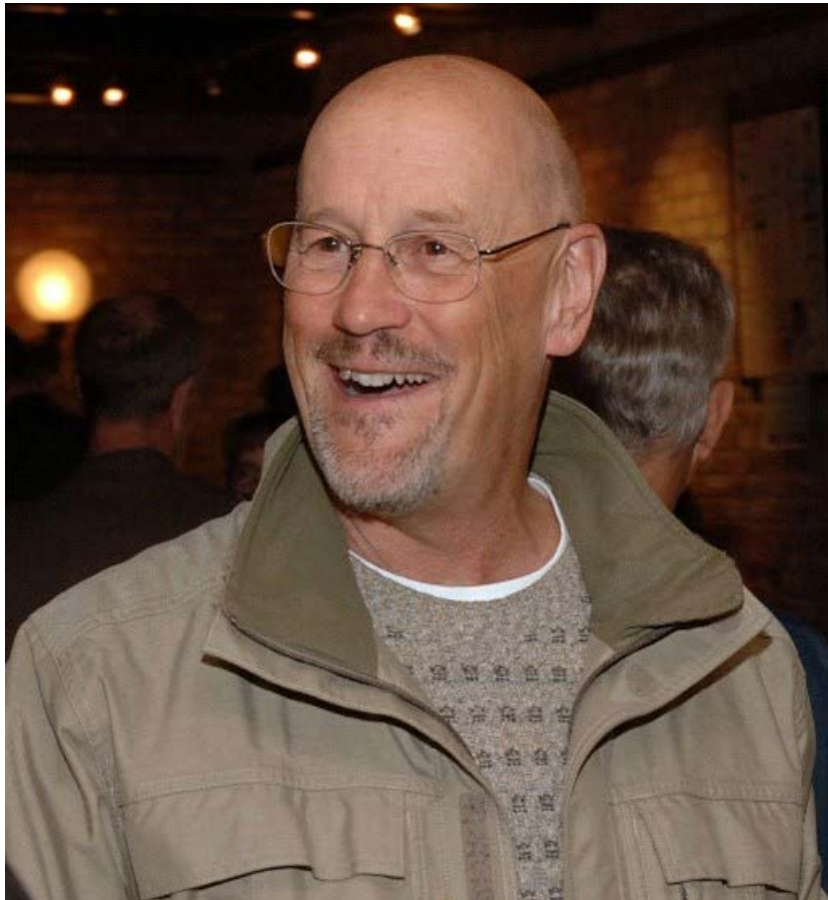


Jonas Minton

A Legacy of Citizen Involvement to Protect Water Quality, Rivers and Enforce Environmental Protection Laws



A Living Compilation by:

Patricia Schifferle

Ronald Stork

William Jennings

September 29, 2022

Jonas Minton
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Enforce Environmental Protection Laws

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01.06.2020_ Comments Westlands WD Conversion Contract for 1.15 MAF & Exhibits under the WIIN Act § 4011.

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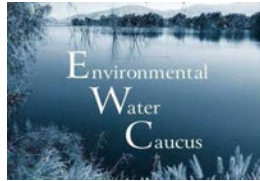
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11.23.2010_ Letter to Rep. Garamendi Requesting an SEC Investigation of Westlands Water District for Misrepresentations and Omitted Statements in the Sale of Bonds to Finance the Preliminary Phase of the Peripheral Canal.

I. Protection of the Public Trust and Water Quality

Revised January 2022



CA Save Our Streams Council



January 24, 2022

Eileen Sobeck, Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

Patrick Pulupa, Executive Officer
CV Regional Water Quality Control Board,
1020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

Clay Rogers, Assistant Executive Officer
Central Valley Regional Water Quality
Control Board,
1685 E Street
Fresno, CA 93706

Ashley Peters
Susan Fregien
Central Valley Regional Water Quality
Control Board,
11020 Sun Center Drive #200,
Rancho Cordova, CA 95670-6114.

Via Email: Eileen.Sobeck@waterboards.ca.gov Patrick.Pulupa@waterboards.ca.gov
Clay.Rogers@waterboards.ca.gov Ashley.Peters@waterboards.ca.gov,
Susan.Fregien@waterboards.ca.gov

Re: Request Regional Board Reopen the Grassland Bypass Project (GBP) WDR: Inconsistent Wetland Objectives; WDRs not protective of China Island & Newman Lake wetlands; Identified Flaws in GBP Stormwater Discharge Plan; The San Luis Delta Mendota Water Authority (SLDMWA) Mud Slough Project to Reroute Flows is not Protective of Wetlands & Follow up to the December 2021 Grassland Bypass Project Stakeholder Meeting.

We appreciate the update that was provided on the Grassland Bypass Project (GBP) at the Regional Board's December 9, 2021, regular Board meeting.¹ We urge the CV Regional Board reopen the GBP WDR as required due to new information and new actions:

1. We provide these comments specifically with respect to the SLDMWA Mud Slough Restoration Project, which will reroute flows in Mud Slough (North) to CDFW's North Grasslands Wildlife Area, China Island Unit (China Island) and private wetlands associated with the Newman Land Company and Newman Lake. The current WDR for the San Luis Drain is not protective of these wetland and refuge areas.
2. There is a lack of public transparency under the existing WDR reporting program for the GBP. GBP water quality data (after 2020) and GBP reports (after 2019) are not posted to provide public access. The Regional Board needs to update the website for the GBP and provide links to current monitoring reports.
3. Selenium water quality data at Vernalis shows that since 2011 (when splittail deformities were reported by federal scientists) dissolved selenium concentrations were below 0.5 µg/L. Further, water quality trends since 2011 have not appreciably changed at the Vernalis regulatory point. This data should be revisited in the Regional Board's analysis of protective selenium water quality objectives for the San Joaquin River and the Sacramento-San Joaquin Delta Estuary. Given the data regarding deformities, the dissolved selenium concentrations at 0.5 µg/L are not protective.

SPECIFIC COMMENTS

SLDMWA Rerouting of Flows: Mud Slough Restoration Project

Grassland Bypass Project Waste Discharge Requirements are Insufficient to Address Rerouting Mud Slough Flows.

Since 1995, without an NPDES permit², the GBP has conveyed water contaminated with pollutants, including selenium, through the San Luis Drain (Drain) to Mud Slough (North). The GBP is currently permitted by the Regional Board via a Waste Discharge Requirements (WDR) R5-2019-0077 to allow stormwater flows commingled with groundwater contaminants, including selenium, to be routed from the San Luis Drain to Mud Slough (North) from 2020-2035.³ Impacts of routing Mud Slough (North) flows (downstream of the San Luis Drain) to wetlands were not considered in the GBP WDR. The SLDMWA Mud Slough Restoration

¹ See: https://www.waterboards.ca.gov/centralvalley/board_info/meetings/2021/

² See Pacific Coast Federation of Fishermen's Associations v. Glaser, 937 F.3d 1191 (9th Cir. 2019) The SLD collects and commingles polluted water from a variety of sources, both ground and surface, and conveys this pollution into Mud Slough and hence to the San Joaquin River and the San Francisco, Sacramento-San Joaquin Delta Estuary. The SLD conveys and discharges contaminated water that contains high levels of selenium, boron, molybdenum, salt, pesticides, and other pollutants.

³ See WDR Order No. R5-2019-0077: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

Project Mitigated Negative Declaration (MND)⁴ likewise does not analyze nor disclose the impacts from the introduction of this contaminated water into these public and private wetlands.

The Final SLDMWA MND Response to Comments on page 30-31 states, “*The Proposed Project is not a discharge project and does not affect water quality conditions in Mud Slough nor the volume of water discharged into Mud Slough. Waste Discharge Requirements are established by the RWQCB and are outside the scope of this project. Evaluation of the water quality impacts of discharges from the Grassland Drainage Area are evaluated in the Addendum to the Final Environmental Impact Statement and Environmental Impact Report for the Grassland Bypass Project, 2010-2019.*”⁵ However, neither the 2019 Addendum nor the 2009 EIS/R for the GBP considered the water quality impact of routing the GBP discharges along with stormwater discharges from the San Luis Drain to these wetlands and wildlife refuges.

The 2019 GBP WDR lists the water quality objectives for selenium in Mud Slough (North) as 5 µg/L 4-day average, and an acute maximum of 20 µg/L.⁶ These selenium objectives are not protective of wetland beneficial uses and concentrations at these levels and lower have been documented to cause reproductive failure and deformities in fish and wildlife. In a 1987 Technical Committee Report on Regulation of Agricultural Drainage to the San Joaquin River the State Water Resources Control Board concluded that “*A 5 ppb interim selenium objective such as recommended for the San Joaquin River may not protect fish and wildlife beneficial uses of the impounded water habitats in the Grassland Water District, San Luis National Wildlife Refuge (NWR), and Los Banos State Wildlife Area (SWA)...A separate objective of 2 ppb selenium in water supply drains and canals which supply the San Luis NWR, the GWD and other state and federal waterfowl areas, which historically diverted subsurface agricultural drainage for waterfowl habitat, is recommended.*”⁷

No explanation is provided in SLDMWA MND or WDR as to why China Island and Newman Lake wetlands are not afforded the same protective water quality objectives as required in the Regional Board’s Basin Plan for the Salt Slough and the Grasslands wetland supply channels and listed in Appendix 40 (objective of 2 µg/L selenium, monthly mean).⁸ The undersigned have

⁴ SCH # 2021060585 see: <https://ceqanet.opr.ca.gov/Project/2021060585>

⁵ See Attachment A to the MND (Response to Comments): https://www.sldmwa.org/OHTDocs/pdf_documents/Meetings/Board/Prepacket/AgendaItem11_AgendaItem12_2021_1119_GBD_Mud_Slough.pdf

⁶ See Order R5-2019-0077, Attachment A, Table 5, page 37: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

⁷ See: https://www.google.com/url?client=internal-element-cse&cx=001779225245372747843:6ygtx6llvco&q=https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/wq_control_plans/1995wqcp/exhibits/sdwa/sdwa-exh-14.pdf&sa=U&ved=2ahUKewiCtOuz_6vwAhUHGDQIHdkaANcQFjAAegQIBBAB&usg=AOvVaw2AnnpOj4kvvzmyLbB5HWkh

⁸ See Table 3-1, page 3-3 of the Sacramento River Basin and San Joaquin River Basin Plan: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

submitted comments on the SLDMWA MND.⁹ Many of the undersigned also objected to the adoption of the SLDMWA MND.¹⁰ This inconsistency appears arbitrary and without scientific justification.

Rerouting Mud Slough Flows is Not Consistent with GBP WDR Attachment A, Antidegradation
Page 38 of Attachment A of the GBP WDR begins a discussion of SWRCB Resolution 68-16 Statement of Policy with Respect to Maintaining High Quality of Waters in California (Resolution 68-16 or “antidegradation policy”). Further, this section includes discussion of Federal Antidegradation Policy (40 C.F.R. § 131.12) that requires for discharges to surface waters that: “*Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.*”

The GBP WDR did not consider the impacts of rerouting Mud Slough and Drain flows into this state refuge area and federally protected wetlands. The SLDMWA MND that would reroute Mud Slough flows is not in compliance with SWRCB Resolution 68-16 nor Federal Antidegradation Policy. Further, the water provided by the GBP Drainers to China Island and Newman Lake since 2010 (as mitigation for the GBP) has been from wells with significantly better water quality. The GBP 2009 Final EIS/R, Appendix D, page 17-18 noted that, “*The results of chemical analysis of well water samples that probably represent the proposed supply water indicate that water quality is good although the salinity is elevated relative to San Joaquin River water quality objectives. Selenium is consistently less than the reporting limit of 2 ppb.*”¹¹ Implementation of the SLDMWA Project would allow poorer quality stormwater commingled with drainage water from Mud Slough to replace groundwater that had been provided to these public and private wetlands. As a result, this action would violate State and Federal Antidegradation policy and does not protect beneficial uses.

The SLDMWA MND Fails to Meet Specified GBP Drainage Management Plan and Long-Term Stormwater Management Plan Objectives.

The final Drainage Management Plan (DMP) for the GBP dated March 31, 2021 references 6 objectives of the Long-Term Stormwater Management Plan (LTSWMP) including the following two objectives (p.18):

1. To eliminate, to the extent feasible, stormwater drainage discharged from the GDA into wetland water supply conveyance channels.

And See Appendix 40 to Basin Plan, pdf pgs. 206-208:

https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_appendices.pdf

⁹ https://calsport.org/news/wp-content/uploads/PCL-et-al_Cmts-SLDMWA-MND-for-Mud-Slough-Restoration-Project_7-28-2021-1.pdf

¹⁰ <https://calsport.org/news/wp-content/uploads/Mud-Slough-Restoration-Project-Objection-MND-and-NOD-12-9-2021.pdf>

¹¹ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4413

6. To provide an outlet for stormwater to flow to the San Joaquin River from the GDA ...that also protects the integrity and quality of wetlands and wildlife refuges.

The SLDMWA MND fails to meet these LTSWMP objectives. Specifically, the Basin Plan selenium objectives for Mud Slough (North) do not protect the integrity and quality of wetlands and wildlife refuges (i.e., China Island and Newman Lake) that would be receiving water from Mud Slough (North) when the SLDMWA Mud Slough Restoration Project is completed.

Drainers' GBP WDR Reopening and Revision Language Requirements are Ignored.

We note that the GBP WDR includes reopening and revision requirements. Page 16 of the WDR denotes conditions for permit reopening, revision, transfer, revocation, termination, and reissuance. Item 1 under this section notes that, “*This Order may be reopened to address any changes in state statutes, regulations, plans, or policies that would affect the water quality requirements for the discharges, including, but not limited to, the Basin Plan.*” (emphasis added) Item 5 on page 16 of the WDR notes that, “*The Central Valley Water Board will review this Order periodically and may revise this Order when necessary. No later than 31 December 2021, and every five years thereafter, Central Valley Water Board staff will present to the board an update on the Grassland Bypass Project, project compliance with Order requirements, and any additional information needed to determine whether the Order should be revised.*” The Regional Board included an update on the GBP at the Board’s December 9, 2021, regular Board meeting,¹² but there was no mention of the drainers’ Mud Slough Restoration Project nor the need to revise the GBP WDR at this meeting.

Because the water quality impacts of routing stormwater discharges from the San Luis Drain to wetlands was not considered in the GBP WDR, the TMDL for Selenium in the Lower San Joaquin River,¹³ or the San Joaquin River Basin Plan,¹⁴ the Regional Board should reopen the GBP WDR and revise the water quality requirements for Mud Slough (North) to protect wildlife habitat beneficial uses in China Island and Newman Lake. We urge the Regional Board to revise the Basin Plan to require that water quality provided to China Island and Newman Lake meet the USEPA’s revised chronic selenium criterion for lentic waters of 1.5 µg/L (monthly mean)¹⁵ or at least the 2 µg/L monthly mean selenium objective for the Grassland wetland supply channels.¹⁶

¹² See: https://www.waterboards.ca.gov/centralvalley/board_info/meetings/2021/

¹³ https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/petitioners_exhibit/dwr/part2/DWR-1110%20McCarthy_Grober_2001.pdf

¹⁴ See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

¹⁵ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

¹⁶ See Table 3-1, page 3-3 of the Sacramento River Basin and San Joaquin River Basin Plan: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

Clean Water Act (CWA) 404 & 401 Certification Permits Require Analysis of Environmental Impacts from the SLDMWA Mud Slough Rerouting Project & Dredging.

To protect water quality a 401 certification and a federal 404 permit from the Secretary of the Army are also required for the SLDMWA Mud Slough Restoration Project. The U.S. Army Corps of Engineers (Corps), through the Regulatory Program, administers and enforces Section 10 of the Rivers and Harbors Act of 1899 (RHA) and Section 404 of the Clean Water Act (CWA). Under RHA Section 10, a permit is required for work or structures in, over or under navigable waters of the United States. Under CWA Section 404, a permit is required for the discharge of dredged or fill material into waters of the United States. Many waterbodies and wetlands in the nation are waters of the United States and are subject to the Corps' regulatory authority.

The SLDMWA MND proposes to remove sediment from Mud Slough and to remove and/or modify various dikes and levees. Yet, detailed sediment analysis was not provided in the SLDMWA MND nor are these materials proposed to be tested before dredging commences. The public and regulatory agencies are left in the dark regarding potential contaminants (including high levels of selenium and other pollutants) in these sediments that could be remobilized into adjacent water ways and wetlands. Any potential pathway for these contaminants to reach surface and groundwater must be disclosed and the impacts and mitigation addressed.

A new Mud Slough Diversion Structure that will span the entire width of Mud Slough with a crest elevation of 8 feet and 80 feet wide, capable of holding back all the flows of Mud Slough with accumulation of water, ponding and inundation planned upstream has the potential for serious ponding adjacent to federal and state wildlife refuges and wetlands. These impacts have not been sufficiently analyzed. The exposure of waterfowl to elevated selenium and other contaminants from this ponding and flooding must be analyzed and its impacts and their mitigation addressed.¹⁷ Please include the undersigned in any correspondence with the drainers' application for either a 401 certification or 404 permit application.

An NPDES Permit Is Required to Reroute the Drain Discharges to China Island and Newman Lake.

On September 6, 2019, the Ninth Circuit Court of Appeals ruled that commingled discharges from the GBP are not exempt from NPDES permitting requirements. In reaching its decision, the Court issued three landmark rulings under the Clean Water Act's exemption for discharges from irrigated agriculture. First, the Court held that the Defendants had the burden of establishing that their discharges were "composed entirely of return flows from irrigated agriculture." Second, the Court held that the exception was limited to "only those flows that do not contain additional discharges from activities unrelated to crop production." Third, the Court held that the District

¹⁷ Ponding upstream from flooding has poisoned birds. In "2003, a pasture at the existing upstream reuse area site attracted waterfowl when it was inadvertently flooded. This flooded area created ideal ecological conditions for shorebird foraging and nesting and thus, a number of pairs responded opportunistically and bred in the field. As a consequence, eggs collected near the pasture had highly elevated [selenium] concentrations." A deliberate exposure of waterfowl to these poisonous waters is a significant impact that requires analysis. Creating this hazard is also a crime forbidden by the Migratory Bird Treaty Act, 16 U.S.C. section 703.

Judge erred in ruling that the exemption applied so long as a “majority” of the wastewater originated from agricultural activities. The Court ruled that only those discharges that are composed *entirely* of return flows from irrigated agriculture were exempt.

Applying these rulings to the commingled discharges of the GBP, the Court held that all of the Plaintiffs’ claims should proceed. First, the commingled discharges from a solar project were not exempt even though they did not comprise a majority of the Project’s waste-stream, since only those discharges that “were composed entirely of return flows from irrigated agriculture were exempt.” Second, the Court overturned the District Judge’s dismissal of the Plaintiffs’ claims regarding polluted ground water that seeped into the Project’s massive drain from unfarmed lands, including highways and residences. Because those commingled discharges were not composed entirely of return flows from irrigated agriculture, they did not fall within the exemption. Third, the Court held that the fact these non-exempt flows were commingled with discharges from irrigated agriculture did not bring them within the exemption.

Mitigation measures or alternatives, including the continued delivery of clean water to these wetland areas, were not considered along with the obligation of the Grassland Drainers/SLDMWA to obtain a NPDES permit to ensure discharges from the San Luis Drain to Mud Slough meet at least the US EPA’s revised chronic selenium criterion for lentic waters of 1.5 µg/L (monthly mean)¹⁸ or the 2 µg/L monthly mean selenium objective for the Grassland wetland supply channels.¹⁹

Mitigation measures in the SLDMWA MND are vague and fail to provide enforceable guidelines. This is especially important with regard to the quality of water that will be introduced to China Island and Newman Lake from Mud Slough once the streambed alteration is completed. Neither the quantity nor quality of the water is provided, analyzed, or modeled in the SLDMWA MND. A brief narrative of water quality data from Mud Slough is provided in the SLDMWA MND Appendix B (Response to Comments)²⁰ and indicates that since July 2019 at least 13% of the water quality samples collected in Mud Slough exceeded 2 µg/L selenium and one sample was above 5 µg/L selenium. The actual water quality data for Mud Slough was not provided in the SLDMWA MND and current water quality reports from the GBP are no longer posted on the USBR or SFEI websites (discussed in more detail below).²¹

¹⁸ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

¹⁹ See Table 3-1, page 3-3 of the Sacramento River Basin and San Joaquin River Basin Plan: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

²⁰ See pgs. 33-34 of Attachment A to MND (Response to Comments): https://www.sldmwa.org/OHTDocs/pdf_documents/Meetings/Board/Prepacket/AgendaItem11_AgendaItem12_2021_1119_GBD_Mud_Slough.pdf

²¹ The most recent GBP water quality report available at the SFEI website for the GBP is from 2019: https://www.sfei.org/sites/default/files/general_content/Final%20GBP%20Monthly%20Report%20January-December%202019.pdf

GBP WDR, Monitoring and Reporting Program, Notification Lack Public Notice.

On page 4 of the GBP Monitoring and Reporting Program (MRP) under Stormwater Monitoring lists the requirements for Notification:

“1. Notification

The following individuals are to be informed of the possible diversion to Grassland wetland supply channels:

- the main contact at the Central Valley Water Board in Sacramento;*
- the Manager of the Grassland Water District;*
- the Manager of the Central California Irrigation District;*
- the Manager of the San Luis Canal Company;*
- personnel at the State and Federal Wildlife Areas that use the water supply channels in the region;*
- managers of the irrigation and drainage districts participating in the Grassland Drainage Area;*
- the Manager of the San Joaquin River Exchange Contractors Water Authority;*
and
- the Area Manager, South-Central California Area Office, Bureau of Reclamation.”*

We note that Summers Engineering previously notified the public stakeholders including members of this environmental coalition when rainfall events resulted in stormwater diversions into the Grassland wetland supply channels. We stopped receiving these notifications several years ago. For the sake of public transparency, the Regional Board should include public stakeholder notifications in the MRP for the GBP not merely the dischargers or those with a stake in continuing the discharge.

GBP WDR, MRP Reporting, Results & Data Are Not Readily Available to the Public.

On page 9-10 of the GBP MRP are requirements for reporting semi-annual surface water monitoring results in an electronic format: *“Every six months, the Dischargers shall submit the previous six months surface water monitoring results in an electronic format. The schedule for these submittals is listed in Table 5 below.”*

Table 5: Semi-annual Surface Water Monitoring Data Report Schedule

Due Date	Type	Reporting Period
31 October	Semi-annual Monitoring Data Report	1 January through 30 June of calendar year
30 April	Semi-annual Monitoring Data Report	1 July through 31 December of previous calendar year

On page 10-11 of the GBP MRP are requirements for annual monitoring reports. As denoted in the MRP, *“The Annual Monitoring Report shall be submitted by 30 April of each year. The report shall cover monitoring periods for the previous calendar year (1 January thru 31 December).”*

On page 14 of the GBP MRP is a requirement of surface water exceedance reports, “*The Dischargers shall provide surface water exceedance reports if monitoring results show exceedances of adopted numeric water quality objectives or trigger limits...The Dischargers shall evaluate all of its monitoring data and determine exceedances no later than five (5) business days after receiving the laboratory analytical reports for an event...the Dischargers shall send the Exceedance Report by email to the designated Central Valley Water Board staff contact by the next business day.*”

On page 15-16 of the GBP MRP is the annual requirement to provide the Regional Board with an update to the Drainage Management Plan (DMP). These updates can be submitted as an attachment to the Annual Monitoring Report.

Since 2020, none of the reports required by the GBP WDR and MRP are available from the Regional Board website.²² The reports that are available are woefully out of date. The Regional Board’s website for the GBP does include links to USBR and SFEI (copied below):

For more detailed information and access to annual reports, go to [U.S. Bureau of Reclamation Grassland Bypass Project Homepage](#).

Additional data and reports are available on the San Francisco Estuary Institute's page: <http://www.sfei.org/projects/grassland-bypass-project>.

We note, however, that the USBR website does not include any current documents related to the GBP WDR or the current Use Agreement for the San Luis Drain. The latest document posted at the USBR site is the 2013 revised monitoring plan for the GBP. Further, the latest document posted on the SFEI site is the annual monitoring report for the GBP from 2019 (latest monthly report January – December 2019)²³ which predates the current GBP Order.

Further, we queried the California Environmental Data Exchange Network for water quality data in Mud Slough (North) (site D) and found the most recent data input to this database was only through December 31, 2020.²⁴

²² Site viewed on January 14, 2022: https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/

²³ See: <https://www.sfei.org/gbp/reports>

²⁴ Site visited on January 14, 2022: <https://ceden.waterboards.ca.gov/AdvancedQueryTool>



To allow full public accountability and transparency, we ask that the Regional Board make available all monitoring reports and data required in the GBP MRP (including annual monitoring reports, semi-annual surface water monitoring results, surface water exceedance reports, and annual updates to the Drainage Management Plan). Without this information, the public is left in the dark about the performance of the GBP.

Splittail Deformities from Elevated Selenium Exposure from Selenium San Joaquin River Diets Despite Selenium Levels at Vernalis Relatively Constant from 2009 -2012.

Johnson et al 2018 submitted a Final Report to USEPA on August 26, 2018, titled “*Unraveling sources and pathways of elevated selenium exposure over the lifetime of an imperiled migratory fish.*”²⁵ The report describes splittail with visible morphological and spinal deformities observed in the Delta. As described on page 3 of this report, “*these gross deformities were found to be consistent with selenium toxicity which include scoliosis (lateral curvature of the spine), kyphosis (outward curvature of the spine), lordosis (concave curvature of the lumbar and caudal regions of the spine; as well as deformities of fins, skull, jaws, and bulging eyes.*”

The Johnson et al 2018 report to EPA concludes on Page 10: “*The strontium isotopic composition ($^{87}\text{Sr} : ^{86}\text{Sr}$) in the otoliths of all wild splittail indicated they acquired Se toxicity while rearing in the freshwaters of the San Joaquin River.*” And “*The otolith data and the*

²⁵ Johnson, R.C., R. Stewart, K. Limburg, R. Huang, D. Cocherell and F. Feyrer. 2018. Unraveling sources and pathways of elevated selenium exposure over the lifetime of an imperiled migratory fish. Final report to USEPA Region 9, San Francisco. 31 pp.

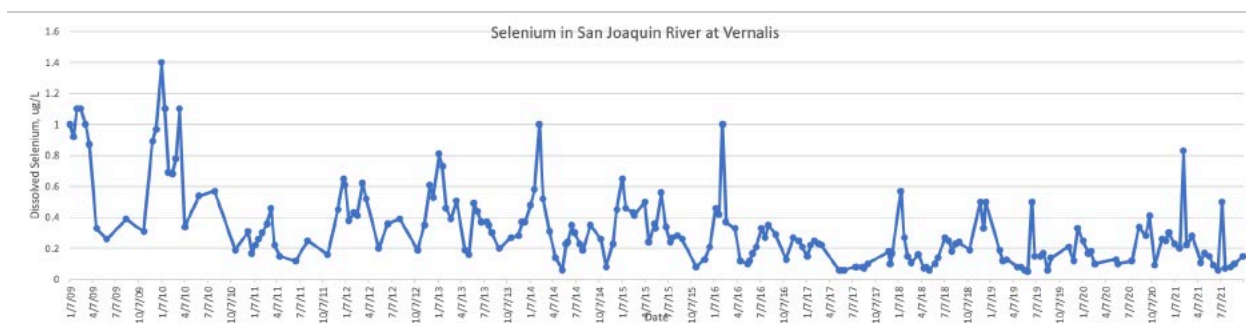
presence of multiple spinal malformations support the interpretation that juvenile splittail in this study fed directly on Se-enriched diets in the San Joaquin River prior to capture.”

The Regional Board’s update on the GBP presented in December 2021 included these questions about splittail deformities from slide 16:

Key Questions

- Are splittail deformities continuing to occur?
- Are they attributable to selenium discharges from the Grassland Drainage Area?
- Are the selenium water quality objectives adequate?

Selenium concentrations in the San Joaquin River at Vernalis are monitored by the US Geological Survey (USGS) as part of routine monitoring and the data are publicly available on the National Water Information System (NWIS) database.²⁶ In 2011 selenium concentrations at Vernalis were below 0.5 ug/L most of the time. Yet, in the spring of 2011, young-of-year splittail were found to have a high incidence (>80%) of spinal deformities characteristic of selenium toxicity at the site of a water diversion station in the San Joaquin Valley of the Delta (U.S. Department of the Interior, Bureau of Reclamation Tracy Fish Collection Facility) (Johnson et al 2020²⁷). The Figure below depicts selenium concentrations in the San Joaquin River at Vernalis from January 2009 thru July 2021. We note that the USGS water quality data at Vernalis data shows some temporal variability in selenium concentrations, but overall selenium water quality has not appreciably changed from when splittail deformities were observed in 2011.



Conclusion

The water quality impacts of routing discharges from the San Luis Drain to wetlands were not considered in the GBP WDR and, therefore, the Regional Board should reopen the GBP WDR and revise the water quality requirements for Mud Slough (North) to protect wildlife habitat

²⁶ The USGS Vernalis station ID# is 11303500. See: <https://nwis.waterdata.usgs.gov/usa/nwis/qwdata>

²⁷ See: <https://pubs.acs.org/doi/10.1021/acs.est.9b06419>

beneficial uses in China Island and Newman Lake. We urge the Regional Board to revise the Basin Plan to require that water quality provided to China Island and Newman Lake meet the USEPA's revised chronic selenium criterion for lentic waters of 1.5 µg/L (monthly mean)²⁸ or the 2 µg/L monthly mean selenium objective for the Grassland wetland supply channels.²⁹ Further there is extensive public interest with regard to the routing of these contaminants to the San Joaquin River and the San Francisco-Sacramento-San Joaquin Delta Estuary. The public should not be excluded from the monitoring and reporting requirements and required data.

Thank you for your consideration.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



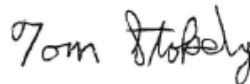
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org




Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com

²⁸ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

²⁹ See Table 3-1, page 3-3 of the Sacramento River Basin and San Joaquin River Basin Plan: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf



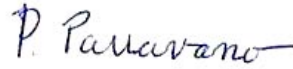
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.com)
connere@gmail.com



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council
Fly Fishers International
mrockwell1945@gmail.com

CC:

Chuck Bonham, Director
California Department of Fish & Wildlife
715 P Street
Sacramento, CA 95814
Director@wildlife.ca.gov

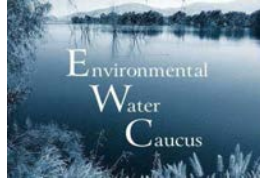
Wade Crowfoot, Secretary
California Natural Resources Agency
715 P Street, 20th Floor
Sacramento, CA 94236-0001
Email: wade.crowfoot@gov.ca.gov

Kristen Gangl
Senior Environmental Scientist-Specialist
Water Quality Certification Program
Division of Water Rights
kristen.gangl@waterboards.ca.gov

Martha Guzman Aceves
Regional Administrator
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Tom Hagler
USEPA REGION 9
75 Hawthorne Street Mail Code ORC-2-3
San Francisco, CA 94105
Hagler.Tom@epa.gov

Damian Higgins
FWS NRD Regional Office
U.S. Fish and Wildlife Service
2800 Cottage Way, Suite W-2610
Sacramento CA 95825-1846
damian_higgins@fws.gov



CA Save Our Streams Council



January 6, 2022

Mr. Robert L'Heureux
Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Drive, #200, Rancho Cordova, CA 95670

Via Email: Robert.LHeureux@waterboards.ca.gov

Re: Comments on the 2021 Triennial Review Workplan for the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin.

Thank you for the opportunity to provide comments on the 2021 Triennial Review Workplan¹ (Workplan) for the Sacramento River and San Joaquin River Basins and Tulare Lake Basin (Sac/San Joaquin and Tulare Basin Plans). As provided in the Notice of Opportunity to Comment,² written comments on the Workplan will be accepted thru January 6, 2022. Additionally, a public hearing will be conducted during the February 2022 Central Valley Water Board (Regional Board) meeting, which is tentatively scheduled to be on 17 to 18 February 2022.

¹ See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/triennialreviews/2021tr/2021tr_wkpln.pdf

² See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/triennialreviews/2021tr/2021tr_noph.pdf

In Section IV, page 7 of the Workplan the Regional Board identified new proposed projects: “*Six new proposed projects were developed to help address the issues identified in the comments submitted to the Central Valley Water Board to guide the Board planning staff for the next three years.*” These new proposed projects are listed in Table 3. However, we note that Table 3 only lists 5 Projects.

Table 3: Proposed Projects to Address Basin Planning Issues Identified During the 2021 Joint Triennial Review

Project Number	Project Name	Sacramento River – San Joaquin River Basin	Tulare Lake Basin
28	Evaluation of Selenium Criteria's Protectiveness of Beneficial Uses	X	X
29	Addressing Water Quality Issues Associated with Trash and Pathogens in the City of Stockton, the San Joaquin River Basin, and the Sacramento-San Joaquin River Delta	X	
30	Addressing Harmful Algal Blooms in City of Stockton Waters	X	
31	Reviewing and Clarifying the Beneficial Uses and Monitoring in the California Aqueduct	X	X
32	Designate RARE Beneficial Uses for Waterbodies in the Sacramento River Basin and San Joaquin River Basin	X	

Table 4 of the Workplan provides a Project Prioritization Summary Table. In that table, Project 28 (Se Criteria evaluation) meets 3 priority criteria, and Projects 31 (Reviewing and Clarifying the Beneficial Uses and Monitoring in the California Aqueduct) and 32 (Designate RARE Beneficial Uses for Waterbodies in the Sacramento River Basin and San Joaquin River Basin) met 1 priority criterion. Yet Projects 31 and 32 are not included in Table 5 (Project Ranking Summary Table). It is unclear why Projects 31 and 32 were omitted from Table 5 as they did meet prioritization criteria of stakeholder interest in Table 4. At a minimum, Projects 31 and 32 should be included in Table 5 under Rank 5, meets 1 criterion. Further, we provide additional comments below why we believe Projects 31 and 32 meet additional ranking criteria and should receive at least a Rank 3 in Table 5.

Project 28, Evaluation of Selenium Criteria’s Protectiveness of Beneficial Uses.

We commend the Regional Board staff for identifying the evaluation of Se Criteria protectiveness of beneficial uses as a priority new proposed project. As we noted in our May 10, 2021, comments we recommended that the Regional Board revise the chronic selenium water quality objective consistent with the U.S. Environmental Protection Agency’s (EPA) July 13, 2016 the Final Updated Clean Water Act (CWA) section 304(a) national chronic aquatic life criterion for the pollutant selenium in fresh water.³ The USEPA’s 2016 federal register notice identified revised chronic selenium criteria in water for lentic waters (e.g., meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps) and lotic waters (e.g., rivers and streams). EPA’s 2016 recommended criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water.

In addition, we recommended the Regional Board rescind acute selenium objectives from both Basin Plans. The USEPA did not include an acute selenium criterion in their July 13, 2016, Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant

³ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambientwater-quality-criterion-for-selenium-in-freshwater>

selenium in fresh water under Item IV: “*The criterion document does not include an acute criterion (based on water-only exposure) because selenium is bioaccumulative and toxicity primarily occurs through dietary exposure.*”⁴ The existing relaxed acute selenium objectives in the Sac/San Joaquin Basin Plan are inconsistent with Final national criteria guidance from EPA and allow short term spikes of selenium that can have long term consequences in the ecosystem. Further, the current acute selenium objectives fail to protect designated fish and wildlife beneficial uses.

The Project 28 fact sheet mentions new WDRs for the Grassland Bypass Project (GBP) that were adopted by the Regional Board in December 2019. The 2019 GBP WDRs require compliance with the selenium water quality objectives (5 µg/L, 4-day average) specified in the 2018 Sac/San Joaquin Basin Plan and referenced in Table 5.2 of Attachment A in the 2019 GBP WDRs (ORDER R5-2019-0077).⁵ These water quality objectives apply to the San Joaquin River from Sac Dam to Vernalis and Mud Slough (north) to the San Joaquin River. However, this proposal allows acute spikes of selenium (as described in Table 3-1 of the Basin Plan and ranging from 12 to 20 µg/L depending on location) that will bio-accumulate throughout the ecosystem. These chronic and acute selenium water quality objectives will result in harm to fish and aquatic-dependent wildlife as denoted in the Service’s 2000 Biological Opinion on the CTR. These water quality objectives are not protective of designated fish and wildlife beneficial uses and likely result in harm to rare and endangered species, migratory birds and endangered anadromous fish populations.

Further, in December 2021, the San Luis & Delta Mendota Water Authority approved a Mitigated Negative Declaration (MND) for the Mud Slough Restoration Project, which will result in the alteration of the Mud Slough streambed and introduction of flows from Mud Slough (North) into CDFW’s North Grasslands Wildlife Area, China Island Unit (China Island), and to private wetlands under federal easement with the USFWS (associated with the Newman Land Company including Newman Lake). Impacts of routing Mud Slough flows to wetlands was not considered in the GBP WDR and the MND likewise does not analyze nor disclosed the impacts from the introduction of this contaminated water into these public and private wetlands. The 2019 GBP WDR lists the water quality objectives for selenium in Mud Slough (North) as 5 µg/L 4-day average, and an acute maximum of 20 µg/L.⁶ These selenium objectives are not protective of fish and wildlife beneficial uses and have been documented to cause reproductive failure and deformities in fish and wildlife. No explanation is provided in MND why China Island and Newman Lake are not afforded the same protective water quality objectives as required in the Regional Board’s Basin Plan for the Salt Slough and the Grasslands wetland supply channels and listed in Appendix 40 (objective of 2 ppb selenium, monthly mean).⁷ In 1996 the Central Valley Regional Water Board amended the Basin Plan to address selenium in the San Joaquin River, Salt Slough, Mud Slough,

⁴ *Ibid.*

⁵ See Attachment B Item D @ pdf pg 90:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

⁶ See Order R5-2019-0077, Attachment A, Table 5, page 37:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

⁷ See Table 3-1, page 3-3 of the Sacramento River Basin and San Joaquin River Basin Plan:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf
And, See Appendix 40 to Basin Plan, pdf pgs 206-208:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_appendices.pdf

and wetland supply channels in the Grassland watershed. The amendment included several control actions, with the first priority being to “*Separate subsurface agricultural drainage containing high levels of selenium from sensitive wildlife areas.*”⁸ We urge the Regional Board to revise the Basin Plan to require that water quality provided to China Island and Newman Lake meet the USEPA’s revised chronic selenium criterion for lentic waters of 1.5 ppb (monthly mean)⁹ or at a minimum the 2 ppb monthly mean selenium objective for the Grassland wetland supply channels.¹⁰

Project 31, Reviewing and Clarifying the Beneficial Uses and Monitoring in the California Aqueduct.

As we recommended in our May 10, 2021, comments on the Triennial Review, the Regional Board should revise the Sac/San Joaquin Basin Plan to include a WARM beneficial use for the California Aqueduct in the San Joaquin Basin and revise the Tulare Basin Plan to include beneficial uses of RARE, WARM and WILD in the California Aqueduct to protect fisheries, wildlife habitat, and state and federally threatened and endangered species that use water from the Aqueduct. Further, we recommended that the Regional Board require daily water quality monitoring for selenium in the Aqueduct in the Tulare Basin at Check 21 and Teerink Pumping Plant (formerly monitored at Check 29) when groundwater pump-ins into the Aqueduct are occurring.

As noted earlier in this letter, the Workplan gave Project 31 a ranking of 1 in Table 4 and was omitted from Table 5. The Project 31 information sheet lists this as a new project with no past Regional Board commitment. Yet, the designation of beneficial uses for waters of the State by the Regional Board is an ongoing requirement, mandated under California Water Code **section 13240**. The Clean Water Act, **section 303** requires that the State adopt designated beneficial uses for surface waters. in accordance with regulations contained in **40 CFR 131**. The State is required to specify appropriate water uses to be achieved and protected. The beneficial use designation of surface waters of the state must take into consideration the use and value of water for public water supplies, protection and propagation of fish, shellfish and wildlife, recreation in and on the water, agricultural, industrial, and other purposes including navigation. So, we would argue that designation or additions to beneficial uses fits under prioritization criteria “**Projects that Complement Prior Work.**”

The prioritization and ranking of Projects in the Workplan did not specify anticipated time commitment per project. This could be a useful additional metric to help the Regional Board prioritize Projects. For Project 31 for example, we believe that designation of beneficial uses would likely be relatively straightforward and use less staff resources (time) than other significant projects. If that is the case, then Project 31 would also meet this additional prioritization criteria “**Projects that Represent an Efficient Use of Board or Public Resources.**”

We therefore recommend that the ranking of Project 31 be reviewed. We believe there is sufficient evidence to support giving Project 31 a Rank 3: Meets ≥ 3 Criteria. Also, Project 31 should be added to Table 5, Project Ranking Summary Table.

⁸ See Order R5-2019-0077, Attachment A, page 10:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

⁹ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

¹⁰ See Table 3-1, page 3-3 of the Sacramento River Basin and San Joaquin River Basin Plan:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

Project 32, Designate RARE Beneficial Uses for Waterbodies in the Sacramento and San Joaquin River Basins.

As we recommended in our May 10, 2021, comments on the Triennial Review, the Regional Board should revise the Sac/San Joaquin Basin Plan to include a RARE beneficial use designation for appropriate waterbodies. The RARE designation has been added where there is substantial evidence that the water body supports threatened or endangered species. By definition waterbodies with a RARE designation support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.¹¹ The RARE designation is placed on bodies of water where the protection of a threatened or endangered species depends on the water either directly, or to support its habitat. The purpose of the RARE designation for a particular water body is to highlight the existence of the threatened or endangered species. This will ensure that, absent extraordinary circumstances, they are not placed in jeopardy by the quality of the discharges to those water bodies.¹²

As noted earlier in this letter, the Workplan gave Project 32 a ranking of 1 in Table 4 and was omitted from Table 5. The Project 32 information sheet lists this as a new project with no past Regional Board commitment. The Project 32 information sheet notes that surface water of the Sac/San Joaquin River Basins falling within RARE beneficial uses category will be identified in the future as part of the “*continuous planning process to be conducted by the State Water Board...*” and would “*involved Central Valley Water Board staff assessing waters in the Sacramento River Basin – San Joaquin River Basin for the RARE Beneficial Use.*” This language implies that designation of a RARE beneficial use is an ongoing commitment, and we would argue that designation of a RARE beneficial uses fits under prioritization criteria “**Projects that Complement Prior Work.**”

The Project 32 information sheet also finds that, “*Considerations would include the efficacy of existing beneficial uses (e.g., WILD, WARM, COLD, and SPAWN) protecting aquatic and aquatic-dependent species.*” We note that water quality criteria and beneficial uses under the CWA are developed at a scale of population or ecosystem harm. The Endangered Species Act demands a much more stringent level of protection (on an individual scale vs the population scale required by CWA). This was considered by USEPA when reviewing Effects to Listed Species and Designated Critical Habitat from the Agency’s Proposed Action on Montana’s Revised Selenium Water Quality Standards for Lake Koochanusa and the Kootenai River (USEPA (a)(b) 2021). In Appendix 1 of the Biological Evaluation that USEPA completed for this review, USEPA used a more protective EC₅ value to protect two federally-listed fish species, than what is typically considered protective under CWA. Therefore, we urge the Regional Board to not assume that existing beneficial uses will be protective of State and Federally listed species.

As we noted for Project 31, the prioritization and ranking of Projects in the Workplan did not specify anticipated time commitment per project. For Project 32, we believe that designation of a RARE beneficial use would likely be relatively straightforward and use less staff resources (time) than other significant projects. If that is the case, then Project 32 would also meet this additional prioritization criteria “**Projects that Represent an Efficient Use of Board or Public Resources.**”

¹¹ See:

https://www.waterboards.ca.gov/rwqcb9/water_issues/programs/basin_plan/docs/update082812/Chpt_2_2012.pdf

¹² *Ibid.*

We therefore recommend that the ranking of Project 32 be reviewed. We believe there is sufficient evidence to support giving Project 32 a Rank 3: Meets ≥ 3 Criteria. Also, Project 32 should be added to Table 5, Project Ranking Summary Table.

Thank you for your consideration and the opportunity to provide comments on the Triennial Review Workplan.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



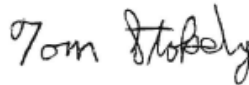
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



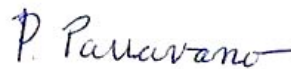
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.org)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net

Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org

Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com

John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org

Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org

Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com

Dr. C. Mark Rockwell, D.C.
President & Conservation VP
Northern California Council
Fly Fishers International
mrockwell1945@gmail.com

CC:

Chuck Bonham, Director
California Department of Fish & Wildlife
715 P Street
Sacramento, CA 95814
Director@wildlife.ca.gov

Wade Crowfoot, Secretary
California Natural Resources Agency
715 P Street, 20th Floor
Sacramento, CA 94236-0001
Email: wade.crowfoot@gov.ca.gov

Elaine Sobeck, Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100
Email: Eileen.Sobeck@waterboards.ca.gov

Kristen Gangl
Senior Environmental Scientist-Specialist
Water Quality Certification Program
Division of Water Rights
kristen.gangl@waterboards.ca.gov

Patrick Pulupa, Executive Officer
CV Regional Water Quality Control Board,
1020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114
Email: Patrick.Pulupa@waterboards.ca.gov

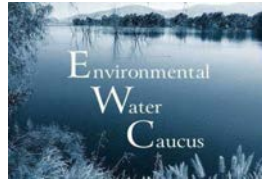
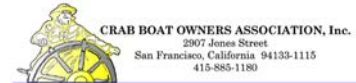
Clay Rogers, Assistant Executive Officer
CV Regional Water Quality Control Board,
1685 E Street
Fresno, CA 93706
Email: Clay.Rogers@waterboards.ca.gov

Martha Guzman Aceves
Regional Administrator
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Tom Hagler
USEPA REGION 9
75 Hawthorne Street Mail Code ORC-2-3
San Francisco, CA 94105
Hagler.Tom@epa.gov

Damian Higgins
FWS NRD Regional Office
U.S. Fish and Wildlife Service
2800 Cottage Way, Suite W-2610
Sacramento CA 95825-1846
damian_higgins@fws.gov

Attached Appendices: Appendix 1 MT Selenium & EPA Ltr. WQ Standards Re MT Selenium
BE 2.18.2021



CA Save Our Streams Council



December 16, 2021

Kristen Gangl
Senior Environmental Scientist_Specialist
Water Quality Certification Program
1001 I Street
Sacramento CA 95814

Re: Insufficient CEQA & NEPA Compliance for the Mud Slough Streambed Alteration Permit Request and 401 CWA Certification Request _San Luis Delta Mendota Water Authority Water [SLDMWA]

Dear Ms. Gangl:

The State Water Resources Control Board, a responsible agency, cannot rely upon the CEQA documents prepared by the lead agency the San Luis Delta Mendota Water Authority (SLDMWA) for the proposed Mud Slough dredging and discharges under Section 401 of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act (Porter-Cologne).

A subsequent EIR must be prepared pursuant to CCR Section 15162.¹ The project also will discharge dredge and fill material into the waters of the United States, thus compliance with CWA, the Rivers and Harbors Act of 1899 along with NEPA are required. The MND fails to analyze and disclose the direct impacts of introducing selenium laden water above 2 ppb into the State of California China Island refuge and the private wetlands operating under a federal wetland easement at Newman Lake.² Further, both the direct impacts and cumulative impacts to fish and waterfowl from altering the stream bed, stream flows, discharge of dredged or fill material along with the placement of the dredge materials have not been disclosed, analyzed, sufficiently considered or mitigated. Alternatives were not considered.

The San Luis & Delta Mendota Water Authority (SLDMWA) is seeking a Section 401 State Certification to protect wetlands relying upon the MND issued for the Mud Slough Restoration Project (SCH # 2021060585)³. This project in addition to dredge and fill activities, will route flows from Mud Slough (North) into the CDFW's North Grasslands Wildlife Area, China Island Unit (China Island) and private wetlands associated with the Newman Land Company including Newman Lake. The SLDMWA is permitted by the Central Valley Regional Water Quality Control Board via a Waste Discharge Requirement (WDR) for the Grassland Bypass Project (GBP) to allow stormwater flows commingled with groundwater contaminants including selenium to be routed from the San Luis Drain to Mud Slough (North).⁴ Since 1995, operating without the required NPDES permit⁵, the GBP has conveyed water contaminated with pollutants, including selenium, through the San Luis Drain (Drain) to Mud Slough (North).

The GBP WDR allows selenium concentrations in Mud Slough (North) that are toxic to fish and wildlife and can cause migratory bird deformities and reproductive impairment. Impacts of routing Mud Slough flows to wetlands was not considered in the GBP WDR. Further, the 2015

¹ <https://www.law.cornell.edu/regulations/california/14-CCR-Sec-15096>

² In 2016, EPA revised their national selenium criterion because of a draft jeopardy biological opinion from USFWS on the 5ppb standard in EPA's California Toxics Rule. EPA avoided a final jeopardy opinion by agreeing to revise the 5ppb criterion requiring objectives of 1.5/3.1 ppb criterion. Any value that China Island and/or Newman Lake might have for the ESA-listed species that USFWS called jeopardy on at 5 ppb (in the draft CA Toxics Rule biological opinion) would be compromised by water with 5 ppb or higher. Listed species of concern in the project vicinity include the giant garter snake, Swainson's Hawk, Aleutian Canada goose, Mountain plover and tricolored blackbird. And potential impacts to splittail and salmonids.

³ See: <https://ceqanet.opr.ca.gov/2021060585>

The Notice of Determination was filed December 9, 2021.

⁴ See WDR Order No. R5-2019-0077:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

⁵ See Pacific Coast Federation of Fishermen's Associations v. Glaser, 937 F.3d 1191 (9th Cir. 2019) The SLD collects and commingles polluted water from a variety of sources, both ground and surface, and conveys this pollution into Mud Slough and hence to the San Joaquin River and the San Francisco, Sacramento-San Joaquin Delta Estuary. The SLD conveys and discharges contaminated water that contains high levels of selenium, boron, molybdenum, salt, pesticides and other pollutants. And <https://calsport.org/news/wp-content/uploads/Volker-2019-12-23-WWT-to-Emerson-re-SLDMWA-EA-Use-Agreement.pdf>

GBP WDR⁶ noted in Item 30(g) that, “Control structures will be maintained to prevent inflow of drainage from Mud Slough (north) to the CDFW China Island Unit.” And the 2019 GBP WDR⁷ refers to mitigation measures in other documents including “provision of water to enhance wildlife management areas” and “protection of China Island...” Yet the requested 401 Certification permit for the Mud Slough Restoration Project, if granted, would allow the introduction of stormwater commingled with groundwater contaminants to these State and private wetlands under federal easement protections. Such a certification if granted would violate the CWA.

The Board of the SLDMWA on Thursday December 8, 2021, approved a Mitigated Negative Declaration (MND) for the Mud Slough Restoration Project, which will result in the alteration of the Mud Slough streambed and flows. This MND is deficient. Among the deficiencies the MND does not analyze nor disclosed the impacts from the introduction of this contaminated water into these public and private wetlands. The undersigned have submitted comments on the MND.⁸ Many of the undersigned also objected to the adoption of the MND.⁹ Ignoring these objections, SLDMWA proceeded to adopt a MND in an attempt to satisfy SWRCB’s CEQA obligations when issuing a 401 Certification of this magnitude and impact. However, the SLDMWA Board of Directors failed to address serious environmental impacts and precluded informed decision making and therefore, have failed to comply with CEQA, NEPA and the CWA.

Further, we have confirmed that the Newman Land Company is under federal easement with the USFWS at San Luis National Wildlife Refuge.¹⁰ Therefore, impacts associated with the project called the “Mud Slough Restoration Project” on Newman Lake should also be considered under a NEPA review. This has not been done.

The MND for the SLDMWA’s proposed discharge and fill as described in the Mud Slough Restoration Project fails to disclose or analyze:

⁶ See WDR Order No. R5-2015-0094:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/fresno/r5-2015-0094.pdf

⁷ See WDR Order No. R5-2019-0077:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

⁶ https://calsport.org/news/wp-content/uploads/PCL-et-al_Cmts-SLDMWA-MND-for-Mud-Slough-Restoration-Project_7-28-2021.pdf

⁹ Letters of Objection for Mud Slough Restoration Project Objection to MND and NOD December 9, 2021, from Planning and Conservation League, Institute for Fisheries Resources, Environmental Water Caucus, Sierra Club California, Pacific Coast Federation of Fishermen’s Associations California Sportfishing Protection Alliance, Friends of the River, Southern California Watershed Alliance and North Coast Rivers Alliance to Federico Barajas.

¹⁰ Pers. comm. Kim Forrest, Refuge Manger San Luis NWR, USFWS, 12.15.2021.

1. Water quality objectives that will protect the state, federal and private wetland areas impacted by the project.¹¹
2. The quality of water provided to China Island and Newman Lake wetland areas prior to this project. This is important baseline information that should have been disclosed and used to analyze the impacts of the project in the MND. The GBP water provided to China Island and Newman Lake since 2010 has been from wells. The GBP 2009 Final EIS/R, Appendix D, page 17-18 noted that, “The results of chemical analysis of well water samples that probably represent the proposed supply water indicate that water quality is good although the salinity is elevated relative to San Joaquin River water quality objectives. Selenium is consistently less than the reporting limit of 2 ppb.”¹²
3. Impacts from changing the source of water for China Island and Newman Lake wetland areas from well water (consistently below 2 ppb selenium) to flows in Mud Slough. The 2019 GBP WDR lists the water quality objectives for selenium in Mud Slough (North) as 5 ppb 4-day average, and an acute maximum of 20 ppb.¹³ These selenium objectives are not protective of fish and wildlife beneficial uses and have been documented to cause reproductive failure and deformities in fish and wildlife. These water quality objectives are not protective of aquatic life and pose a serious threat to endangered species.
4. No explanation is provided in MND why China Island and Newman Lake are not afforded the same protective water quality objectives as required in the Regional Board’s Basin Plan for the Salt Slough and the Grasslands wetland supply channels and listed in Appendix 40 (objective of 2 ppb selenium, monthly mean).¹⁴ In 1996 the Central Valley Regional Water Board amended the Basin Plan to address selenium in the San Joaquin River, Salt Slough, Mud Slough, and wetland supply channels in the Grassland watershed. The amendment included several control actions, with the first priority being to “*Separate subsurface agricultural drainage containing high levels of selenium from sensitive wildlife areas.*”¹⁵

¹¹ The May 2010 Final MOU between CDFG and the SLDMWA regarding the GBP included the following in Exhibit 4 of the MOU: “The Authority shall supply 100 ac-ft of water per month or 1,200 ac-ft per year to China Island WA... The water supply shall meet the Department’s water quality objectives and the source shall be surface water, well water, or a mixture of both surface and well water to meet the quantity and quality objectives.”

¹² See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4413

¹³ See Order R5-2019-0077, Attachment A, Table 5, page 37:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

¹⁴ See Table 3-1, page 3-3 of the Sacramento River Basin and San Joaquin River Basin Plan:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf
And, See Appendix 40 to Basin Plan, pdf pgs 206-208:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_appendices.pdf

¹⁵ See Order R5-2019-0077, Attachment A, page 10:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

5. The MND relies on the 2019 GBP WDR which includes an acute selenium objective of 20 ppb selenium for Mud Slough (North). We note that the USEPA did not include an acute selenium criterion in their July 13, 2016, Final updated Clean Water Act section 304(a) recommended national aquatic life criterion for the pollutant selenium. Under Item IV EPA found that, “*The criterion document does not include an acute criterion (based on water-only exposure) because selenium is bioaccumulative and toxicity primarily occurs through dietary exposure.*”¹⁶ (emphasis added)
6. The dredging of potentially contaminated sediment: The SLDMWA proposes to remove sediment from Mud Slough and to remove and/or modify various dikes and levees. Yet, detailed sediment analysis is not provided in the MND nor are these materials proposed to be tested before dredging commences. The public and regulatory agencies are left in the dark regarding potential contaminants (including high levels of selenium and other pollutants) in these sediments that could be remobilized into adjacent water ways and wetlands. Any potential pathway for these contaminants to reach surface and groundwater must be disclosed and its impacts and their mitigation addressed.
7. A new Mud Slough Diversion Structure that will span the entire width of Mud Slough with a crest elevation of 8 feet and 80 feet wide, capable of holding back all the flows of Mud Slough with accumulation of water, ponding and inundation planned upstream has the potential for serious impacts to adjacent to federal and state wildlife refuges and wetlands. These impacts have not been disclosed nor analyzed. The exposure of waterfowl to elevated selenium and other contaminants from this ponding and flooding must be disclosed and its impacts and their mitigation addressed.¹⁷
8. Mitigation measures or alternatives including the continued delivery of water to these wetland areas were not considered along with the obligation of the Grassland Drainers/SLDMWA to obtain a NPDES permit to ensure discharges from the San Luis Drain to Mud Slough upstream of the proposed streambed alteration meet at least the US EPA’s revised chronic selenium criterion for lentic waters of 1.5 ppb (monthly mean)¹⁸ or the 2 ppb monthly mean selenium objective for the Grassland wetland supply channels.¹⁹

¹⁶ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

¹⁷ Ponding upstream from flooding has poisoned birds. In “2003, a pasture at the existing upstream reuse area site attracted waterfowl when it was inadvertently flooded. This flooded area created ideal ecological conditions for shorebird foraging and nesting and thus, a number of pairs responded opportunistically and bred in the field. As a consequence, eggs collected near the pasture had highly elevated [selenium] concentrations.” A deliberate exposure of waterfowl to these poisonous waters is a significant impact that requires analysis. Creating this hazard is also a crime forbidden by the Migratory Bird Treaty Act, 16 U.S.C. section 703.

¹⁸ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

¹⁹ See Table 3-1, page 3-3 of the Sacramento River Basin and San Joaquin River Basin Plan: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

Mitigation measures in the MND are vague and fail to provide enforceable guidelines. This is especially important with regard to the quality of water that will be introduced to China Island and Newman Lake from Mud Slough once the streambed alteration is completed. Neither the quantity nor quality of the water is provided, analyzed or modeled in the MND. A brief narrative of water quality data from Mud Slough is provided in the MND Appendix B (Response to Comments)²⁰ and indicates that since July 2019 at least 13% of the water quality samples collected in Mud Slough exceeded 2 ppb selenium and one sample was above 5 ppb selenium. The actual water quality data for Mud Slough was not provided in the MND and water quality reports from the GBP are no longer posted on the web.²¹

The GBP WDR permits selenium concentrations in Mud Slough at levels that are toxic to fish and wildlife. Selenium at these levels kills juvenile salmon and steelhead, has been found to cause deformities in Sacramento splittail, and causes birth defects and reproductive impairment in birds that nest and feed along the shorelines and in the wetlands. Special-status species such as the State and federally-listed as threatened giant garter snake could be adversely affected by this project as they are vulnerable to selenium exposure through their aquatic diet. The MND's response to comments notes, "*Because the Project occurs within a State wildlife refuge managed by CDFW that provides habitat suitable for numerous special-status species, formal consultations with CDFW and the USFWS are planned and will occur following the submittal of permit applications to the regulatory agencies and prior to any Project construction.*"²² Yet these formal consultations have not been made available to the public nor have they been included with the MND.

The Mud Slough Restoration Project as defined in the MND would introduce more than 1,500 acre-feet/year of water from Mud Slough to replace the low-selenium well water currently used to provide water for wetlands in China Island and Newman Lake. Stormwater flows in Mud Slough can contain groundwater contaminants including selenium and should not be viewed as suitable for wetlands water supply. To protect the fish and wildlife beneficial uses of these public and private wetlands in the North Grasslands, we urge you to require that water quality provided to China Island and Newman Lake meet the USEPA the US EPA's revised chronic selenium

²⁰ See pgs 33-34 of Attachment A to MND (Response to Comments):

https://www.sldmwa.org/OHTDocs/pdf_documents/Meetings/Board/Prepacket/AgendaItem11_AgendaItem12_2021_1119_GBD_Mud_Slough.pdf

²¹ The most recent GBP water quality report available at the SFEI website for the GBP is from 2019:

https://www.sfei.org/sites/default/files/general_content/Final%20GBP%20Monthly%20Report%20January-December%202019.pdf

²² See pg 28 of Attachment A to MND (Response to Comments):

https://www.sldmwa.org/OHTDocs/pdf_documents/Meetings/Board/Prepacket/AgendaItem11_AgendaItem12_2021_1119_GBD_Mud_Slough.pdf

criterion for lentic waters of 1.5 ppb (monthly mean)²³ or the 2 ppb monthly mean selenium objective for the Grassland wetland supply channels.²⁴

The SLDMWA Mitigated Negative Declaration does not meet CEQA requirements for a 401 Certification permit nor does it comply with the CWA enforcement and monitoring provisions. We request you require a complete EIR/EIS analysis before taking any action on the request for this permit to ensure state, federal and private refuge wetland resources are protected. There is no NEPA compliance for this project. The 2019 the EA conducted for the use by the Grassland Drainers of the federal San Luis Drain, does not consider, analyze, describe or provide mitigation with regard to the introduction of this San Luis Drain water conveyed through to Mud Slough (North) to the China Island Wildlife area or Newman Lake wetland areas.

Thank you for your consideration.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



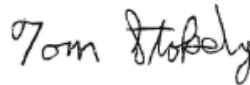
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org




Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com

²³ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

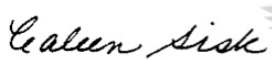
²⁴ See Table 3-1, page 3-3 of the Sacramento River Basin and San Joaquin River Basin Plan: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Advocate



Susan Harvey
President

Crab Boat Owners Association
papaduck8@gmail.com

North County Watch
ifsusan@tcsn.net

CC:

Chuck Bonham, Director
California Department of Fish & Wildlife
715 P Street
Sacramento, CA 95814
Director@wildlife.ca.gov

Wade Crowfoot, Secretary
California Natural Resources Agency
715 P Street, 20th Floor
Sacramento, CA 94236-0001
Email: wade.crowfoot@gov.ca.gov

Elaine Sobeck, Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100
Email: Eileen.Sobeck@waterboards.ca.gov

Kristen Gangl
Senior Environmental Scientist-Specialist
Water Quality Certification Program
Division of Water Rights
kristen.gangl@waterboards.ca.gov

Patrick Pulupa, Executive Officer
CV Regional Water Quality Control Board,
1020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114
Email: Patrick.Pulupa@waterboards.ca.gov

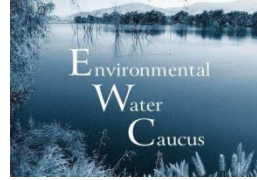
Clay Rogers, Assistant Executive Officer
CV Regional Water Quality Control Board,
1685 E Street
Fresno, CA 93706
Email: Clay.Rogers@waterboards.ca.gov

Martha Guzman Aceves
Regional Administrator
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Tom Hagler
USEPA REGION 9
75 Hawthorne Street Mail Code ORC-2-3
San Francisco, CA 94105
Hagler.Tom@epa.gov

Damian Higgins
FWS NRD Regional Office
U.S. Fish and Wildlife Service
2800 Cottage Way, Suite W-2610
Sacramento CA 95825-1846
damian_higgins@fws.gov

Rain L. Emerson,
M.S. Environmental Compliance Branch
Chief Bureau of Reclamation,
South-Central California Area Office
1243 N Street, Fresno, CA 93721
Emerson, Rain <remerson@usbr.gov>



December 8, 2021

Federico Barajas
Executive Director
Via Email

federico.barajas@sldmwa.org

cheri.worthy@sldmwa.org

Dear Mr. Barajas:

We object to the adoption of the Mitigated Negative Declaration and Notice of Determination with regard to the Mud Slough Restoration project that proposes to alter the stream bed, construct a major dam barrier and dredge the slough stream bed to allow for increased flows from the westside of the San Joaquin Valley to enter Newman Lake and other wetland and refuge areas, the San Joaquin River and Delta Estuary.

There is substantial evidence that supports a fair argument that the proposed dredging and dam barrier construction project will have a significant impact on endangered species, fish and wildlife along with beneficial uses of water. The response to our comments are deficient. They did not address these significant issues, did not consider a full range of alternatives including treating this stormwater and drain waters that can contain damaging levels of selenium, mercury, boron, salt and other contaminants. Further, the cumulative impacts of this project need to be mitigated and addressed.

The basic CEQA principle that a “full EIR” must be prepared whenever a project may have any significant environmental effect has been ignored.

We urge the SLDMWA Board to reject the MND and Notice of Determination and complete a full EIR as required along with providing USFWS and CDFW consultation and biological assessments for public review and comment.

Project Impacts Support a Fair Argument Environmental Impacts are Significant: An EIR is required.

The Proposed Project is located in the China Island Unit of the North Grasslands Wildlife Management Area that is managed by the California Department of Fish and Wildlife (CDFW). The area is comprised of wetlands, riparian habitat, and uplands. Newman Lake is owned by the Newman Land Company and operated for duck hunting and is kept full of water from September 5 through January 10. For this Project, the area includes approximately 368 acres: 78 acres on Newman Land Company and the remainder in the China Island Unit of the North Grasslands Wildlife Management Area. The China Island Unit is part of the 7,400-acre North Grasslands Wildlife Area that is comprised of wetlands, riparian habitat, and uplands that are managed by CDFW for waterfowl habitat and hunting. The project would alter the southern portion of the China Island Unit that is predominantly floodplain. This area serves the Pacific Flyway, many sensitive and endangered fish and wildlife and plant species. Water from Mud Slough flows into the San Joaquin River and on to the San Francisco-Sacramento Delta Estuary.

Four special-status plants have been documented to occur on the Study Area in the CNDDDB (CDFW 2020): alkali milk-vetch (*Astragalus tener* var. *tener*), vernal pool smallscale (*Atriplex persistens*), Delta button-celery (*Eryngium racemosum*), and spiny-sepal'd button-celery (*Eryngium spinosepalum*). In addition, numerous other special-status plant species have been documented within three miles of the Study Area.

Without physical surveys, SLDMWA identified twelve special-status fish species were identified as having potential to occur within the lower San Joaquin River and were assumed to potentially occur in Mud Slough or inhabit areas downstream and therefore would be potentially affected by changes in San Joaquin River hydrology or water quality as a result of the Proposed Project construction and operations.

According to SLDMWA, fish Species that are assumed to be impacted by the project are the Central Valley spring-run Evolutionarily Significant Unit (ESU) and Central Valley fall-run ESU of Chinook salmon, Pacific lamprey, Sacramento hitch and hardhead. In 2019 & 2020, based on the site reconnaissance, review of available databases and literature, and familiarity with local fauna, a total of 76 special-status fish and wildlife species were considered as part of this assessment (USFWS 2019a,b; CDFW 2019a,b; CNDDDB 2020). Based on the field investigations, review of available databases and literature, familiarity with local flora, and assessment of habitat suitability, 11 federally- or State-listed, Proposed, Candidate, or Fully Protected wildlife species have the potential to occur within the Study Area: Conservancy fairy shrimp, longhorn fairy shrimp, vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander (Central California Distinct Population Segment (DPS)), giant garter snake, greater sandhill crane, Swainson's hawk, tri-colored blackbird, white-tailed kite, and San Joaquin kit fox (*Appendix C*).

Construction-related activities associated with removal of the existing water control structures and removal of the Los Banos Creek spill structure, cofferdam installation and dewatering, installation of the new Mud Slough Diversion Structure, installation of a culvert in the Connection Channel, and reinforcement of the Newman Lake dam will utilize heavy machinery

which could potentially injure or kill fish, including special-status fishes such as spring-run and fall-run Chinook salmon, hardhead, Pacific lamprey or hitch, should they be present in the vicinity of the Proposed Project during construction. SLDMWA assumed the BMPs will be implemented and thus protect water resources that would effectively minimize or avoid impacts on special-status fishes. No data or surveys or monitoring are provided to confirm this assumption.

Without actual surveys, SLDMWA states that construction-related activities will cause only short-term and localized impacts on aquatic habitats within the immediate vicinity of the construction. The area of construction is estimated to be approximately 1.4 acres for the new Mud Slough diversion structure and 2.4 acres of disturbance for other elements of Project construction. Largely due to operations of the Grasslands Bypass Project habitat conditions in Mud Slough and Los Banos Creek are generally poor. Without data or current surveys SLDMWA assumes during the summer months sensitive species of special concern are not expected to be in the vicinity of the proposed Project site. As noted contaminants like selenium in dredge materials and water bio-accumulate and can have lasting impacts long after the immediate construction impacts may have subsided.

SLDMWA goes on to assume without surveys or data that the construction-related activities associated with recontouring and installation of the new diversion structure in Mud Slough would have temporary and localized impacts on the aquatic, riparian, and benthic habitats in the Study Area and immediately downstream. And state that the proposed will only provide some protections fish and their habitat, the direct and indirect impacts of construction of the Proposed Project on resident and migratory fish, including special-status fishes and their habitats including EFH2 for Pacific salmon, inhabiting Mud Slough were considered to be significant without mitigation. The assumptions, lack of data and surveys lend credible doubt to the assertion that these significant impacts are mitigated.

SLDMWA assumes without surveys, data or water quality monitoring that increases in turbidity or temperature associated with in-water construction would be small, highly localized to within a short distance of the construction area, and temporary (lasting hours or days). This assumption relies upon undisclosed pollution prevention and water quality monitoring would be required by the Clean Water Act (CWA) Section 401 Water Quality Certification issued by the Regional Water Quality Control Board (RWQCB) for the Proposed Project to ensure that construction-related activities do not cause turbidity, temperature, or dissolved oxygen concentrations within or downstream of the Project site to exceed thresholds for maintaining aquatic life. The long term and cumulative impacts from potentially releasing contaminant laden sediments into downstream water ways has not been examined and is likely to have significant impact on downstream fisheries and water quality.

SLDMWA without data or surveys, assumes the construction of the new Mud Slough Diversion Structure, that will span the entire width of Mud Slough with a crest elevation 8 feet high will not have significant impacts because the diversion structure is expected to be a complete barrier to the upstream passage of migratory fish including Chinook salmon, steelhead, and sturgeon when the control gate is closed during the fall and winter diversion period and during summer re-filling, and providing an impediment to migration.

SLDMWA assumes without data or surveys, that operation of the new diversion structure is not anticipated to have any significant impacts on water quality of the San Joaquin River in the vicinity of the Proposed Project in Mud Slough, including EFH for Chinook salmon. SLDMWA does disclose that routine maintenance of the diversion structure has the potential to cause short-term and localized increases in suspended sediment loads and debris removal from the diversion structure. This impact is assumed to be mitigated with best management practices but no actual surveys or monitoring to confirm the claim.

No alternatives to the present project are provided, including an alternative that would continue to provide good quality water to Newman Lake that is pumped groundwater. Admittedly the diversion of surface water by the Proposed Project during high flow winter months from Mud Slough will result in a reduction in flow passing downstream into the lower San Joaquin River. But without monitoring, surveys or data this diversion of water to the San Joaquin River is assumed to be insignificant.

SLDMWA indicates that a US Army Corps of Engineers (USACE): Section 404 permit for discharge of fill into waters of the US State Water Resources Control Board (SWRCB): Section 401 water quality certification from the Central Valley Regional Water Quality Control Board (CVRWQCB) CDFW: Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife are all needed to complete the project. None of these permits were made available for public review so the impacts of the proposed project and monitoring is not disclosed. No ESA or CESA consultations have been conducted. Thus, the impacts to endangered species also have not been fully assessed or disclosed.

We adopt our previous comments. And find that there is substantial evidence that supports a fair argument that the project may have a significant impact on endangered species, fish and wildlife along with beneficial uses of water from the proposed permanent diversion structure to be constructed in Mud Slough, approximately 300 feet downstream of the confluence with Los Banos Creek with this diversion structure that would span the width of Mud Slough (approximately 80 feet) and will raise the water level in Mud Slough to match the operating water level in Newman Lake. The impacts from this structure that will consist of a reinforced concrete broad crested weir check with a top width of 8 feet and armored upstream and downstream faces have not been sufficiently disclosed. This includes the operation of the structure that will include an overshot spill gate to control water levels and maintain downstream flows. The structure and concrete lining will extend over the 52-foot length of Mud Slough, with 10 linear feet of riprap embedded in the channel upstream and downstream of the structure. The crest elevation is designed to pass normal high flows without exceeding the Mud Slough channel capacity. Extreme high flows would spill and inundate the adjacent floodplains, which is consistent with current conditions. Supposedly the “self-cleaning operation and design of the Mud Slough diversion structure” are assumed to halt suspended sediment or turbidity at elevated to levels that would cause impacts on fish or habitat suitability in Mud Slough or the San Joaquin River. No data, monitoring or surveys are provided to confirm these assumptions of insignificance.

Newman Lake Dam Reinforcement: There is also not sufficient disclosure of the impacts from the removal of the five hydraulic structures within the Grasslands Bypass Project (L2, L11, L13, L14 and L15) along with the use of construction equipment (excavators, backhoe, grader, roller-compactor, bottom-dump truck, side-dump truck, and water trucks) for the installation of a reinforced concrete diversion structure, installation of a culvert and clean out of approximately 200 feet of existing ditch, reinforcement of an existing dam, and the removal of five abandoned water control structures.

Specific Responses to PCL et. al. MND Comments:

In response to our comments [PCL et. al. Comment 3-4, on page 30 of Attachment A to the MND], SLDMWA claims:

"Only stormwater flows (no agricultural drainage) will continue to be routed to Mud Slough from January 1, 2020 through December 31, 2035 under new WDRs."

Yet in response to PCL et. al. Comment 3-8, pgs 33-34 of Attachment A to MND SLDMWA says:

"Since July 2019, when daily selenium sampling began in Mud Slough, selenium concentrations have been below 2 ppb in 87% of the measurements (660 out of 763 samples) and only once in 763 samples was there a detection above 5 ppb (5.41 ppb, February 2021)."

From the data presented, since July 2019 SLDMWA admits they have exceeded 2 ppb 13% of the time, and one sample exceeded 5 ppb Se. These numbers document that the stormwater discharges are indeed commingling with agricultural drainage. As mentioned in our comments and not addressed is the fact these levels of selenium are significant. They likely will impact migratory birds reproduction, endangered species and cumulatively will magnify through the food chain

Also with respect to PCL et. al. Comment 3-8, SLDMWA further states that the:

"5 ppb 4-day average water quality objective from the WDRs has not been exceeded since daily sampling began."

The MND does not address nor analyze the serious impacts from this water quality objective at Newman Lake or other adjacent wetland areas. There is no analysis or data to confirm the lack of impacts from such a water quality objective for Se in Newman Lake. Certainly the 5 ppb objective should NOT be the appropriate number. It should at a minimum be 2 ppb as has been adopted for the Grassland Wetland Channels in the Basin Plan. Newman Lake is part of a State Wildlife Area that includes wetland habitat. To protect the beneficial uses at the China Basin Wildlife Area, the objective should consider protection of wetland resources. Selenium at 5 ppb is a non-protective number. Also the GBP Ecological Risk Guidelines list Se in water between 2-5 ppb as a Level of Concern, and above 5 a level of Toxicity.

Table 1. Recommended Ecological Risk Guidelines for Selenium Concentrations

Medium	Effects on	Units	No Effect	Concern	Toxicity
Water (total recoverable selenium)	fish and bird reproduction	µg/L	< 2	2 – 5	> 5
Sediment	fish and bird reproduction	µg/g (dry weight)	< 2	2 – 4	> 4
Invertebrates (as diet)	bird reproduction	µg/g (dry weight)	< 3	3 – 7	> 7
Warmwater Fish (whole body)	fish growth/condition/survival	µg/g (dry weight)	< 4	4 – 9	> 9
Avian egg	egg hatchability (via foodchain)	µg/g (dry weight)	< 6	6 – 10	> 10
Vegetation (as diet)	bird reproduction	µg/g (dry weight)	< 3	3 – 7	> 7

Notes:

1/ These guidelines, except those for avian eggs, are intended to be population based. Thus, trends in means over time should be evaluated. Guidelines for avian eggs are based on individual level response thresholds (e.g., Heinz, 1996; Skorupa, 1998)

2/ A tiered approach is suggested with whole body fish being the most meaningful in assessment of ecological risk in a flowing system.

3/ The warmwater fish (whole body) concern threshold is based on adverse effects on the survival of juvenile bluegill sunfish experimentally fed selenium enriched diets for 90 days (Cleveland et al., 1993). It is the geometric mean of the "no observable effect level" and the "lowest observable effect level."

4/ The toxicity threshold for warmwater fish (whole body) is the concentration at which 10% of juvenile fish are killed (DeForest et al., 1999).

5/ The guidelines for vegetation and invertebrates are based on dietary effects on reproduction in chickens, quail and ducks (Wilber, 1980; Martin, 1988; Heinz, 1996).

6/ If invertebrate selenium concentrations exceed 6 mg/kg then avian eggs should be monitored (Heinz et al., 1989; Stanley et al., 1996).

Thank you for the opportunity to comment.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



Mike Conroy
Executive Director & IFR
Pacific Coast Federation of Fishermen's Ass.
mike@ifrfish.org



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](#)



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



September 10, 2021

Ashley Peters
 Water Resource Control Engineer
 Irrigated Lands Regulatory Program
 Central Valley Regional Water Quality Control Board
 11020 Sun Center Drive #600,
 Rancho Cordova CA 95670
 Email: ashley.peters@waterboards.ca.gov

Re: Comments on the Grassland Bypass Project’s Technical and Monitoring Report Pursuant to California Water Code Section 13267.

Summary: Summary: Materials provided by the dischargers do not sufficiently comply with the order: The dischargers do not include a comprehensive analysis of the data that reflect the most recent EPA water column requirements and the fish tissue analysis (including egg/ovary tissue data). Modeling of fish tissue alone will overestimate the protective water values for selenium and is scientifically indefensible. Specifically, the Tech Report provides incomplete monitoring data (e.g. no fish egg data is provided for ANY species of fish in the sample), and does not compare recent water column numbers with 2016 USEPA water quality standards that would be protective of downstream beneficial uses. Further, given the technical complexity of this issue, we recommend the Water Board to obtain a peer review of the report and any future reporting to ensure compliance with state and federal standards and to ensure the orders comply with EPA fish tissue and water column standards and that monitoring is sufficient to ensure

compliance. The undersigned groups requested the opportunity to review the CVRWQCB EO Order prior to execution. There was no opportunity to comment provided nor was the Order or Study Proposal peer reviewed.

The undersigned organizations respectfully submit comments to the Central Valley Regional Water Quality Control Board (Regional Board) on the Grasslands Bypass Project's (GBP) Technical and Monitoring Report (Tech Report) as required by written Order (Order) from the Regional Board's Executive Officer (EO) to the San Luis & Delta Mendota Water Authority and U.S. Bureau of Reclamation dated February 25, 2020. The Order specifically requested the following:

1. Review of Fish Tissue Data

No later than 31 July 2021, the Responsible Parties shall review all available fish tissue data in the Grassland watershed¹ and compare that data to aquatic life criteria for selenium recommended by the United States Environmental Protection Agency, as well as human health criteria that will be identified for the Responsible Parties by Central Valley Water Board staff. The results of the data assessment should be reported along with all raw data evaluated so that Central Valley Water Board staff may conduct an independent review. Data gaps within the available fish tissue data should be identified.

This review may be combined with the report required by Item 2.

2. Report on Water Column Numbers

In concurrence with the National Marine Fisheries Service, biological monitoring will be conducted by the Responsible Parties for particulate matter selenium and dissolved selenium concentrations, which, when taken as a ration, measure the body of water's potential for bioaccumulation of selenium (K_d , ratio of particulate matter selenium to dissolved selenium)². This value is one variable that can be used to estimate the upper limit of water column selenium that would be protective of the fish species represented by other variables (e.g., whole-body fish tissue selenium, trophic transfer factor for fish and invertebrates).

No later than 31 July 2021, the Responsible Parties shall submit the first of two phased reports on the water column numbers derived through implementation of their biological monitoring, along with the data used to develop them. The method employed for development of water column numbers, selected in collaboration with the National Marine Fisheries Service, should be reported along with all inputs used to derive the results including monitoring data and assumed values with citations. The review of fish tissue data, completed under Item 1, should be used to describe the availability, limitations, and data gaps pertaining to existing whole-body fish tissue selenium values

¹ The waterbodies evaluated shall, at minimum, include the stretch of the San Joaquin River between Salt Slough and the Merced River, Mud Slough upstream and downstream of the San Luis Drain, and Salt Slough.

² Presser T.S. and S.N. Luoma. 2010. A methodology for ecosystem-scale modeling of selenium. *Integrated Environmental Assessment and Management* 6(4), 685-710.

that may be used to model protective thresholds for fish. The first report may be combined with the review required by Item 1.

The second phased report should follow approximately one (1) year after the first report is submitted. The timing shall coincide with the Responsible Parties reporting to the National Marine Fisheries Service on the results of their biological monitoring program, which is anticipated to last two years beginning in March 2020. The second phased report must include the final assessment and conclusions from the monitoring program, while the first report will include preliminary assessment of the first year of monitoring data.

Both reports shall compare derived water column numbers to criteria for selenium recommended by the United States Environmental Protection Agency.

The Regional Board provided notice to public Stakeholders via email on August 9, 2021, of a 30-day public comment period on the first Technical and Monitoring Report dated July 2021. Public comments must be received by **5:00 pm on September 10, 2021**, to be considered in the Executive Officer's assessment of the report.

The undersigned organizations, have a long-standing interest in the GBP because contaminants in this agricultural drainage discharges have profound effects to the environment, including effects to downstream waterways, aquatic life, and migratory birds. We include our comments on the Triennial Review of the Water Quality Control Plan for Sacramento River and San Joaquin River and Tulare Basins, comments on GBP Drainage Management Plan, Draft EA on a 10-Year Use Agreement of the San Luis Drain, the 2019 Tentative WDRs for the GBP, the GBP Stormwater Plan EIR Addendum, the USEPA's proposed water quality criteria for selenium in California, and the 2009 GBP EIR/EIS and the Basin Plan Amendment by reference.³

³Coalition comments on the Triennial Review of the Water Quality Control Plan for Sacramento River and San Joaquin River Basins and the Tulare Lake Basin. May 10, 2021. See: <https://calsport.org/news/wp-content/uploads/CVRWQCB-Triennial-Review-Cmts-CSPA-et.-al.-05-10-21.pdf>

Coalition comments on Grassland Bypass Project Drainage Management Plan, Including Components of the Westside Regional Drainage Plan and the Long-Term Stormwater Management Plan. February 1, 2021. See: https://calsport.org/news/wp-content/uploads/PCL-PCFFA-et-al-Cmts-to-the-CV-Regl-Bd_GBP-Drainage-Mgmt-Plan_2-1-21-.pdf

Comments on behalf of North Coast Rivers Alliance, Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, San Francisco Crab Boat Owners Association, California Sportfishing Protection Alliance, the Winnemem Wintu Tribe and Felix Smith on Grassland Bypass Project Drainage Management Plan, Stephan C. Volker, February 1, 2021. See: <https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fcalsport.org%2Fnews%2Fwp-content%2Fuploads%2F2021-02-01-NCRA-et-al-GBP-DMP-Comments.pdf&data=04%7C01%7C%7C4b82a3c6d53e4a805e3508d96d262dfa%7C84df9e7fe9f640afb435aaaaaa%7C1%7C0%7C637660833009070879%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQ>

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uESGTVcui94E%3D&reserved=0](http://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925)

Coalition comments on USBR's Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area. December 23, 2019. See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

Comments of Pacific Coast Federation of Fishermen's Associations (PCFFA) and the Institute for Fisheries Resources (IFR), and the signatory organizations Re: Comments on Tentative Waste Discharge Requirements (WDRs) for Surface Water Discharges from the Grassland Bypass Project in Merced and Fresno Counties. November 5, 2019. See: <https://calsport.org/news/wp-content/uploads/Fishing-Conservation-Grps-Cmt-Letter-CV-RWQCB-WDRs-for-Federal-SLD-Grassland-Drainers-Discharge-11-6-19-1-2.pdf>

Comments of Pacific Coast Federation of Fishermen's Associations, California Sportfishing Protection Alliance, Friends of the River, San Francisco Crab Boat Owners Association, Inc., Institute for Fisheries Resources, and Felix Smith on the Addendum to the Final Environmental Impact Statement / Environmental Impact Report for the Grassland Bypass Project, 2010-2019, SCH No. 2007121110. Stephan C. Volker, September 13, 2019. See: <https://calsport.org/news/wp-content/uploads/Comments-of-PCFFA-et-al-9-13-2019.pdf>

Coalition comments on Grassland Bypass Project Long-Term Storm Water Management Plan EIR Addendum and Initial Study--A Full EIR-EIS is Required. September 9, 2019. See: <https://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-GBP-Stormwater-Plan-CEQA-09-09-2019-3.pdf>

Coalition comments of environmental, fishing and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. See: <http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf>

Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker, June 22, 2015. See: https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf

Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR, September 8, 2014. See: <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbp-land-retirement.pdf>

Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project, June 30, 2014. See: <http://calsport.org/news/wp-content/uploads/Final-coalition-comments-on-Draft-GBP-WDR-6.30.14.pdf>

Coalition Comments: Grasslands Bypass Project -- Violations of the Endangered Species Act and Reduced Monitoring Threaten Endangered Species and Public Health, November 27, 2013. See: <http://calsport.org/news/wpcontent/uploads/2013/12/Coalition-Letter-on-GBP-ESA-Violations-Monitoring-Reductions-LTR.Corrected-.pdf>

We also incorporate by reference comments to the Regional Board by the Bay Institute on the 2021 Triennial Review of the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, dated May 10, 2021, and comments of San Francisco Baykeeper and The Bay Institute on the Triennial Review of the Water Quality Control Plan for Sacramento River and San Joaquin River Basins and the Tulare Lake Basin, dated May 10, 2021.

Executive Officer Order for GBP Technical Reports

The Regional Board hosted an online GBP Stakeholder Meeting on January 14, 2021, to discuss the GBP Drainage Management Plan. During the Stakeholder Meeting, the Regional Board staff noted that the EO had issued an order for two Tech Reports to help the Board derive protective water column selenium values (see slide 7 of the Board’s presentation on below). A copy of the EO Order dated February 25, 2020, was provided by the Regional Board to Patricia Schifferle via email on August 3, 2021. Item 11 of the EO Order identifies the need for the Tech Reports: *“Information is needed to better understand the scope and degree of threat to fish due to the discharge of selenium to Mud Slough (north) and the San Joaquin River. The technical reports required under this Order are necessary to assess potential threats and impacts to water quality. Specifically, responsive information is necessary to better understand the relationship between selenium concentrations in the water column and fish tissues.”*

Coalition Comments: Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project. August 11, 2011. See: <http://calsport.org/news/wp-content/uploads/2011/09/Opposition-To-Grassland-Bypass-MonitoringReductions.pdf>

CSPA, CWIN and AquAlliance submit Comments to State Water Board Regarding Grassland Bypass Project and Basin Plan Amendment. September 22, 2010. See: <http://calsport.org/news/cspa-cwin-and-aqualliance-submit-comments-to-state-water-board-regarding-grassland-bypass-project-and-basin-plan-amendment/>

Sierra Club et. al. Comments: Grassland Bypass Project & San Joaquin River Selenium Basin Plan Amendments September 22, 2010. https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/jim_metropulos.pdf

Comments of California Sportfishing Protection Alliance and California Water Impact Network on the draft environmental impact report for the Irrigated Lands Regulatory Program and related documents. Also attached are several comments prepared by three expert consultants September 27, 2010. <http://calsport.org/doclibrary/pdfs/207.pdf>

Environmental Coalition Comments on Draft Staff Report for Grasslands Bypass Project Basin Plan Selenium Amendments to The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, April 26, 2010 available at: https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf

EO Order for Technical Reports

- Analysis of available fish tissue Se data
 - SJ River, Mud SI, Salt SI; compare to USEPA aquatic life criteria; human health criteria TBD
 - Due July 2021
- Derive estimated water column selenium values
 - Based on particulate and dissolved Se data
 - Model estimate of protective water column values for fishes; compare to USEPA #'s
 - Due July 2022

We support the Regional Board's effort to model and estimate protective water column selenium values for fishes. It will be important that this effort consider the following:

- Existing water quality objectives in the Basin Plan and GBP WDRs are not Protective of the fish and wildlife beneficial uses, especially downstream in the San Joaquin River and Delta;
- The study proposals for the Tech Reports, the Tech Reports and the subsequent modeling effort should all be peer reviewed by selenium toxicity experts from agencies including CDFW, USGS, USFWS, NMFS and USEPA;
- Derivation of Protective Water Column Selenium Values should consider USEPA's Updated CWA section 304(a) national chronic aquatic life criterion for selenium in fresh water⁴ and the Proposed CA Se Water Quality Criteria Applicable to SF Bay and Delta⁵;
- Derivation of Protective Water Column Selenium Values should consider Fish species Vulnerable to Selenium Contamination in the Delta;
- New information warrants reinitiating consultation under the ESA with NMFS for effects of the GBP to the federally-listed green sturgeon.

⁴ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambientwater-quality-criterion-for-selenium-in-freshwater>

⁵ See: <https://www.regulations.gov/document?D=EPA-HQ-OW-2015-0392-0001>

We provide a more detailed description of these issues to be considered below.

Current Selenium Water Quality Objectives in Basin Plan and GBP WDRs are not Protective and Don’t Meet Legal Standards under the CWA

The core regulatory guidelines for aquatic selenium pollution in the United States are the Aquatic Life Water Quality Criteria derived by the US Environmental Protection Agency (USEPA) pursuant to the Clean Water Act (CWA) of 1977 (as amended). Selenium is highly bioaccumulative and its toxicity to fish and wildlife occurs primarily via dietary exposure. Prior to 2016, the USEPA had last promulgated an updated national chronic criterion for selenium in 1987, setting the criterion at 5 µg/L selenium on an acid-soluble basis (USEPA 1987).⁶ The procedure EPA used to derive the 1987 objective is much better suited for application to non-bioaccumulative pollutants. Since that time, serious weaknesses in the 1987 national selenium criterion have been revealed.

As we have commented before to the Regional Board, the current 5 µg/L selenium water quality objective in the Sac/San Joaquin Basin Plan and for Mud Slough (north) and the San Joaquin River from Sack Dam to Vernalis and referenced in Table 5.2 of Attachment A in the 2019 GBP WDRs (Order R5-2019-0077)⁷ is based on EPA’s 1987 national selenium criterion and is not protective of downstream beneficial uses including fish and wildlife resources that use those surface waterways. The selenium water quality objectives for the Grasslands wetland channels and Mud Slough (north) and San Joaquin River are summarized in Table 1.

Table 1. Total Selenium Water Quality Objectives⁸

Acute	Chronic	Applicable Water Bodies
12 µg/L	5 µg/L (4-day average)	San Joaquin River, mouth of the Merced to Vernalis
20 µg/L	5 µg/L (4-day average)	Mud Slough (north), and the San Joaquin River from Sack Dam to the mouth of Merced River
20 µg/L	2 µg/L (monthly mean)	Salt Slough and constructed and re-constructed water supply channels in the Grassland watershed listed in

⁶ See: <https://www.epa.gov/sites/production/files/2019-03/documents/ambient-wqc-selenium-1987.pdf>

⁷ See Attachment B Item D @ pdf pg 90: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

⁸ Adapted from Table 3-1 on page 3-5 from the Basin Plan: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

		Appendix 40.
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On July 13, 2016, the USEPA published a Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water. The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 recommended criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. Draft versions of the criterion underwent public review in 2014 and 2015 and external peer review in 2015. EPA considered all public comments and peer reviewer comments in the development of the 2016 final selenium criterion document. EPA's water quality criterion for selenium provides recommendations to states and tribes authorized to establish water quality standards under the CWA.⁹

The EPA's 2016 final revised Section 304(a) guidance for selenium makes clear that retaining the Sac/San Joaquin Basin Plan chronic selenium standard of 5 µg/L will not protect aquatic life and wildlife designated beneficial uses and therefore would bring the state out of compliance with the requirements of Section 303(c)(2)(B) of the Clean Water Act (CWA). As per [48 FR 51405](#), Nov. 8, 1983, as amended at [80 FR 51049](#), Aug. 21, 2015, “a) **State review.** *The State shall from time to time, but at least once every 3 years, hold public hearings for the purpose of reviewing applicable water quality standards adopted pursuant to §§ 131.10 through 131.15 and Federally promulgated water quality standards and, as appropriate, modifying and adopting standards. The State shall also re-examine any waterbody segment with water quality standards that do not include the uses specified in section 101(a)(2) of the Act every 3 years to determine if any new information has become available. If such new information indicates that the uses specified in section 101(a)(2) of the Act are attainable, the State shall revise its standards accordingly. Procedures States establish for identifying and reviewing water bodies for review should be incorporated into their Continuing Planning Process. In addition, if a State does not adopt new or revised criteria for parameters for which EPA has published new or updated CWA section 304(a) criteria recommendations, then the State shall provide an explanation when it submits the results of its triennial review to the Regional Administrator consistent with CWA section 303(c)(1) and the requirements of [paragraph \(c\)](#) of this section.*”¹⁰

⁹ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

¹⁰ See: <https://ecfr.federalregister.gov/current/title-40/chapter-I/subchapter-D/part-131/subpart-C/section-131.20>

Further, the Regional Board has included acute water quality objectives in the Basin Plan and GBP WDRs.¹¹ As we noted in our comments to the Regional Board for the Triennial Review of the Water Quality Control Plan for Sacramento River and San Joaquin River Basins and the Tulare Lake Basin, dated May 10, 2021, USEPA did not include an acute water quality criterion for selenium in their final updated CWA section 304(a) selenium criteria revision.¹² This is because selenium bioaccumulates in the ecosystem and toxicity is primarily through dietary exposure. Thus, short-term exceedances of the 5 µg/L selenium objective allowed by acute selenium objectives in the Sac/San Joaquin Basin Plan (ranging from 12 to 20 µg/L depending on location) can have deleterious effects to the upper trophic level species. Selenium bioaccumulates rapidly in aquatic organisms and a single pulse of selenium (>10 µg/L) into aquatic ecosystems could have lasting ramifications, including elevated selenium concentrations in aquatic food webs (Beckon 2016; Besser *et al.* 1993; Graham *et al.* 1992; Maier *et al.* 1998; Nassos *et al.* 1980; Hamilton 2004). We therefore urge the Regional Board rescind acute selenium objectives from the Basin Plan and GBP WDRs and adopt chronic selenium objectives that are protective of designated fish and wildlife beneficial uses.

Planning and review efforts in the mid-1980's recommended a lower selenium objective to protect fish and wildlife resources in the San Joaquin River. The California State Water Board (State Board) in Order 85-1¹³ (dated February 5, 1985) directed the formation of the San Joaquin River Technical Committee (Technical Committee) made up of State Board and Central Valley Regional Board staff and tasked the Technical Committee (among other things) to report back to the State Board on proposed water-quality objectives for the San Joaquin River Basin that would protect all beneficial uses. The Technical Committee reported back (via a technical report to the State Board, in August, 1987¹⁴) that available scientific information indicated an appropriate selenium objective for the San Joaquin River at Hills Ferry would likely need to be 2 µg/L. The Technical Committee noted that 2 µg/L coincidentally also reflected selenium concentrations at Hills Ferry in the mid-1970's, which was viewed as important because 1975 is the benchmark year for compliance with the CWA antidegradation policy (i.e., beneficial uses existing as of November 28, 1975, must be protected). In part, because of uncertainties concerning how much it would cost dischargers to implement a 2 µg/L objective on the San Joaquin River at Hills Ferry, the Technical Committee allowed an "interim selenium objective" of 5 µg/L. It was recommended that this "interim" objective be reviewed during the 1991 triennial review of the

¹¹ As described in Table 3-1 of the Basin Plan and ranging from 12 to 20 µg/L (depending on location) that will bioaccumulate throughout the ecosystem. See Table 3-1 on page 3-5:

https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

¹² See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

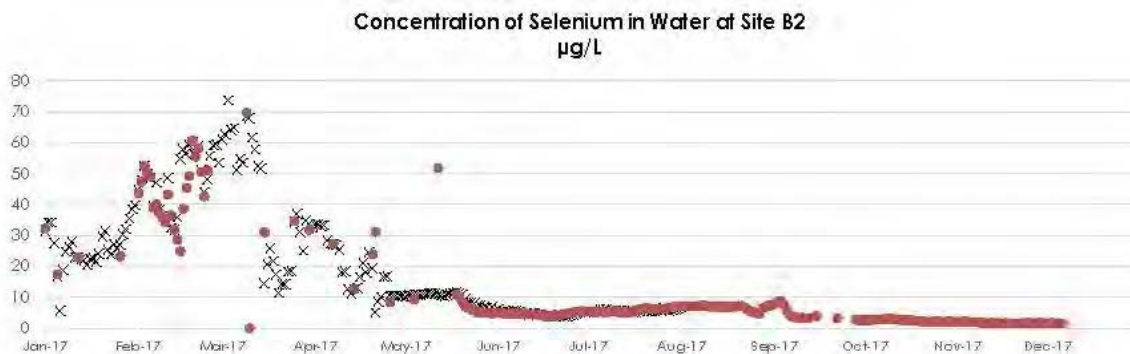
¹³ See: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/1985/wq1985_01.pdf

¹⁴ See: https://www.google.com/url?client=internal-element-cse&cx=001779225245372747843:6ygtx6llvco&q=https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/wq_control_plans/1995wqcp/exhibits/sdwa/sdwa-exh-14.pdf&sa=U&ved=2ahUKEwiCtOuz_6vwAhUHGDQIHdkaANcQFjAAegQIBBAB&usg=AOvVaw2AnnpOj4kvyzmyLbB5HWkh

Basin Plan and the Regional Board should assess the data from water quality monitoring and studies of direct toxicity and bioaccumulation to determine whether the 5 µg/L interim selenium objective is still appropriate. That “interim selenium objective” has effectively been extended to the present day. The Technical Committee recommendations were summarized in Gerald Johns’ presentation in the Proceedings of the 4th Selenium Symposium (Johns 1989).

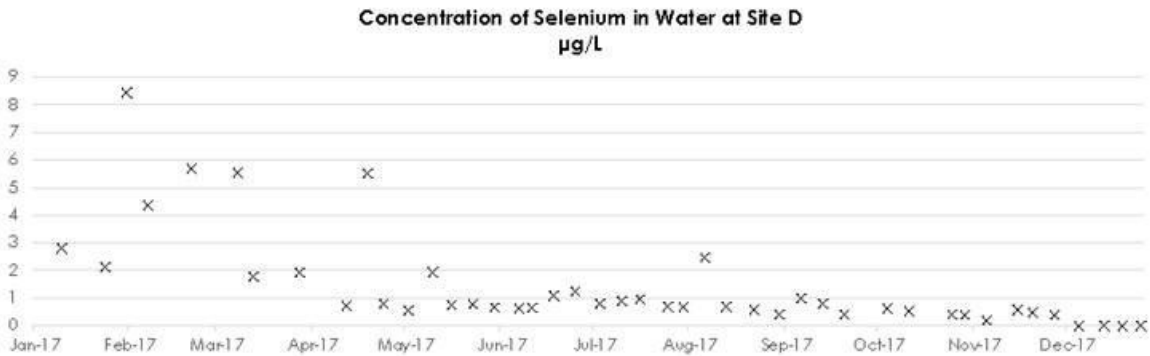
Even modeling done for the GBP supports a selenium objective below 5 µg/L in the San Joaquin River. We reference a report by H.T. Harvey and Associates (2019) that applied the Presser and Luoma fish selenium models to the Long-term Stormwater Management Plan for the GBP. In that report, 3 of the 5 “site-specific” estimates of protective water values for selenium in the San Joaquin River just downstream of Mud Slough were below 5 µg/L.

There can be significant discharge of selenium-laden drainage and contaminated groundwater from the GBP. For example, during the winter/spring of 2017, water quality monitoring data showed high selenium concentrations (e.g., 20-40 µg/L) associated with high flow conditions in water entering the San Luis Drain from the GBP. The figure below shows selenium concentrations at Site B2 in the San Luis Drain during 2017.



Although the San Luis Drain adds a relatively small percentage of flow to Mud Slough, it nevertheless substantially increased the selenium concentrations in Mud Slough in 2017 to unacceptably high levels of 5-10 µg/L (depicted in the figure below). Dilution is not the solution to pollution—especially in the case of selenium, which bioaccumulates in the food chain and magnifies impacts on fish, wildlife, migratory birds, and terrestrial species (Lemly and Skorupa, 2007; Skorupa 1998; USDI 1998). According to selenium expert Dr. Dennis Lemly, the 5 µg/L is an outdated number from the 80's and 90's, which has been shown repeatedly through field case study research to be under protective. In other words, 5 µg/L won't protect downstream fish and wildlife, including salmon.¹⁵

¹⁵ Dr. Dennis Lemly personal communication to Pacific Advocates, dated 10-26-19: “... refer to the peer reviewed published guidelines for selenium toxicity given in my book (Lemly, A.D. 2002. Selenium Assessment in Aquatic Ecosystems: A Guide for Hazard Evaluation and Water Quality Criteria. Springer-Verlag, New York), and the current national regulatory criteria issued by EPA in 2016 (https://www.epa.gov/sites/production/files/2016-06/documents/se_2016_fact_sheet_final.pdf). These information sources establish water limits for protection of fish and other aquatic life, at 1-2 ug/L (my book, <1 for organic selenium, 2 for inorganic selenium; EPA = 1.5).”



Peer Review of EO Tech Reports and Proposals

In our comments on the Drainage Management Plan dated February 1, 2021, we asked the Regional Board the following: *“Have the proposals for the EO Technical Reports been peer reviewed?”* We see no evidence that the proposals for the Tech Reports or the July 2021 Tech Reports have been peer reviewed. Peer review of the proposals is essential in establishing a study plan and sampling schedule that would be comparable with previous GBP biological monitoring efforts and consider impacts to downstream fisheries resources in the Delta.

Peer Review is warranted to correct errors or miss-statements. The Tech Reports could definitely use a careful peer review. There are editorial revisions or errors that are needed so materials can be read and analyzed including:

- Figures are too small and compressed to be read and analyzed by a reader: For example Look at Figures 5 and 6, they are so small (so compressed) that there's very little separation of the plotted data points. Each of those Figures should be a full page (not sharing a page) and blown up for data point resolution (by reorienting "landscape"). If an entire page could to be dedicated to a Figure, this would let your reader actually see some detail in the data. Another example, look at Figure 9, the 0 to 10 ug/L on the Y-axis is a region where every ug/L increment is incredibly important for a reader to be able to read and analyze, but one cannot discern anything in that region for the most recent years of data. If this data was "landscape" oriented that Figure and blow it up to fill the page, those 2019 thru 2021 data points would no longer be jumbled together (compressed) but rather would separate out to an extent that a reader could actually distinguish them and clearly know each value. Thus, if a reader wanted to look at the Figure to see how many points were greater than 2 ug/L.
- 1996-2004 being referred to as a 12-year span,
- pg. 4 and pg. 10: percent moisture of fish tissue being called "soil moisture",

There are also substantive revisions needed such as explaining how in Table 4a [Water Inflow monitoring for Se concentrations] of Appendix D there are selenium water concentrations reported for dates with zero (0) discharge. This occurs for more than 100 separate monitoring dates in the Table.

Further, in Section 3.2 of the Tech Report the use of the 1993 selenium in water (11 µg/L) and particulate (1.6 µg/g dw) data to estimate contemporary Kd for modeling input is scientifically indefensible. Kd is a bioaccumulation factor (from water to the 1st trophic level), it is well established that bioaccumulation factors for selenium are inversely proportional to "dose" or "exposure". Since 11 µg/L for selenium in water is, according to the Tech Report, about an order of magnitude higher than current conditions, the estimated Kd of 146 will be a gross underestimate of current condition Kd. This could lead to gross overestimates of protective water values for selenium.

The most significant data gap in the Tech Report is the complete absence of fish egg data for ANY species of fish in the sampled slough and river reaches. This is not highlighted in the report. This is significant because the only truly independently derived tissue criterion in EPA's 2016 criteria document is the 15.1 ug/g egg/ovary criterion. All the other tissue (and water) criteria (whole-body and muscle) are translational and anchored to the 15.1 ug/g egg/ovary criterion. That's why EPA emphasized the primacy of the egg/ovary criterion over the other criteria. The problem is that the post-2016 Se literature (including the Stewart et al. 2020 splittail paper) now includes empirical field verification that the EPA 8.5 ug/g whole-body and 11.3 ug/g muscle criteria translations are not very reliable (i.e., lower values than those translations associated with greater than 15.1 ug/g in fish egg/ovary tissue). Thus, the only way to know for sure how protective a water value will be is to directly link it to fish egg/ovary data (i.e., no reliance on intermediary tissue translations).

Further, the monitoring data for the San Joaquin River MUST be connected to the Bay/Delta using an approach similar to Presser and Luoma (2006).¹⁶ The declines in selenium loading to Mud Slough (north) should be translated to updated Presser/Luoma type load estimates to the Bay/Delta from the San Joaquin River and examined to see if that "signal" propagates" thru to the Bay/Delta overbite Clam and White Sturgeon tissue monitoring data sets (or any other long-term data sets). It might then be possible to calibrate the load reduction needed for Bay/Delta downstream protection and thus an upstream San Joaquin River selenium concentration water value necessary for downstream protection.

We therefore recommend that the study proposals and Tech Reports be reviewed by selenium toxicity experts from agencies including CDFW, USGS, USFWS, NMFS and USEPA.

Derivation of Protective Water Column Selenium Values should consider USEPA's Proposed CA Se Water Quality Criteria Applicable to SF Bay and Delta

Several USEPA documents determined that existing selenium criteria are not protective of aquatic life and aquatic dependent wildlife in the San Francisco Bay and Delta. Any effort by the Regional Board to derive protective water column selenium values from these EO Tech Reports, needs to consider downstream impacts to Bay/Delta environments. These EPA documents include:

¹⁶ See: <https://doi.org/10.3133/pp1646>

1. Water Quality Challenges in the San Francisco Bay/Sacramento-San Joaquin Delta Estuary: EPA's Action Plan dated August 2012: EPA concluded that existing programs under the CWA were not adequately safeguarding resources and recommended seven priority activities to advance the protection and restoration of aquatic resources and ensure a reliable water supply in the Bay/Delta watershed. The priority activities included #4, strengthening selenium water quality criteria.¹⁷
2. USEPA Proposed CA Se water quality criteria applicable to SF Bay and Delta: On July 15, 2016 the USEPA published a Proposed Rule in the Federal Register to revise the current federal Clean Water Act selenium water quality criteria applicable to the San Francisco Bay and Delta to ensure that the criteria are set at levels that protect aquatic life and aquatic-dependent wildlife, including federally listed threatened and endangered species.¹⁸ EPA determined that the latest science on selenium fate and bioaccumulation indicates that existing selenium criteria are not protective of aquatic life and aquatic-dependent wildlife in the San Francisco Bay and Delta. Therefore, EPA published a Proposed Rule to revise the existing selenium criteria, based on best available science, legal requirements, and EPA policies and guidance. EPA's Determination of Necessity (page 46036 Item III B.) found that *"Because California's existing aquatic life criteria for selenium in the salt and estuarine waters of the San Francisco Bay, upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta, as promulgated by EPA in the NTR, are not protective of the applicable designated uses per the CWA and EPA's regulations at 40 CFR 131.11, EPA determines under CWA section 303(c)(4)(B) that new or revised WQS for the protection of aquatic life and aquatic-dependent wildlife are necessary to meet the requirements of the CWA for these California waters. EPA, therefore, proposes the revised selenium aquatic life and aquatic-dependent wildlife criteria in this rule in accordance with this 303(c)(4)(B) determination."*

The graph below was prepared by CSPA & CWIN and is directly based on the results from a U.S. Geological Survey (USGS) Administrative Report (Presser and Luoma 2010).¹⁹ The USGS Report evaluated a series of selenium exposure scenarios using a set of specific guidelines and modeling choices from the range of temporal hydrodynamic conditions, geographic locations, food webs, and allowable dissolved, particulate, and prey selenium concentrations (which we have referred to as "safe levels"). According to the USGS, *"[t]he specificity of these scenarios demonstrates that enough is known about the biotransfer of Se and the interconnectedness of habitats and species to set a range of limits and establish an understanding of the conditions, biological responses, and ecological risks critical to management of the Bay-Delta."* The following scenarios were evaluated by USGS for a range of hydrologic conditions and residence times (See Tables 17, 18 and 19 in the USGS report): (1) predicted allowed dissolved Se concentrations for Bay-Delta transects at different effect guidelines and associated levels of

¹⁷ See: <https://www.epa.gov/sites/production/files/documents/actionplan.pdf>

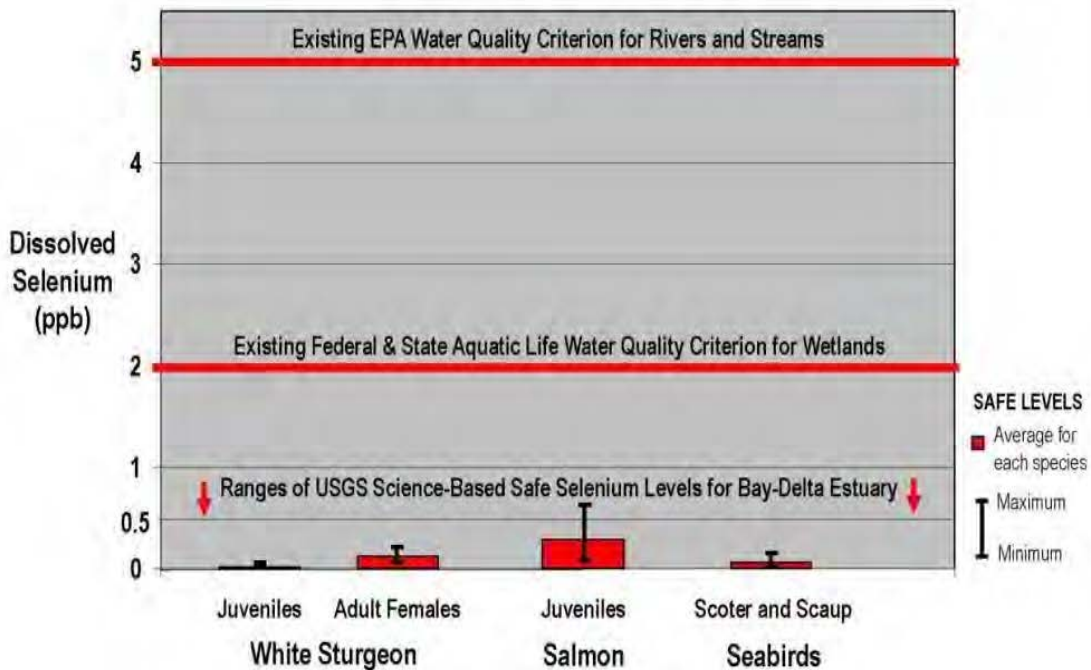
¹⁸ See: <https://www.regulations.gov/document?D=EPA-HQ-OW-2015-0392-0001>

¹⁹ Presser and Luoma 2010. Ecosystem-Scale Selenium Modeling in Support of Fish and Wildlife Criteria Development for the San Francisco Bay-Delta Estuary, California. Available at: <https://downloads.regulations.gov/EPA-HQ-OW-2015-0392-0010/content.pdf>

protection (USFWS, 2009b) for a suspended particulate material>C. amurensis>sturgeon food web; (2) predicted allowed dissolved Se concentrations for Bay-Delta transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>C. amurensis>clam-eating bird species food web; and (3) predicted allowed dissolved selenium concentrations for landward transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>aquatic insect>juvenile salmon food web. The summary graphic of this data shows the results for critical Bay-Delta species, aggregated across all combinations of target tissues (e.g., whole body, eggs, or diets) that have known levels of concerns, as summarized by the U.S. Fish and Wildlife Service. Results are also combined across all hydrologic conditions for each species. The ranges of “allowable” or safe levels of dissolved selenium clearly show that, although EPA will need to specify exact safety levels, flow conditions, and species, new standards for the Bay-Delta will need to be substantially less than 0.5 parts per billion dissolved selenium to be protective of the Bay Delta estuary.

Existing Selenium Water-Quality Standards Do Not Protect Bay-Delta Species:

A new USGS study, which will be used by EPA to revise standards, shows that much lower levels of selenium will be required to protect critical species.



Critical Bay-Delta Estuary Species

The Regional Board should consider how the selenium discharges allowed in the Sacramento/San Joaquin Basin Plan and the 2019 GBP WDRs for the next 25 years will affect the Bay-Delta ecosystem and could affect compliance with EPA’s water quality criteria for San Francisco Bay and Delta. The 5.0 µg /L Basin Plan selenium objective for Mud Slough and the

San Joaquin River will result in non-compliance with USEPA's Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for selenium.²⁰

Derivation of Protective Water Column Selenium Values should consider Fish species Vulnerable to Selenium Contamination in the Delta

As was recommended at the GBP Stakeholder Meeting on January 14, 2021, by Dr. Joseph Skorupa of USFWS, the Tech Reports should consider downstream impacts in the Delta when deriving protective water column selenium values. Fish species vulnerable to selenium contamination include green sturgeon, Sacramento splittail, and salmonids.

Green sturgeon

The USFWS (2012) provided a technical report to the USEPA evaluating the toxicity of selenium to white and green sturgeon.²¹ This technical report concluded that "...*white and green sturgeon are among the most sensitive of fish to adverse effects of selenium, with the listed green sturgeon being the more sensitive of these two species. These levels of sensitivity evidently put sturgeon at substantial risk at current levels of exposure in the San Francisco Bay area. Selenium concentrations in food items of sturgeon in the San Francisco Bay area are almost always high enough that they may cause at least 10 percent mortality in hatchling green sturgeon ($\geq 3.58 \mu\text{g/g}$), and they are frequently high enough that they may cause at least 10 percent mortality among hatchling white sturgeon ($\geq 10.8 \mu\text{g/g}$) as well.*"

In their assessment of risk of selenium exposure to white sturgeon (a representative surrogate to green sturgeon), Beckon and Maurer (2008b) concluded, "*white sturgeon in the San Francisco Bay estuary are producing eggs with as much as 35-times normal selenium content. Based on studies regarding toxicity response functions for avian and fish eggs (e.g., Lemly 1996a, 1996b; Skorupa et al. 1996; USDI-BOR/FWS/GS/BIA 1998) and assuming that sturgeon are as sensitive to selenium as birds and other fish, it is highly probable that these fish are reproductively impaired due to selenium exposure.*"

The Sacramento splittail serve as an indicator species for species such as the federally listed as threatened green sturgeon²² which feed on the same species of clam (Asian clam) as splittail. As USFWS (2012) noted, fish of the genus *Acipenser* (sturgeon) are likely to be among the most vulnerable to selenium exposure in the San Francisco Estuary because these fish feed predominantly on benthic invertebrates, including the Asian clam, *Corbula amurensis*. As has been well documented, this clam is an efficient bioaccumulator of selenium in the Delta.

²⁰ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

²¹ See: <https://downloads.regulations.gov/EPA-HQ-OW-2015-0392-0007/content.pdf>

²² <https://www.fisheries.noaa.gov/species/green-sturgeon>

Sacramento splittail

Several recent publications have highlighted the importance of selenium contamination in the San Joaquin River to toxicity impacts in Sacramento splittail. Johnson et al 2018 submitted a Final Report to USEPA on August 26, 2018, titled “*Unraveling sources and pathways of elevated selenium exposure over the lifetime of an imperiled migratory fish.*” Our organizations received this final report via a FOIA request from NMFS in February 2020. We have included a copy of this report as Attachment 1. The report describes splittail with visible morphological and spinal deformities observed in the Delta. As described on page 3 of this report, “*these gross deformities were found to be consistent with selenium toxicity which include scoliosis (lateral curvature of the spine), kyphosis (outward curvature of the spine), lordosis (concave curvature of the lumbar and caudal regions of the spine; as well as deformities of fins, skull, jaws, and bulging eyes.*”

The Johnson et al 2018 report to EPA concludes on Page 10:

"The strontium isotopic composition ($87\text{Sr}:86\text{Sr}$) in the otoliths of all wild splittail indicated they acquired Se toxicity while rearing in the freshwaters of the San Joaquin River." And "The otolith data and the presence of multiple spinal malformations support the interpretation that juvenile splittail in this study fed directly on Se-enriched diets in the San Joaquin River prior to capture." Emphasis added.



Two journal articles were subsequently published from this study in 2020 that identified adverse effects from selenium to Sacramento splittail. These publications by the USGS and NMFS have documented elevated levels of selenium in the benthic clam food chain used by the Sacramento splittail and the federally listed green sturgeon in the San Francisco Bay Delta. In the spring of 2011, young-of-year splittail were found to have a high incidence (>80%) of spinal deformities characteristic of selenium toxicity at the site of a water diversion station in the San Joaquin Valley of the Delta (U.S. Department of the Interior, Bureau of Reclamation Tracy Fish

Collection Facility) (Johnson et al 2020). This study identified various sources of selenium contamination and points to agricultural drainage as a significant source:

*“These data suggest that individuals acquired Se toxicity while feeding in the freshwaters of the San Joaquin River but already started with significantly higher Se burdens from females maturing in the estuary (Figure 3, Table 1 and Supporting Information).”*²³

A second publication (Stewart et al 2020) compared splittail tissue concentrations with those proposed by EPA in 2016 for the Bay Delta and found that *“Despite the consistently low muscle Se concentrations across all regions and years and no exceedances, the frequency of exceedance in liver and ovary were high for Pacheco, ranging from 60 to 80% (range for both tissues and years), followed by Suisun in 2011 (33%) and the Confluence in 2010 (17%).”*

Chinook salmon

A publication by USFWS for the US Bureau of Reclamation (Beckon and Maurer 2008a)²⁴ found that, *“California Central Valley Chinook salmon evidently are among the most sensitive of fish and wildlife to selenium. They are especially vulnerable during juvenile life stages when they migrate and rear in selenium-contaminated Central Valley rivers and the San Francisco Bay/Delta estuary.”* In this report the USFWS fitted a biphasic model to 90-day survival data for salmon from Hamilton *et al.* (1990) to estimate mortality due to selenium toxicity. At a tissue concentration of 7.9 µg/g mortality was estimated to be 59 percent. At a tissue concentration of 2.45 µg/g (whole body dry weight) after 90 days of exposure the model estimated mortality to be 20 percent due to selenium (Figure 8).

This USFWS report further noted *“that, in sloughs that carry agricultural drainwater, concentrations of selenium in invertebrates, small (prey) fish, and larger predatory fish commonly reach levels (Beckon et al. 2003) that could kill a substantial portion of young salmon (Figure 8 upper graph) if the salmon, on their downstream migration, are exposed to those selenium-laden food items for long enough for the salmon themselves to bioaccumulate selenium to toxic levels....Available data (Saiki et al. 1991) confirm that young salmon migrating down the San Joaquin River in 1987 bioaccumulated selenium to levels (about 3 µg/g whole body dry wt.) that were likely to kill more than 25% (Figure 9).”*

Lastly, this USFWS report concluded that there remains substantial ongoing risk to migrating juvenile Chinook salmon in the San Joaquin River as depicted in Figure 11.

A second publication by USFWS for USEPA (Beckon and Maurer 2008b)²⁵ concluded that salmon, *“are especially vulnerable during juvenile life stages when they migrate and rear in selenium-contaminated Central Valley rivers and the San Francisco Bay/Delta estuary.”*

²³ See: <https://dx.doi.org/10.1021/acs.est.9b06419>

²⁴ See first attachment in email comments:
https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/usfws_att_e.pdf

²⁵ See:
http://www.swrcb.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/northsfbayselenium/Species_at_risk_FIN_AL.pdf

Figure 8 from Beckon and Maurer

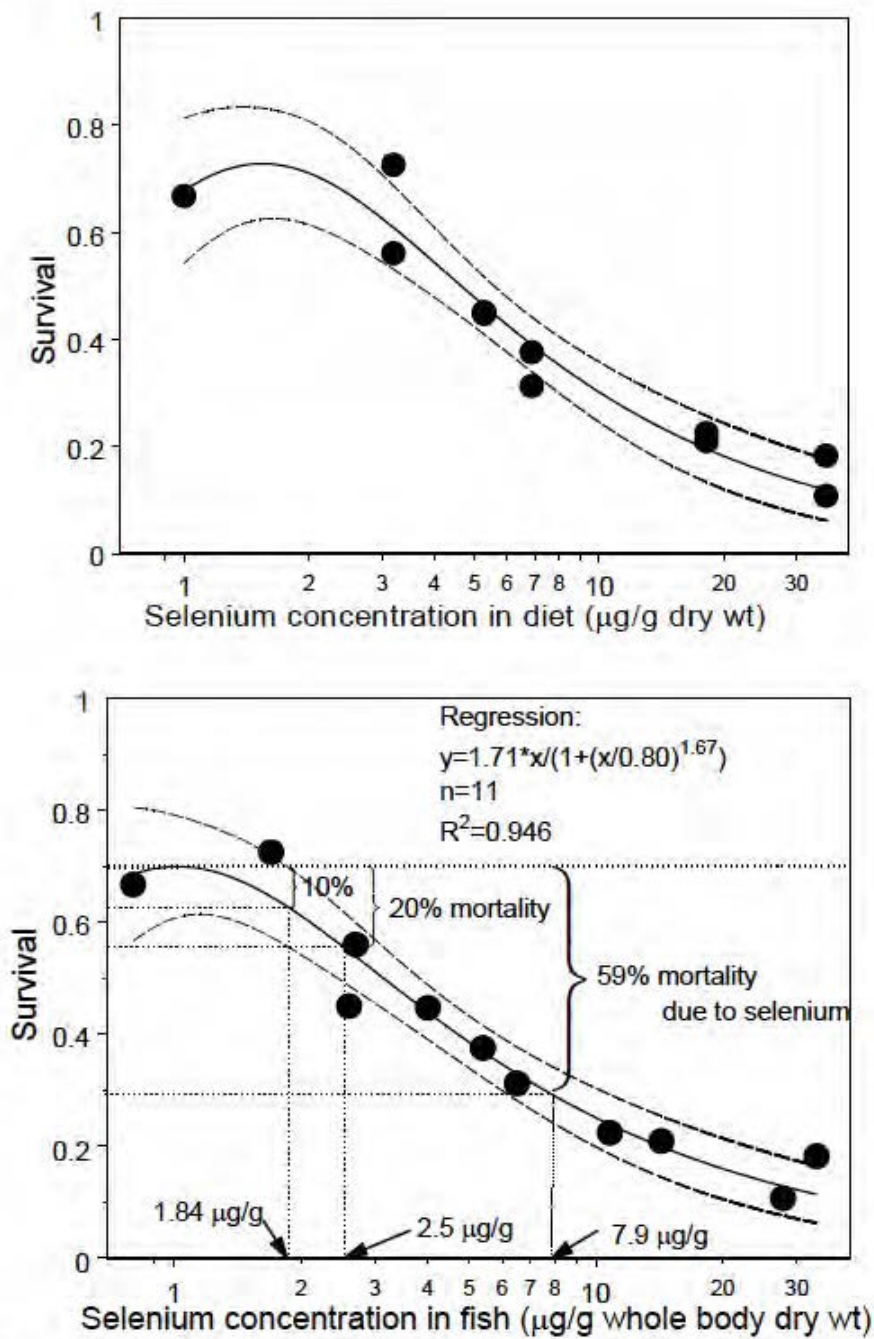


Figure 8. Survival as a function of selenium concentration in diet (above) and tissue (below) of juvenile Chinook salmon after 90 days of exposure to dietary selenium. A biphasic model (Brain and Cousens 1989) was fitted by least squares regression. Dashed lines indicate 95% confidence bands around the regressions.

2008a:

Figure 9 from Beckon and Maurer 2008a:

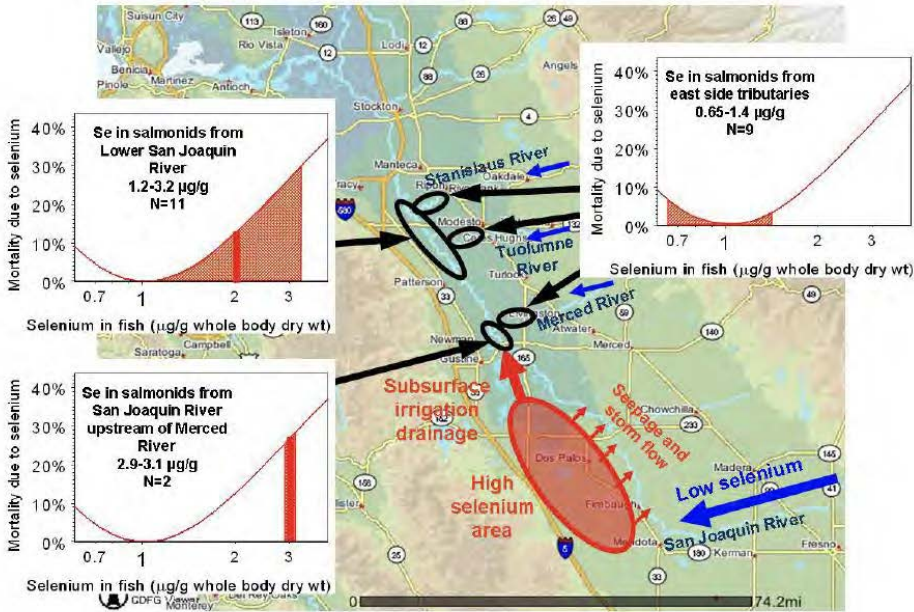


Figure 9. Risk of mortality to juvenile Chinook salmon based on selenium measured in the salmon (Saiki, *et al.* 1991) and the toxicity data shown in Figure 8 (presented here as mortality). Solid red bars represent the geometric mean selenium concentration in sampled fish at each location or cluster of locations. The stippled red areas span the ranges of concentrations in fish at the respective locations.

Figure 11 from Beckon and Maurer 2008a:

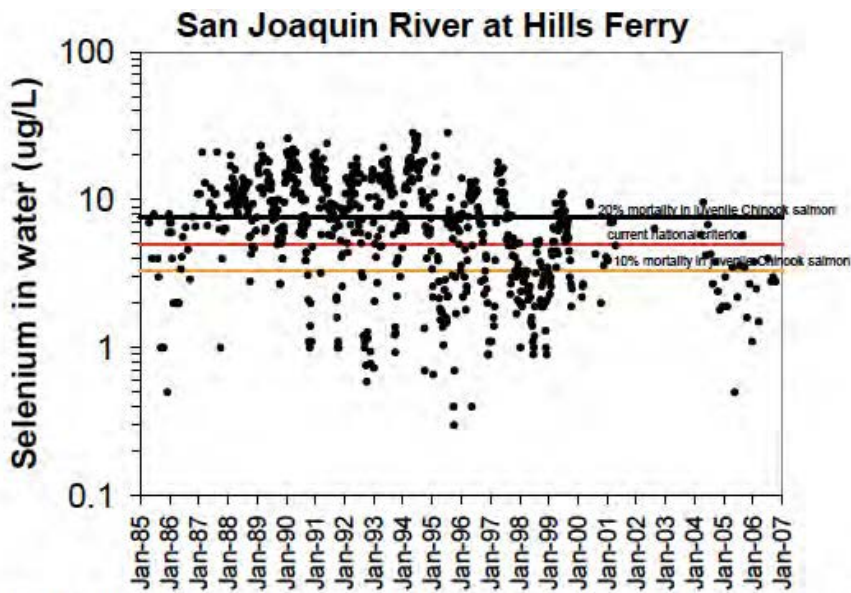


Figure 11. Selenium concentrations measured in the San Joaquin River at Hills Ferry, just upstream of the confluence of the Merced River. The data are from the Central Valley Regional Water Quality Control Board.

Steelhead

The USFWS (Beckon and Maurer 2008b) concluded in a report completed for USEPA that steelhead trout are sensitive to selenium and the most sensitive life stages occur in rivers and estuaries. Selenium toxicity studies on rainbow trout have found that they are among the more sensitive of fish to selenium exposure. One study referenced in the USFWS report examined the effects of selenium on fry of rainbow and brook trout exposed in streams in Alberta, Canada (Holm 2002, Holm *et al.* 2003). That study indicated that maternal selenium would result in 20 percent mortality of fry if female rainbow trout have a tissue selenium concentration of 2.93 µg/g wholebody dry weight. Another laboratory experiment referenced in the USFWS report monitored the growth of juvenile rainbow trout exposed for 20 weeks to a diet spiked with selenium in the form of sodium selenite (Hilton et al. 1980). This experiment indicated that, relative to optimal selenium exposure, a weight reduction of 20 percent would be associated with a tissue selenium concentration of 2.15 µg/g (carcass dry weight).

Specific Comment on Page 5 of Tech Report under Section 1.3.2 National Marine Fisheries Service biological evaluation

The Tech Report finds on page 5 that, “*Reclamation (2019a, 2019b) and the NMFS (2019) considered all potential effects of the proposed action including impacts to California Central Valley DPS (CCV) steelhead (Oncorhynchus mykiss), Central Valley (CV) spring-run Chinook salmon (Oncorhynchus tshawytscha), and sDPS green sturgeon (Acipenser metshawytscha), and designated critical habitat for CCV steelhead.*” This statement is not accurate with respect to impacts of the GBP to fisheries resources downstream in the San Joaquin River. The NMFS in their 2019 ESA consultation on the effect of the 10-year extension of the use agreement for the San Luis Drain did not consider impacts to the Green Sturgeon.²⁶ Reclamation in their request for consultation with NMFS for this project arbitrarily limited the downstream end point of the action area to the San Joaquin River at Crows Landing even though selenium contamination from the project has environmental impacts further downstream in the Bay Delta estuary. Therefore, impacts to listed fish species downstream of the San Joaquin River at Crows Landing, including impacts to the federally listed green sturgeon and listed salmonids, were not considered. Given the new splittail data was published in early 2020 and after the NMFS ESA consultation had been completed, and because Reclamation limited the action area to not consider impacts in the San Joaquin River downstream of Crows Landing, this new information warrants reinitiation of consultation under the ESA for effects to green sturgeon.

Conclusion

To derive protective water quality objectives, the Regional Board should consider how discharges from the GBP influence vulnerable resources in the Delta. Specifically, we recommend that the Regional Board consider the following:

²⁶ See NMFS ESA consultation starting at pdf pg 243:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

1. Existing water quality objectives in the Basin Plan and GBP WDRs are not Protective of the fish and wildlife beneficial uses, especially downstream in the San Joaquin River and Delta;
2. The study proposals for the Tech Reports, the Tech Reports and the subsequent modeling effort should all be peer reviewed by selenium toxicity experts from agencies including CDFW, USGS, USFWS, NMFS and USEPA;
3. Derivation of Protective Water Column Selenium Values should consider USEPA's Updated CWA section 304(a) national chronic aquatic life criterion for selenium in fresh water and the Proposed CA Se Water Quality Criteria Applicable to SF Bay and Delta;
4. Derivation of Protective Water Column Selenium Values should consider Fish species Vulnerable to Selenium Contamination in the Delta.
5. New information warrants reinitiating consultation under the ESA with NMFS for effects of the GBP to the federally-listed green sturgeon.

Thank you for the opportunity to comment on the Tech Reports. Please include our organizations in any future actions or regulatory comments regarding this discharge and these dischargers.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org




Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



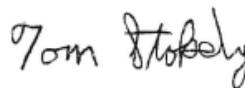
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



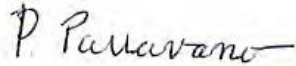
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](#)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



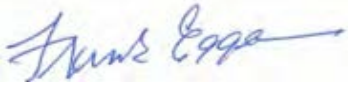
Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



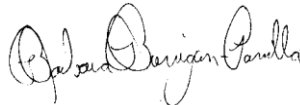
Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



Susan Harvey
North County Watch
ifsusan@tcsn.net



Gerald Neuburger
Delta Fly Fishers
gneuburg@gmail.com

Attachment 1

Unraveling sources and pathways of elevated selenium exposure over the lifetime of an imperiled migratory fish. Final report to United States Environmental Protection Agency Region 9. By R.C. Johnson, R. Stewart, K. Limburg, R. Huang, Dennis Cocherell and F. Feyrer

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**Final report to
United States Environmental Protection Agency
Region 9
75 Hawthorne St, San Francisco, CA 94105
August 26, 2018**

Unraveling sources and pathways of elevated selenium exposure over the lifetime of an imperiled migratory fish

R.C. Johnson,^{1,2*†}, R. Stewart,³ K. Limburg,⁴ R. Huang,⁵ Dennis Cocherell² and F. Feyrer⁶

¹ NOAA Fisheries, Southwest Fisheries Science Center, Fisheries Ecology Division, 110 McAllister Way, Santa Cruz, CA USA, Rachel.Johnson@noaa.gov.

² University of California Davis, Center for Watershed Sciences, 1 Shields Avenue, Davis, CA USA.

³ U.S. Geological Survey, Water Resources Division, 345 Middlefield Rd. MS496, Menlo Park, CA USA.

⁴ State University of New York, 249 Illick Hall, 1 Forestry Dr., Syracuse, New York USA.

⁵ Cornell University, Cornell High Energy Synchrotron Source, 161 Synchrotron Drive, Ithaca, NY USA.

⁶ U.S. Geological Survey, California Water Science Center, 6000 J Street, Placer Hall, Sacramento, CA USA.

* Corresponding author

† First and last author contributed equally to this work.

Abstract

Aquatic ecosystems around the world face growing threats from elevated levels of contaminants from human activities. The influence of selenium (Se) toxicity shown to cause deformities in birds, fish, and mammals can be transferred from parents to progeny during embryonic development or directly through Se-enriched diets. For migratory species that move across landscapes, understanding where in the life cycle elevated Se is encountered is vital to mitigating vulnerabilities. Se concentrations in tissues provide recent Se exposure. Here we apply a new method in biominerals to reconstruct Se exposures over the lifetime of an organism to chronicle when, where, and for how long individuals were exposed to elevated Se levels. The method successfully determined that spinal deformities observed in wild Sacramento Splittail (*Pogonichthys macrolepidotus*), an imperiled migratory minnow, were caused by elevated Se acquired during early life stages via diet in freshwater. This approach paves the way for diagnosing the sources and pathways of Se toxicity relevant for wildlife conservation.

Introduction

Chemical contaminants from industry, agriculture, and urban runoff seep into aquatic environments and disrupt biological systems at levels ranging from molecules to ecosystems. While large-scale environmental disasters such as oil spills injure and kill organisms making impacts tangible to observers, cryptic sub-lethal levels may be more common and have profound population-level impacts where examined [Schwarzenbach et al. 2006].

Bioaccumulation of contaminants can affect an organism's physiology, health, and fitness as well as the community of organisms in a foodweb [Cutter 1989]. Selenium (Se) is found naturally in soils and minerals, and is an essential nutrient that is required for oxidative and enzymatic processes. However, it has a narrow range of levels between those that are nutritionally optimal and those that are toxic. Elevated dietary exposure exceeding $3 \mu\text{g} \times \text{g}^{-1}$ can disrupt protein synthesis by substituting Se for sulfur in ionic disulfide bonds, resulting in deformities in developing offspring of fish, birds, and mammals (Lemly 2002). Human activities, including coal combustion, mining, and agricultural practices can concentrate Se to toxic levels in the aquatic environment that can further bioaccumulate in foodwebs (Simmons and Wallschläger 2005).

Effluent from oil refineries within the estuary and legacy agricultural practices in the upstream watershed are the two leading point sources of anthropogenic Se in the upper San Francisco Estuary (estuary), California (USA) [Cutter 1989]. Sacramento splittail (splittail), *Pogonichthys macrolepidotus*, a cyprinid benthivore endemic to the the San Francisco Bay Estuary and Watershed, feed, migrate, and reproduce between these two potentially elevated Se

environments at different life stages. The extent to which splittail are threatened by point sources of Se resulting in spinal deformities in the estuary and/or freshwater has direct bearing on which water bodies may remain impaired for wildlife.

Splittail was formerly listed as Threatened under the US Endangered Species Act and is a species of special management concern. Reproducing splittail migrate from the estuary to spawn in freshwater channels and floodplains of the Sacramento and San Joaquin Rivers and recruit as sub-yearlings into the estuary where they feed, grow, and live the majority of their lives (Moyle 2002). Extensive work has been done to establish Se thresholds and reduce the exposure of wildlife to elevated Se in the estuary and San Joaquin River over several decades, yet juvenile splittail with visible morphological (Fig. S1) and spinal deformities (Fig. S2) have recently been observed. These gross deformities and morphological distortions are consistent with Se toxicity which include scoliosis (lateral curvature of the spine), kyphosis (outward curvature of the spine), lordosis (concave curvature of the lumbar and caudal regions of the spine; Fig 1 A-C), as well as deformities of fins, skull, jaws, and bulging eyes.

There are two primary pathways for Se toxicity to result in observed spinal deformities in organisms. Elevated Se can be transferred from females to their progeny altering embryonic development or an individual can directly be exposed to toxic levels in water or food modifying the spine subsequent to development. A growing body of toxicological research on Se exposure across taxa suggests that spinal deformities in young are primarily transgenerational (Lemly 1993). Deformed progeny resulted when parents were given elevated Se diets during pregnancy (Rosenfeld and Beath 1954) or exposed prior to spawning (Woock et al. 1987, Hermanutz et al. 1992). Because of this, there is concern that splittail are at heightened risk to Se toxicity in the estuary because their diet includes the invasive Asian clam, *Potamocorbula amurensis* which is

known to bioaccumulate Se (Feyrer et al. 2003). Selenium levels in the clam have exceeded dietary concentrations known to cause reproductive toxicity in wildlife (Engberg et al. 1998, Presser & Luoma 2013, Janz et al. 2010) making vulnerable other clam-eating native fish like white sturgeon, *Acipenser Transmontanus*, as well as diving ducks (Linville et al. 2002, Poulton et al. 2004). Therefore, females with high Se body burdens from foraging in the estuary could produce progeny with the observed deformities through maternal transfer of Se in yolk during development.

There is also evidence that juvenile fish, including splittail, directly exposed to waters with elevated sodium selenite or selenium dioxide or fed Se- enriched diets develop the same deformities (Niimi and LaHam 1975, Teh et al. 2004). Se-enriched feeding experiments with 7-month-old juvenile splittail induced spinal deformities (Teh et al. 2004). Flowing into the estuary, the San Joaquin River is also known to have elevated Se from agricultural practices shown to impact wildlife (Saiki et al. 1992). One of the most well documented cases of Se toxicity occurred in the 1980s when laboratory and field studies confirmed that Se in agricultural irrigation drainwater in the San Joaquin River caused extensive deformities in wild populations of aquatic birds. This included disfiguring impacts with birds missing eyes, beaks, wings, legs, and feet and reproductive failures (Ohelendorf et al. 1986, Hoffman and Heinz 1988). When splittail are young and first begin to feed on plankton and insects in the freshwater floodplains, they can be exposed to elevated levels of Se directly in their diets.

The ecological and conservation significance for revealing the source and pathway of spine-deforming Se-toxicity in nature is immense, yet remains one of the greatest challenges in toxicological studies (Chapman et al. 2010). Discovering fish with spinal deformities is rare in the wild and investigations are often limited to detecting recent exposures because contaminants

in muscle or soft-tissues change over time due to depuration, metabolic transformation, and tissue re-compartmentalization making measurements difficult to interpret. For migratory species, such as splittail, the observation of deformed individuals with symptoms of Se toxicity presented an opportunity to apply new analytical tools to diagnose sources and pathways of exposure in nature.

Here, we combine for the first time, chemistry and deposition chronology in a biomineral (fishes' otolith) to reveal when and where during development individuals with spinal deformities were exposed to elevated Se. Specifically, we were able to map selenium concentrations and strontium isotopes in otoliths to deduce whether individuals in nature obtained Se toxicity through their parents in the estuary or from direct ingestion of Se-enriched prey in the freshwater. Otoliths are metabolically stable and they provide a permanent chronology of Se exposure over the lifetime of fish (Limburg et al. 2010, Halden and Friedrich 2016, Lochet et al. 2010). Otoliths are concentric layers of CaCO_3 and protein that reflect daily deposition of a range of elemental constituents from a fish's local environment (Campana and Thorrold 2001). Some trace elements, such as strontium, are benign to fish and their isotopic ratios can also be used to track movements in fish as they migrate among chemically different waterways such as estuaries and rivers (Barnett-Johnson et al. 2008). When chemistry data are linked to the daily growth bands in fish otoliths, information on when a fish was exposed to particular contaminants and for how long can be revealed. We chronicled Se exposure histories over the lifetime in wild fish with spinal deformities to deduce a maternal (core of otolith) from direct diet pathway (10 days post hatch; first feeding) of Se exposure and thus the aquatic habitats (estuary vs. freshwater) linked to Se toxicity.

Materials and Methods

Experimental Design

Young of the year splittail (30-90 days of age) were collected in the San Francisco Delta on the San Joaquin River at the Fish Salvage Collection facility, Byron, California (USA) between February and March, 2011 and transported to the University of California, Davis' Center for Aquatic Biology and Aquaculture Facility as part of on-going genetic and physiology studies on the species. The majority (>80%) were observed to exhibit spinal deformities. A total of 16 fish that ranged in the severity of morphological deformities were selected for x-ray and otolith analyses. Two additional fish that were progeny from a different cohort and cultivated in the aquaculture facility were used as controls. Individuals were externally examined, photographed (Fig. S1), and assessed visually as either having normal or deformed morphology (Table 1). Individuals were then radiographed at the University of California's Veterinary Medical Clinic (Fig. S2). X-rays were read and individuals were diagnosed as having scoliosis, kyphosis, lordosis, or normal spine morphology (Table 1). The severity of spinal aberration was further scored (1-5) depending on the visual phenotype (deformed or normal) and the number of visible vertebrae from the X-ray that were affected (>2, 1 or 0). The following criteria were used:

Score 5: Morphology = Deformed; >2 impacted vertebrae;

Score 4: Morphology = Deformed; 1 impacted vertebrae;

Score 3: Morphology = Normal; >2 impacted vertebrae;

Score 2: Morphology = Normal; 1 impacted vertebrae;

Score 1: Morphology = Normal; 0 impacted vertebrae.

Otolith preparation and daily ages

One lapilli otolith per fish was embedded in West Systems 105 epoxy resin before being sectioned in the frontal plane using a low speed diamond saw. The core and natal portions were further revealed using 1500 grit sandpaper and 3 μm lapping film. Finished preparations were cleaned by sonicating in deionized water and surface wiped with ethanol prior to elemental mapping. All otolith microstructure imaging and age and growth measurements were performed in Image Pro Premier at 200x magnification. Daily increments were counted along the primary growth axis on the rostral side starting with the first increment after the hatch check (Fig. S7). This transects and increment data were later used to link the chemical maps with daily ages.

Elemental mapping in wild splittail otoliths

Selenium, strontium (Sr), and Calcium (Ca) concentrations were analyzed in splittail otoliths at Cornell's High Energy Synchrotron Source (Cornell University, Ithaca New York) using scanning X-ray fluorescence microscopy (SXFEM) on the F3 beamline per established techniques (Limburg et al. 2007, 2010; Lochet et al. 2010). This instrument allows for spatial mapping of elemental concentrations using a non-destructive technique with minimal interferences among Se and other elements. Briefly, a multi-layer monochromator (0.6-1% bandwidth) produced an X-ray ranging from 10-29 KeV focused on the otolith with a single glass capillary necessary to achieve 10-30 μm spot resolution over the entire otolith. The photon flux was 10^{11} counts per second and a fluorescence spectrum was integrated for 5-45s. To increase the sensitivity of Se and reduce the potential for overwhelming Ca fluorescence, an aluminum attenuator was applied to the Vortex (SII) detector. Spectra were calibrated with PyMCA software using an in-house otolith pellet previously described (Sole' et al. 2007; Limburg et al.

2010). Concentration data were imported from text files for further spatial analysis into geographical information system (Arc GIS).

Strontium isotope measurements

Sr isotopes ($^{87}\text{Sr}:$ ^{86}Sr) provide information on fish movement among tributaries, rivers, estuaries, and Bays in California's Central Valley (Barnett-Johnson et al. 2008; Sturrock et al. 2015; Feyrer et al. 2015). We used a Laser-Ablation Multi-Collector Inductively Coupled Plasma Mass Spectrometer and the University of California Davis, (MC-LA-ICPMS; Nu plasma HR interfaced with a New Wave Research Nd:YAG 213 nm laser) to measure $^{87}\text{Sr}:$ ^{86}Sr from the core to the edge of the splittail otoliths to reconstruct the portion of the juvenile otolith under maternal influence and associate the portion of the otoliths exhibiting elevated Se:Ca with the location in the watershed the juvenile was rearing at the time. The transect consisted of consecutive spots that were 40 μm in diameter. At each spot the laser pulsed at 10 Hz for 25 seconds and varied between 3 and 8 j/cm^2 depending on sample strontium concentrations (Supplemental Data Files). Data corrections included: measuring background ^{86}Kr voltages for 30 seconds prior to each batch of analysis for blank subtraction of Krypton interference, monitoring ^{85}Rb to correct for and remove the ^{87}Rb influence on the measured ^{87}Sr value, and accounting for instrument bias by systematically analyzing a marine carbonate standard (*A. nobilis*). The measured value in the standard was normalized to 0.70918 and this correction was applied to all analyses. The accuracy (average $^{87}\text{Sr}:$ ^{86}Sr) and precision (1 standard deviation) of 18 measurements was (0.709042 ± 0.000078) during the analytical session.

Chemical chronology analysis

Transects used to generate daily ages in individual fish (Fig. S7) were georeferenced in the GIS chemistry layer. Daily elemental chemistry data (Se:Ca and Sr:Ca) along the growth transect from the core to the edge was extracted (Fig. S4 and Fig. S5). $^{87}\text{Sr}:^{86}\text{Sr}$ isotope data were also georeferenced to the same daily growth transect (Fig. S6). Because otoliths grow incrementally throughout a fish's lifetime, these transect are analogous to a time-series of chemistry and exposure histories.

Results:

Deformities observed in wild splittail

Splittail were observed to have three primary categories of spinal deformities that ranged in severity (Fig. 1; Table 1). The most common diagnoses among the sixteen fish were lordosis (38%), kyphosis (31%) and scoliosis (6%). The remaining fish (25%) appeared to have normal morphology (Fig. S1; Table 1).

Chemical chronologies

All wild splittail showed elevated concentrations of Se in otoliths (Se:Ca), whereas individuals born and reared in captivity did not. The distribution of elevated Se occurred after maternal influence (>10 days post hatch and beyond yolk absorption), indicating an increase in Se exposure from direct ingestion of contaminated prey (Fig. 2; Fig. S3; Fig. S4). The values of Se:Ca in the otolith cores varied, but all wild individuals showed an increase in Se:Ca after yolk absorption as evidenced by a halo of increased Se surrounding the center of the otolith (Fig. S3, Fig. S4). Individuals were exposed on average to elevated Se (Se:Ca >0.004) on days 25-80 after hatch (Fig. 2).

The strontium isotopic composition ($^{87}\text{Sr}:^{86}\text{Sr}$) in the otoliths of all wild splittail indicated they acquired Se toxicity while rearing in the freshwaters of the San Joaquin River. Previous work and additional water sampling has identified the San Joaquin River as having a diagnostic $^{87}\text{Sr}:^{86}\text{Sr}$ of 0.70716 ± 0.00013 (Sturrock et al. 2015). Splittail otoliths in this study converged on the range of San Joaquin River $^{87}\text{Sr}:^{86}\text{Sr}$ values coincident with the elevated Se:Ca peak in the otolith around day 50 post hatch (Fig. 2, Fig. S6). The Sr isotope profiles also provide information on the transition zone in the otolith between maternal yolk and the San Joaquin River value providing further support that the higher Se:Ca occurs outside the maternal influence (Fig. S6).

Discussion

Waterbodies are becoming increasingly threatened by multiple human-mediated sources of contaminants. For migratory species that occupy often distant aquatic habitats, understanding where in their life cycle they are encountering toxic levels of contaminants that can originate from multiple sources is vital to understanding where vulnerabilities occur for a species. Se toxicity that results in significant deformities has been shown to occur transgenerationally through parents to progeny as well as somatically to individuals directly exposed to Se enriched foodwebs. The extent to which splittail are threatened by point sources of Se in the estuary and/or freshwater has direct bearing on which water bodies are considered impaired for wildlife and at what threshold levels.

The otolith data and the presence of multiple spinal malformations support the interpretation that juvenile splittail in this study fed directly on Se-enriched diets in the San Joaquin River prior to capture. The Se:Ca ratios in the otoliths of all juvenile splittail in this study, with the exception of those bred and raised in captivity, showed elevated Se:Ca >10 days

post hatch. Larval development studies confirm otoliths in splittail form prior to hatching and that yolk absorption occurs approximately 10 days after hatching (Deng et al. 2012). These laboratory studies also highlight that several important developmental transitions occur between exogenous feeding and 50 days when juveniles form their adult fin-structures but still haven't formed scales (Deng et al. 2012). It is this time during splittail development (days 25-80; Fig. 2) that we estimate Se toxicity to have occurred. Splittail that were 7 months of age and fed Se-enriched diets ≥ 2.7 mg of Se kg^{-1} for 5-9 months produce spinal deformities in the laboratory identical to those observed in nature (Teh et al. 2004). The levels of Se:Ca measured in otoliths in this study (10ppm) and resulting Se concentrations in these juveniles rival those recorded in Walleye and White sucker in polluted lakes in New York (Limburg et al. 2010, Freidrich et al. 2011). In this species, these otolith values are linked to direct impacts to the organism.

The water in the San Joaquin River has a distinct $^{87}\text{Sr}:$ ^{86}Sr value and high Sr:Ca relative to surrounding freshwater sources in the San Francisco Estuary and Watershed (Weber 2002, Barnett-Johnson et al. 2008, Sturrock et al. 2015). The spatial distribution of Se:Ca, $^{87}\text{Sr}:$ ^{86}Sr , and Sr:Ca in the otoliths all corroborate that juveniles were exposed to elevated Se while feeding and rearing in the San Joaquin River. Previous research documents that the Sr isotopes in the estuary are higher relative to the mainstem San Joaquin River (Barnett-Johnson et al. 2008). Therefore, as juvenile splittail feed on the yolk, the Sr isotope ratio in the otolith reflects contributions from the yolk (estuary) and the water in the natal habitat (San Joaquin River). When juveniles deplete yolk and exogenous feeding begins then the isotopic value in the otolith reaches equilibrium with the Sr isotopic value of the prey in their foraging habitat where they hatched and are feeding.

Several factors besides Se toxicity can result in spinal deformities such as kyphosis, lordosis, and/or scoliosis in fish including elevated temperatures (ØRnsrud et al. 2004), diseases (e.g., whirling disease, *Myxobolus* sp.; Treasurer 1992), other contaminants (e.g., organophosphate, organochlorine, and carbamate intoxications reviewed in Bengtsson 1975), nutritional deficiencies such as a lack of vitamin C (Lim et al. 1978), as well as interactions among multiple stressors (ØRnsrud et al. 2004, Bengtsson 1975). While it is possible that fish in this study were exposed to other stressors that could be linked to their skeletal deformities, the otolith chemistry confirms juveniles were indeed exposed to elevated Se, suggesting this as a plausible and known stressor for those individuals. Additional investigations on habitat conditions including temperature, contaminate and disease prevalence, and nutritional status would assist in characterizing the extent to which other factors coincident with Se may be functioning as a stressor linked to spinal deformities in the wild.

Because Se is an essential nutrient and is lipophilic, it is commonly present in elevated concentrations in eggs (Holm et al. 2006). Indeed, this maternal transfer has been captured in the otolith cores of other fish species, which may be expected given the high protein concentrations of this section of the otolith (Chittaro et al. 2006, Belcher et al. 1996). Therefore, if female splittail were exposed to elevated Se in the estuary during vitelligenesis, one would expect to observe elevated levels in the core of the otoliths of progeny. While all individuals did show elevated levels outside of maternal influence, there was significant variation among individuals in the otolith core Se:Ca values. For example, one individual had a value of Se:Ca=0.008 within the first 10 days post hatch, which is comparable to the elevated values observed post exogenous feeding in some deformed individuals. Therefore, it is possible that female body burdens (Se exposure in the estuary) varies among females and may also be a contributing factor in the observed deformities. Further laboratory and field studies are necessary to understand the

relationship between deformities and exposure of elevated Se in multiple life stages and Se:Ca in otoliths and toxic levels in the environment. Empirical data coupled with population modeling and cohort reconstructions are necessary to quantify potential population-level effects of Se toxicity in this imperiled species and other wildlife in the watershed.

The abnormalities found in this study closely resemble those observed in the same geographic region for populations of wild aquatic birds exposed to selenium in agricultural irrigation drainwater at Kesterson Reservoir in the San Joaquin River. The Grasslands Bypass was created as a solution to divert the Se-enriched soils and water around the Kesterson Reservoir to reduce wildlife impacts (McCarthy and Grober 2001). This Bypass effort has significantly reduced the concentrations of Se that enter the San Joaquin River downstream of Mud Slough (McCarthy and Grober 2001). However, in wet years such as that experience in 2010-2011 (this study year), portions of floodplain habitats accessible to spawning and rearing splittail may expose splittail to elevated Se levels. Indeed, splittail have been documented spawning in regions near Mud Slough where Se levels still exceed EPA criteria of < 5ug/L monthly average (Baxter et al. 1995, McCarthy and Grober 2001).

One of the greatest challenges in aquatic ecotoxicology is detecting sub-lethal exposures of contaminants, as these individuals are likely eliminated due to predation or competition functionally disappearing from sampling opportunities. This study provided a rare opportunity to use otoliths in several fish that exhibited skeletal deformities to test hypotheses about where in the life cycle and thus the aquatic habitat Se toxicity may be occurring. Indeed, Se toxicity producing skeletal deformities could be an important, but easily overlooked phenomenon contributing to recruitment failure in Se-contaminated aquatic habitats.

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Data and materials availability: Raw data included in supplemental materials

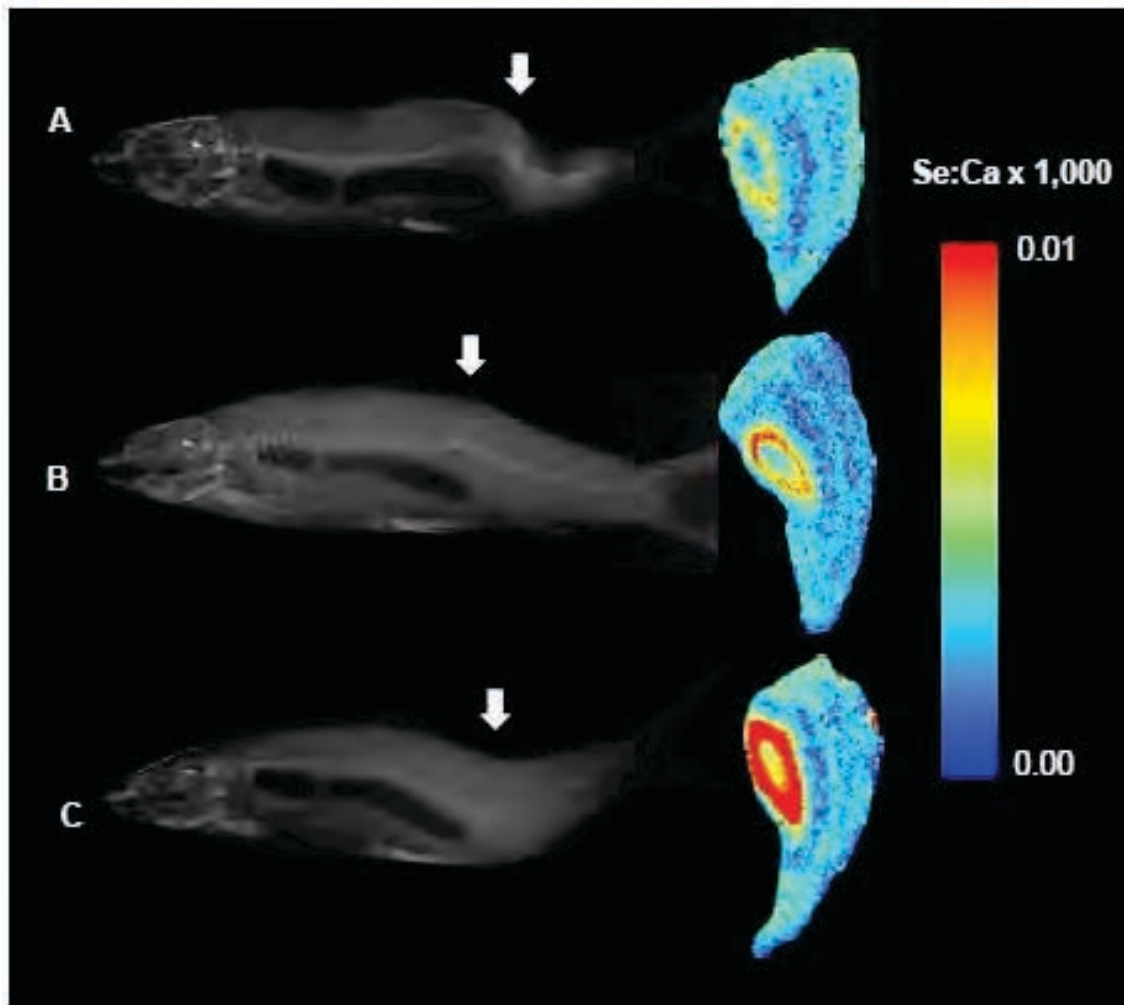


Fig. 1. Juvenile splittail spinal deformities and selenium chronology. Three categories of spinal deformities with affected vertebrae (white arrow) were observed including scoliosis (A), kyphosis (B), and lordosis (C). Selenium to calcium (Se:Ca) distribution in the otoliths for the same individuals show a halo of elevated selenium outside of the core (maternal influence) suggestive of an elevated selenium diet while in freshwater.

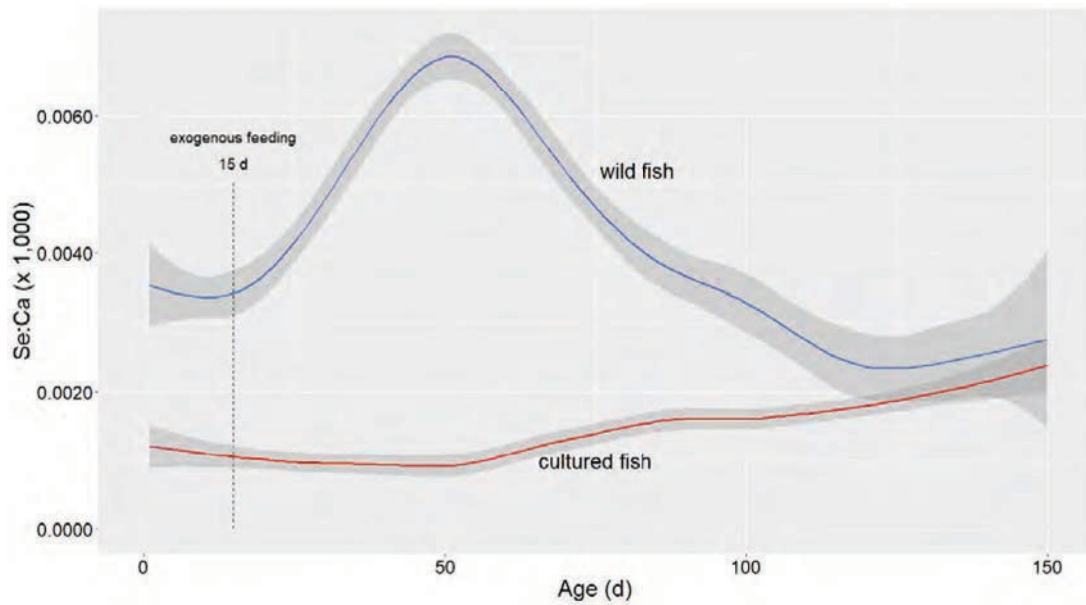


Fig. 2. Ratio of selenium and calcium in splittail otoliths. Smoothed function of selenium-calcium ratio in wild-caught splittail (blue; N= 16) and cultured individuals that were spawned and rearing in captivity (red; N=2). Results indicate elevated levels post maternal yolk absorption and first-feeding (vertical dashed line) for wild-caught individuals.

Table 1. Diagnosis and severity of spinal deformities and severity in juvenile splittail.

Juvenile splittail were x-rayed at the UC Davis Veterinary Sciences Radiology Laboratory and diagnosed for spinal deformities (scoliosis, lordosis, kyphosis, normal) prior to elemental mapping of otoliths. Severity of spinal aberration was further scored (1-5) depending on the visual morphological phenotype (deformed or normal; Fig. S1) and number of visible vertebrae from the X-ray that were effected (>2, 1 or 0): Score 5: Morphology = Deformed; >2 impacted vertebrae; Score 4: Morphology = Deformed; 1 impacted vertebrae; Score 3: Morphology = Normal; >2 impacted vertebrae; Score 2: Morphology = Normal; 1 impacted vertebrae; Score 1: Morphology = Normal; 0 impacted vertebrae.

FISHID	SCORE	DIAGNOSIS
14001C	5	Lordosis
14002C	5	Scoliosis
14003C	5	Kyphosis
14004C	5	Lordosis
14005C	5	Lordosis
14007C	5	Kyphosis
14008C	5	Kyphosis
14010C	4	Lordosis
14016N	2	Lordosis
14017N	2	Kyphosis
14018N	1	Normal
14020N	1	Normal
14023N	1	Normal
14024N	3	Kyphosis
14025N	2	Lordosis
14028N	1	Normal

Supplementary Materials

Supplement Figures:



Fig. S1. Photographs capturing external morphology of juvenile splittail. Individuals range in their visible aberrations and scored as ‘deformed’ or ‘normal’ in Table 1.

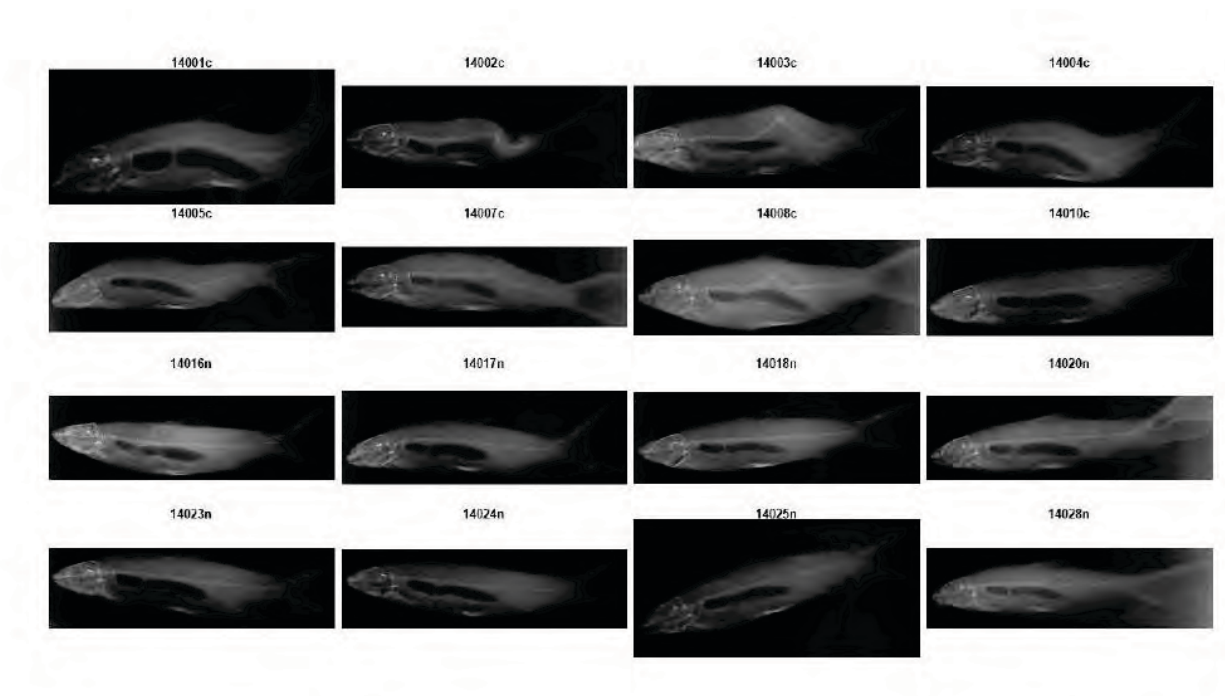


Fig. S2. Radiographs capturing vertebral condition of splittail. Individuals range in their severity of spinal deformities and scored by the number of impacted vertebrae 0, 1, > 2 and summarized in Table 1.

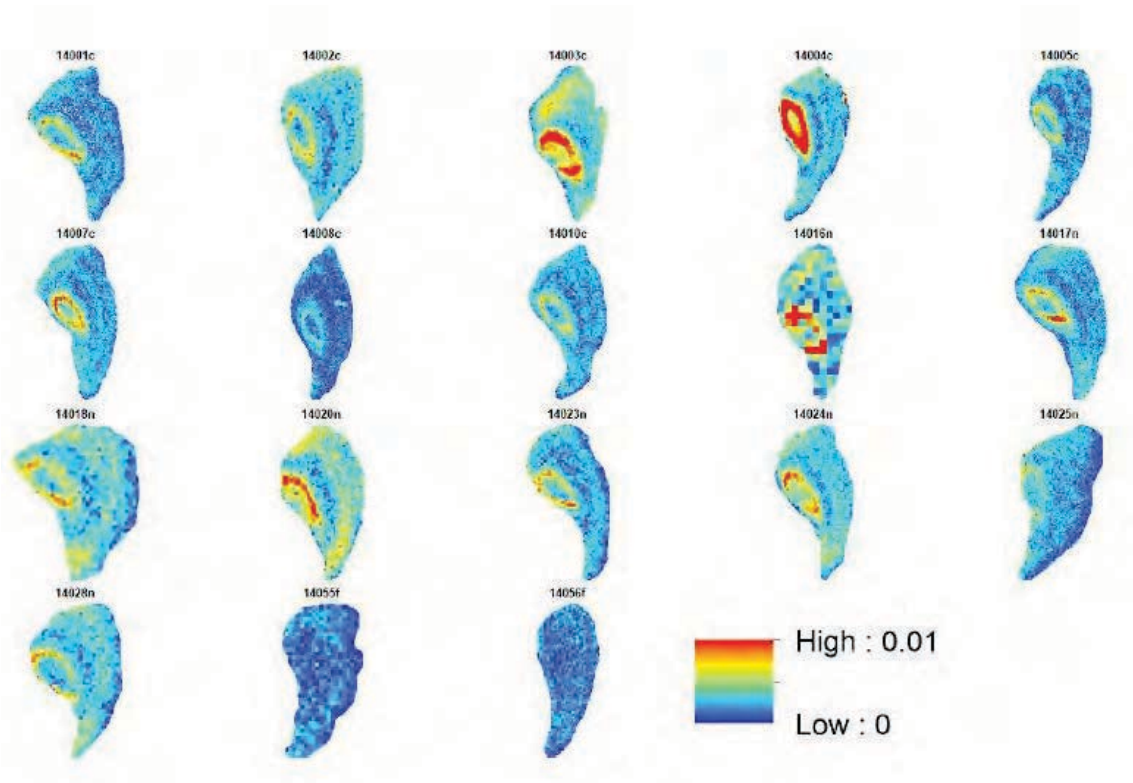


Fig. S3. Selenium to calcium distribution in the otoliths of all study individuals X-ray fluorescence microscopy (SXFM) of splittail collected at Cornell’s High Energy Synchrotron Source chronicling the spatio-temporal distribution of Se:Ca in otoliths. All juveniles independent of both morphological and vertebral evaluation showed evidence of selenium exposure with the exception of the two cultured fish (14055f, 14056f). Fish numbers with the suffix of ‘c’ were visibly deformed and those with ‘n’ were assessed as normal.

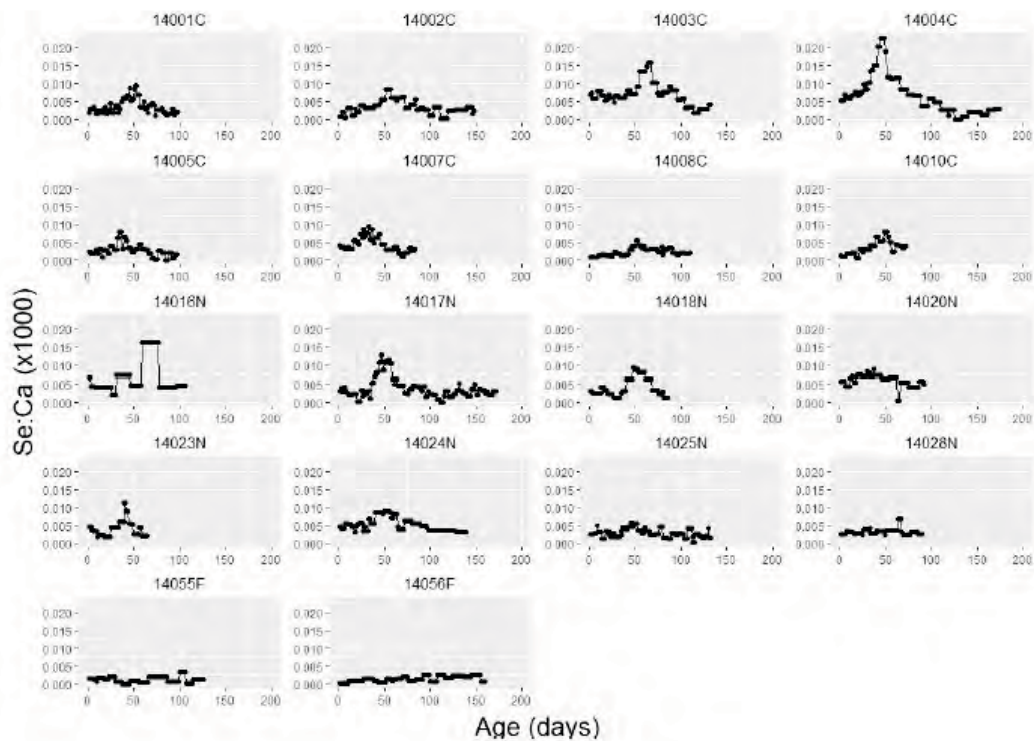


Fig. S4. Profiles of otolith selenium/calcium (*1000) along a transect originating from the primordium to the edge along the growth axis. Ratio values of selenium and calcium extracted from GIS from X-ray fluorescence microscopy image along a single transect corresponding to each visible daily increment in the otolith. All individuals show the same conclusion supported by the X-ray fluorescence images with elevated levels outside of maternal influence. Raw data values can be found in supplemental data. Note the different values within the core across individuals and the magnitude of Se:Ca in the elevated portions.

Fig. S5. Profiles of otolith strontium/calcium along a transect originating from the primordium to the edge along the growth axis. Ratio values of strontium and calcium extracted from GIS from X-ray fluorescence microscopy image along a single transect corresponding to each visible daily increment in the otolith. There is a correspondence between elevated selenium and strontium suggesting the water mass that have elevated selenium may also have elevated strontium. Raw data values can be found in supplemental data.

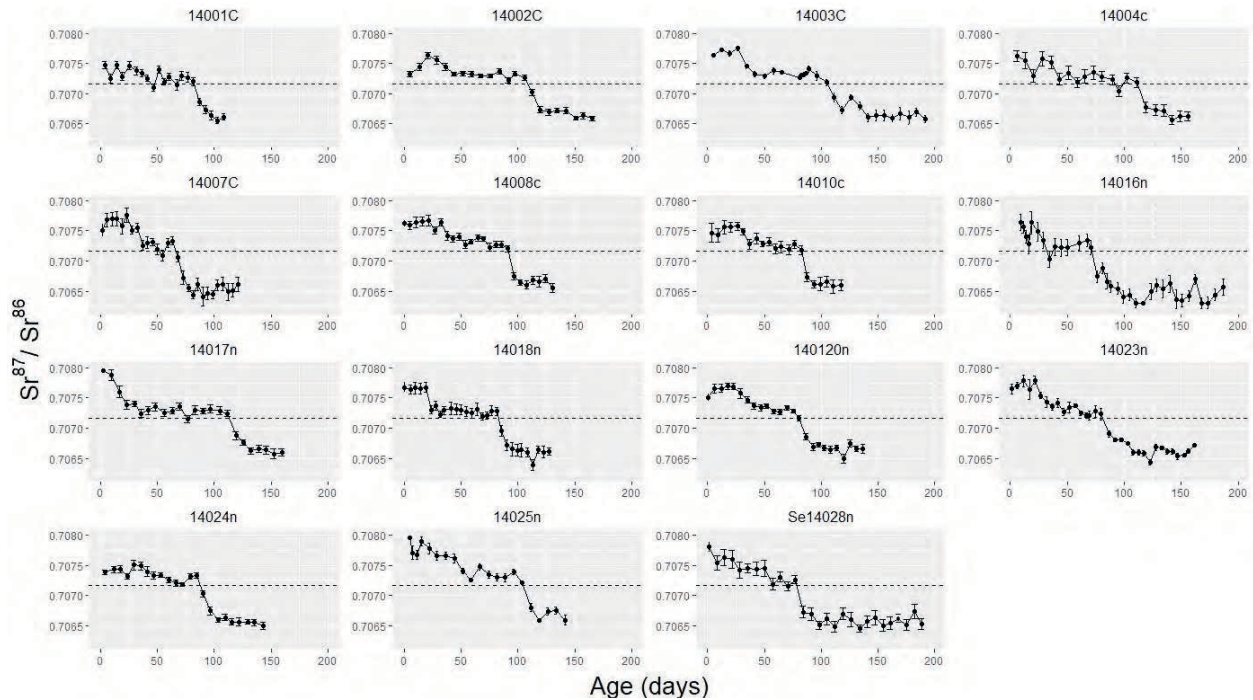


Fig. S6. Profiles of otolith strontium isotope ($^{87}\text{Sr}/^{86}\text{Sr}$) ratios along a transect originating from the primordium to the edge along the growth axis. Sr isotope ratios measured with laser ablation multi-collector inductively coupled plasma mass spectrometry at the University of California, Davis. The core shows elevated Sr isotope ratios indicative of vitellogenesis in female egg/yolk formation in the more saline estuary. As juveniles absorb maternal yolk, the Sr isotope ratio converges on the published value for the San Joaquin River coincident with Se:Ca enrichment around day 50 (dashed line; 0.70716 ± 0.00013 Sturrock et al. 2015).

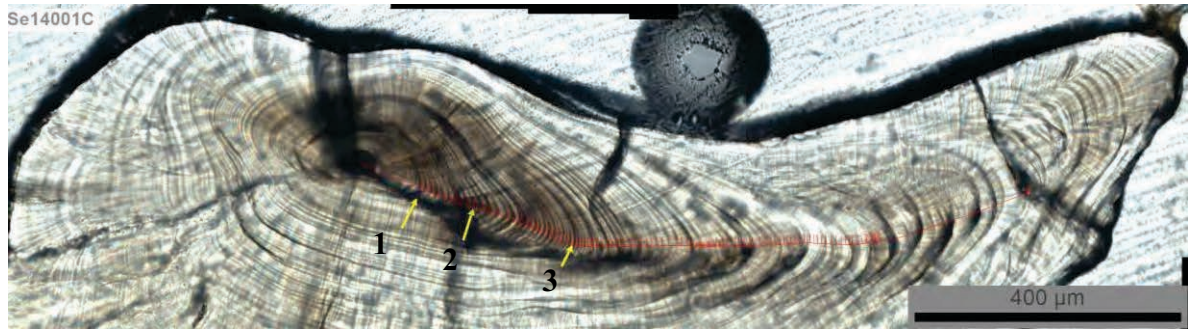
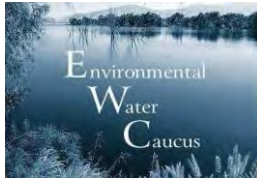


Fig. S7 Sectioned lapilli otolith from wild splittail showing daily growth increments and transect. The aging transect (red line) begins at the core of the otolith (dark circle) and each day is marked along the transect. Hatch check (arrow-1) and 10 days post hatch (arrow-2) delineate the maternal from environmental influence on otolith chemistry. The majority of individuals showed elevated Se:Ca around 25 days post hatch (arrow-3). These transects and increment data were later used in linking the chemical maps with daily ages.



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS



CA Save Our Streams Council



July 27, 2021

Mr. Joseph C. McGahan, Drainage Coordinator,
San Luis & Delta-Mendota Water Authority,
P.O. Box 1122, Hanford, CA, 93230
Email: jmcgahan@summerseng.com

Re: Comments on the Initial Study/Mitigated Negative Declaration for the Mud Slough Restoration Project, SCH # 2021060585

The San Luis & Delta Mendota Water Authority (Water Authority) has made available a draft Initial Study and CEQA Checklist and Proposed Mitigated Negative Declaration (IS/MND) on the Mud Slough Restoration Project. Copies of these documents were made available at CEQAnet¹ and the Water Authority's website². We also requested from the Water Authority a cd with the referenced Appendices to these CEQA documents (Appendix A: Project Drawings; Appendix B: Biological Resources Report;

¹ See: <https://ceqanet.opr.ca.gov/2021060585>

² See: <https://sldmwa.org/mud-slough-restoration-project/>

Appendix C: Cultural Resources; Appendix D: Paleontological Technical Memorandum; and Appendix E: Hydrology Study).

After careful review of these documents, we find the IS/MND is woefully inadequate and focuses largely on impacts of construction to restore pre-1995 hydrology as required under previous environmental and CDFW [previously CDFG] agency agreements, but ignores the potential contaminant issues the project will cause in surface water and potential discharge of contaminated sediment in the Project Area. Critical information with respect to water and sediment quality is lacking and therefore the environmental analyses for this project are incomplete. The documents fail to accurately provide a complete definition of the project. An accurate, stable, and finite project description has been described as the “sine qua non” of a legally sufficient CEQA document. (*County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185, 193 (1977).) The analysis fails to accurately describe the project and thus, fails to inform the public about the project’s likely effect on the environment and ways to mitigate any significant impacts caused by the discharge of these waters to the China Island wildlife refuge and Lake Newman.

The MND fails to meet CEQA standards for mitigation measures and accurately disclosing impacts that must be mitigated. Reliance upon mitigation measures involves an evaluative process of assessing those mitigation measures and weighing them against potential environmental impacts, and that process must be conducted under established CEQA standards and procedures for EIRs or negative declarations. (*Id.* at 1108; *see also Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster*, 52 Cal.App.4th 1165, 1198-1200 (1997) [E.G. Operation and minor alteration of existing landfill was not exempt, despite mitigation measures addressing leaking of pollutants].)

Further, consultations with CDFW and USFWS under CESA and ESA on impacts to listed threatened and endangered species are not included with IS/MND leaving the public in the dark about the extent of these impacts to protected species. A complete description with data is necessary. For example, a detailed discussion of any special-status species and their habitat located on or in the vicinity of the site, as well as any wetlands or other protected waters that exist and may be impacted by the project are needed. The project description with regard to the full impacts of the discharge of these contaminated surface waters to these sensitive species significant areas is absent. We recommend therefore, that IS/MND be rescinded. A full EIR is required to analyze these significant impacts to the wildlife refuges and this migratory bird corridor including the Pacific Flyway. This critical information and effects analyses is required and the environmental analysis must be re-released for public comment.

Background

The objective of the Mud Slough Restoration Project (Project) is to restore and enhance wildlife habitat on the China Island Unit of the North Grasslands Wildlife Management Area (China Island) and on the Newman Land Company property by reestablishing Mud Slough flows to portions of those lands that were isolated from Mud Slough as a result of implementation of the Grassland Bypass Project (GBP). The Proposed Project would replace the water supplies (currently provided by groundwater) to Newman Lake through the restoration of the hydrologic connection between Mud Slough and the Lake. Natural erosion effects of flow in Mud Slough have caused the normal water level to drop, and it is currently approximately four feet below the Newman Lake water level. Therefore, hydraulic modification is required to allow Newman Lake to receive Mud Slough water deliveries.

The undersigned organizations, have a long-standing interest in the GBP because contaminants in agricultural drainage discharges from the Grassland Drainage Area (agricultural lands served by the GBP) have had profound adverse effects on the environment, including effects to downstream waterways, aquatic life, and migratory birds. We include our previous comments on the 2020 Drainage Management Plan, 2019 Draft Environmental Assessment on a 10-Year Use Agreement of the San Luis Drain, the 2019 Tentative WDRs for the GBP, the GBP Stormwater Plan EIR Addendum, the USEPA’s proposed

water quality criteria for selenium in California, and the 2009 GBP EIR/EIS and the Basin Plan Amendment by reference.³

³ Coalition comments to the Central Valley Regional Water Quality Control Board on the Grassland Bypass Project Drainage Management Plan, Including Components of the Westside Regional Drainage Plan, and the Long-Term Stormwater Management Plan. February 1, 2021.

Coalition comments on USBR's Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area. December 23, 2019. See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

Comments of Pacific Coast Federation of Fishermen's Associations (PCFFA) and the Institute for Fisheries Resources (IFR), and the signatory organizations Re: Comments on Tentative Waste Discharge Requirements (WDRs) for Surface Water Discharges from the Grassland Bypass Project in Merced and Fresno Counties. November 5, 2019.

Coalition comments on Grassland Bypass Project Long-Term Storm Water Management Plan EIR Addendum and Initial Study--A Full EIR-EIS is Required. September 9, 2019.

Coalition comments of environmental, fishing and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. <http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf>

Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker, June 22, 2015. https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf

Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR, September 8, 2014. <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbp-land-retirement.pdf>

Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project, June 30, 2014. <http://calsport.org/news/wp-content/uploads/Final-coalition-comments-on-Draft-GBP-WDR-6.30.14.pdf>

Coalition Comments: Grasslands Bypass Project -- Violations of the Endangered Species Act and Reduced Monitoring Threaten Endangered Species and Public Health, November 27, 2013. <http://calsport.org/news/wpcontent/uploads/2013/12/Coalition-Letter-on-GBP-ESA-Violations-Monitoring-Reductions-LTR.Corrected-.pdf>

Coalition Comments: Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project. August 11, 2011. <http://calsport.org/news/wp-content/uploads/2011/09/Opposition-To-Grassland-Bypass-MonitoringReductions.pdf>

CSPA, CWIN and AquAlliance submit Comments to State Water Board Regarding Grassland Bypass Project and Basin Plan Amendment. September 22, 2010. <http://calsport.org/news/cspa->

As denoted in our previous comments on the GBP's 2019 Stormwater Management Plan and 2020 Drainage Management Plan, we recommended that a full Environmental Impact Report/Statement (EIR/EIS) be prepared for the continued use of the San Luis Drain for stormwater discharges into Mud Slough (north), the San Joaquin River and the Delta. In those comments we detailed our concerns in several areas and recommended what we believe is the only reliable and cost-effective solution—order the cessation of this polluted discharge.⁴

Specific Comments

Drainage Discharges to Mud Slough after 2019

On page 1-2 of the IS under background it states, “By December 31, 2019, all agricultural drainage was managed within the Grassland Drainage Area such that it was no longer discharged to Mud Slough, in accordance with water quality objectives and Waste Discharge Requirements (WDRs). Only stormwater flows (no agricultural drainage) will continue to be routed to Mud Slough from January 1, 2020, through December 31, 2035 under new WDRs.” This language stating that no agricultural drainage will be routed to Mud Slough after December 2019 is misleading. Although the GBP Stormwater Plan does implement several actions to reduce drainage discharges into the San Luis Drain, it will not eliminate those discharges during stormwater runoff events. During these rainfall events, stormwater can commingle with drainage water and those flows could be discharged into the San Luis Drain and if that system is

[cwin-and-aqualliance-submit-commentsto-state-water-board-regarding-grassland-bypass-project-and-basin-plan-amendment/](#)

Sierra Club et. al. Comments: Grassland Bypass Project & San Joaquin River Selenium Basin Plan Amendments September 22, 2010.

https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/jim_metropulos.pdf

Comments of California Sportfishing Protection Alliance and California Water Impact Network on the draft environmental impact report for the Irrigated Lands Regulatory Program and related documents. Also attached are several comments prepared by three expert consultants September 27, 2010. <http://calsport.org/doclibrary/pdfs/207.pdf>

Environmental Coalition Comments on Draft Staff Report for Grasslands Bypass Project Basin Plan Selenium Amendments to The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, April 26, 2010 available at:

https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf

⁴ [The San Joaquin Valley Drainage Program \(SJVDP\) A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley, also known as the “Rainbow Report” \(September 1990\); see also USGS Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California Open-File Report 2008-1210 By: Theresa S. Presser and Steven E. Schwarzbach https://pubs.er.usgs.gov/publication/ofr20081210; USBR Final Environmental Impact Statement for San Luis Drainage Feature Re-evaluation \(May 2006 and Record of Decision \(ROD\) \(March 2007\) \(selecting the “In-Valley/ Water Needs/ Land Retirement Alternative.”\).](#)

overwhelmed, then can be discharged into the Grassland wetland supply channels.⁵ The language in the IS/MND should be changed to acknowledge that during heavy rainfall events drainage can be commingled with stormwater discharges from the GBP that could affect downstream water quality including Mud Slough (North) China Island, and Newman Lake. The effects of these discharges on downstream water quality, fish and wildlife, endangered species and species of special concern need to be disclosed, analyzed and mitigated in the CEQA for this project.

Water Quality Objectives in the WDR for the GBP are Not Protective of Beneficial Uses For China Basin and Newman Lake.

Both the Initial Study on page 1-2 and the Biological Resources Report (pages 1-2) concluded the following: “*With the successful completion of the GBP in 2019, selenium levels in Mud Slough have been reduced below thresholds of concern, and Mud Slough flow can now be returned to Newman Lake and the historic Mud Slough channel north of Newman Lake.*” Yet those thresholds of concern are not described in the IS or MND. Like the project description, CEQA requires the environmental setting provide a complete and accurate description of the project setting, *i.e.*, the existing environmental conditions and surrounding uses, to establish the baseline for measuring environmental impacts resulting from the project. (14 CCR § 15125; *see also San Joaquin Raptor/Wildlife Rescue Ctr. v County of Stanislaus*, 27 Cal.App.4th 713, 729 (1994) [finding EIR inadequate without “accurate and complete information pertaining to the setting of the project and surrounding uses”]). The failure of the analysis to provide this baseline data is a fatal flaw with regard to the proposed mitigation and findings of no significance. This document must identify the environmental impacts likely to result from the project development, followed by mitigation measures or project alternatives that will avoid or reduce these impacts. To determine whether mitigation is required, or if mitigation can reduce an impact to a level of insignificance, SLDMWA must compare a project’s impacts to thresholds of significance. (14 CCR § 15064.)

The MND is virtually silent with regard to the impacts of this project development. These impacts must be disclosed, analyzed and mitigated otherwise it is likely that grotesque selenium-induced deformities and severe biological and reproductive problems to federally-protected species and migratory birds (as was found in the neighboring Kesterson National Wildlife) could result from this project. The MND document appears to rely upon standards and objectives for the Grassland Bypass Project's new 2020 Drainage Management Plan (Drainers' Plan). This Drainers' Plan and the GBP (actions or methods currently being or to be implemented by Grassland Area Drainers and individual Water Districts) will not protect downstream water quality including Mud Slough (North) from causing significant impacts to endangered species, species of special concern and sensitive wetland and estuary habitats. This plan proposes standards that are not protective of the beneficial uses of Mud Slough much less, protective of lake, wetland or estuary waters. The Drainers' Plan’s intention is to meet water quality objectives specified in the 2019 Waste Discharge Requirements (2019 WDRs) in Mud Slough (North) and the San Joaquin River. Yet the water quality objectives for Mud Slough (North) and the San Joaquin River specified in the 2019 WDRs do not protect downstream beneficial uses including fish and wildlife resources or migratory birds. The Numerical Water Quality Objectives for selenium are described in Table 5.2 on page 32 of Attachment A of the 2019 WDRs:⁶

⁵ See pg 7 of Attachment A to Order R5-2019-0077:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

⁶ See: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

Table 5.2: Selenium Numerical Objectives

4-day Average	Maximum	Location
5 µg/L	20 µg/L	Mud Slough (north) and the San Joaquin River from the Mud Slough confluence to the Merced River
5 µg/L	12 µg/L	San Joaquin River, mouth of the Merced River to Vernalis

The 2019 WDRs for the GBP require compliance with the selenium water quality objectives specified in the 2010 Basin Plan Amendment (5 µg/L, 4-day average). However, the GBP WDRs are lax, allowing for acute spikes of selenium (as described in Table 5.2 above and ranging from 12 to 20 µg/L depending on location) that will bio-accumulate throughout the ecosystem. These water quality objectives will result in harm to fish and aquatic-dependent wildlife. Short term spikes of selenium in a waterway can have longer lasting effects in an ecosystem. Beckon (2016) noted that when a bioaccumulative substance such as selenium is introduced into or removed from the environment, the processes by which it is assimilated into upper trophic levels of the ecosystem may be complex and prolonged.⁷ These processes include several levels of trophic transfer, each entailing the time required to consume food, assimilate the substance of interest, and the time span during which the organism continues to survive before being eaten by a member of the next higher trophic level. Beckon noted that for some species of piscivorous fish the lag time for selenium exposure to bioaccumulate in the upper trophic level of fish is over 1 year from the initial exposure. Thus, short-term exceedances of the 5 µg/L selenium objective can continue to have deleterious effects to the upper trophic level species several months to over a year after the event.

The 2019 WDRs for the GBP effectively sanction continued excessive pollution discharge, especially during stormwater events, of Mud Slough (North), the San Joaquin River, and ultimately the Sacramento-San Joaquin Delta and San Francisco Bay, by failing to enforce science-based protective water quality standards for selenium and allowing the continued contamination of these water bodies. These discharges, under the proposed project operations, will impact China Island and Newman Lake fish and wildlife resources. These impacts have not been disclosed, analyzed or addressed under the proposed MND.

Excess selenium in streams kills or deforms fish and other aquatic life and is a human health concern in drinking-water supplies. Under the 2019 WDRs, selenium (and other harmful drain water pollutants, such as salt, sulfates, boron, molybdenum, and mercury) will continue to be discharged from the federally owned San Luis Drain directly into Mud Slough (North). These stormwater discharges will impact the quality of water provided to China Island and Newman Lake associated with this Project. These impacts must be disclosed and analyzed. Further, alternatives such as other sources of water to replenish these critical wildlife areas must be considered.

⁷ See: <https://www.sciencedirect.com/science/article/abs/pii/S0166445X16301230>

The MND Relies Upon Outdated Water Quality Protection Standards That Are Inconsistent with USEPA National Criteria Revision for Selenium

On July 13, 2016, the USEPA published a Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water. The USEPA's 2016 federal register notice identified revised chronic selenium criteria in water for lentic waters (e.g., meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps) and lotic waters (e.g., rivers and streams). The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 recommended criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. Draft versions of the criterion underwent public review in 2014 and 2015 and external peer review in 2015. EPA considered all public comments and peer reviewer comments in the development of the 2016 final selenium criterion document. EPA's water quality criterion for selenium provides recommendations to states and tribes authorized to establish water quality standards under the CWA.⁸ The EPA's 2016 final revised Section 304(a) guidance for selenium makes clear that retaining the current state standard of 5 µg/L will not protect aquatic life and wildlife designated uses and therefore would bring the state out of compliance with the requirements of Section 303(c)(2)(B) of the Clean Water Act (CWA). Thus, the reliance of the MND upon these outdated standards is not protective and will cause significant environmental impacts.

Further, the USEPA did not include an acute selenium criterion in their July 13, 2016 Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water under Item IV: "*The criterion document does not include an acute criterion (based on water-only exposure) because selenium is bioaccumulative and toxicity primarily occurs through dietary exposure.*"⁹ So the MND reliance upon the 2019 GBP WDRs inclusion of acute selenium objectives (12 to 20 µg/L depending on location) is inconsistent with Final national criteria and will have to be updated during the next triennial review in 2021.

⁸ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

⁹ Ibid.

Comparison of Final 2016 Selenium Criterion to 1999 Criteria

Criterion version	Chronic					Short-term
	Egg-Ovary ¹ (mg/kg dw)	Whole Body ¹ (mg/kg dw)	Muscle ¹ (mg/kg dw)	Water, ¹ Lentic (µg/L)	Water, ¹ Lotic (µg/L)	Water (µg/L)
2016 Final Update	15.1	8.5	11.3	1.5 (30 d)	3.1 (30 d)	Intermittent exposure equation.
1999 Selenium Criteria	N/A	N/A	N/A	5 (4 d)	5 (4 d)	Acute Equation based on water column concentration.

¹ A note on hierarchy of table: when fish egg/ovary concentrations are measured, the values supersede any whole-body, muscle, or water column elements except in certain situations. Whole body or muscle measurements supersede any water column element when both fish tissue and water concentrations are measured, except in certain situations (see examples in text above). Water column values are derived from fish tissue concentrations.

The EPA's 2016 final revised Section 304(a) guidance for selenium makes clear that retaining the current state standard of 5 µg/L will not protect aquatic life and wildlife designated uses and therefore would bring the state out of compliance with the requirements of Section 303(c)(2)(B) of the Clean Water Act (CWA). As per the EPA's 2014 "Water Quality Standards Handbook, Chapter 6: Procedures for Review and Revision of Water Quality Standards", @ page 7:¹⁰ "It is important to note that, although a state or tribe may have fully complied with the requirements of Section 303(c)(2)(B) previously, states and tribes may be required to adopt new toxic criteria in the following situations:

- The EPA publishes new Section 304(a) criteria recommendations for a priority pollutant.
- New information on existing water quality and pollution sources indicates that a toxic pollutant for which a state or tribe had not previously adopted criteria could now be reasonably expected to interfere with the designated uses adopted by the state or tribe.

EPA's revised chronic selenium criterion for lentic waters of 1.5 µg /L on a monthly basis is the criterion that should be applied to protect fish and wildlife beneficial uses in Newman Lake and China Island. The CEQA documents for this Project should be revised to include analysis of water quality impacts and compliance with this selenium water quality criterion for lentic waters.

¹⁰ See: <https://www.epa.gov/wqs-tech/water-quality-standards-handbook>

The CEQA Analysis should Consider Effects of Contaminants in Sediments.

The IS on page 1-28 describes construction-related impacts on water quality: “*Construction-related activities would involve site preparation, cofferdam installation and removal, clean riprap rock placement, removal of the existing Los Banos Creek spillway structure and restoration of the channel, and Newman Lake dam reinforcement. Each of these activities has the potential to disturb soils and discharge or resuspend sediments and increase turbidity in the immediate vicinity and downstream of the construction site.*” Yet there is no consideration or discussion of potential contaminant loads in the sediments that have accumulated from decades of drainage discharges into Mud Slough (North) associated with the GBP. No data on contaminant concentrations in the sediments where the construction is going to take place is provided in the CEQA for this Project.

Construction-related activities associated with this Project can mobilize drainage contaminants in the sediments that may contain loads of selenium and other toxic constituents such as salt, sulfates, boron, molybdenum, and mercury. The CEQA analysis for this Project should be revised to include contaminant concentrations in the sediments, an analysis of the effects of construction-activities on contaminant mobilization into the water column, and associated water quality impacts to fish and wildlife resources.

The CEQA Analysis completed in the 2009 GBP EIR/EIS and 2019 GBP Stormwater Addendum do not Support the Proposed IS/MND for the Mud Slough Restoration Project.

Under CEQA a supplemental EIR is required if, as defined in CEQA Guidelines Section 15162(a)(1): (a) there have been substantial changes to the Project; (b) new significant environmental effects have been identified; or (c) there has been a substantial increase in the severity of previously identified significant effects. The 2009 EIR/EIS was based on the premise that all drainage discharges into the San Luis Drain would cease by the end of 2019. Thus, the 2019 GBP Stormwater Plan and associated WDRs include both a substantial change and environmental effects not included in the 2009 GBP EIR/EIS.

Under the current GBP WDRs, contaminated discharges would continue adding stormwater commingled with subsurface agricultural drainage into the San Luis Drain for an additional 25 years. This is a substantial change and should have been analyzed in a full EIR/EIS. There are numerous impacts from this extension of the use of the San Luis Drain for stormwater that are significant and are relevant to this Project, including: (1) cumulative impacts to downstream beneficial uses; (2) the failure to meet protective water quality standards; (3) impacts to endangered and listed species; and (4) migratory bird impacts. All of these impacts warrant a full EIR/EIS analysis to adequately inform decision makers of the risks posed by continuing these discharges without proper permits and compliance with the Clean Water Act, including state and federal non-degradation policies. The Water Authority’s proposed adoption of a MND for the Mud Slough Restoration Project is likewise not supported by the draft IS/MND for this Project nor the 2019 GBP Stormwater Plan and associated WDRs.

Another consideration to take into account are the CEQA Guidelines pertaining to “mandatory findings of significance.” (14 CCR § 15065(a).) These Guidelines specifically refer to impacts to biological resources and specify that an EIR must be prepared in the event certain biological resources are impacted, subject to certain specific requirements. Admittedly this project is likely to impact endangered species and specifically "substantially reduce" the number or restrict the range of the Giant Garter Snake and endangered and migratory birds, shore birds, marsh and water birds. The long term cumulative impacts of the discharges from this project are also likely to impact the federally threatened Central Valley steelhead (*Oncorhynchus mykiss*), threatened Central Valley spring-run Chinook salmon (*O. tshawytscha*), endangered Sacramento River winter-run Chinook salmon (*O. tshawytscha*),

threatened Southern Distinct Population Segment (DPS) of North American green sturgeon (*Acipenser medirostris*), and any of the critical habitat designated for these listed species.

Memorandum of Understanding with CDFW should be included with the CEQA for this Project.

The IS on page 1-21 references a Memorandum of Understanding (MOU) with CDFW and the Water Authority: *“The Proposed Project will fulfill the commitment to restore Mud Slough to its pre-GBP condition as described in the 2010 Memorandum of Understanding between the California Department of Fish and Game and the San Luis and Delta-Mendota Water Authority Regarding the Grassland Bypass Project (CDFW and SLDMWA, 5/26/2010).”* Yet this MOU is not included with the CEQA documents or appendices for this Project. A search of CEQAnet provided this description of the MOU: *“The DFG is executing a Memorandum of Understanding (MOU) with the San Luis and Delta-Mendota Water Authority for the Authority's use of Mud Slough (North) through the China Island Wildlife Area. The purpose of the Project is to allow the Authority to continue its discharge of saline agricultural drain water from the Grassland Drainage Area to the San Joaquin River via the Mud Slough. The northern portion of Mud Slough flows through the China Island Wildlife Area, which is owned by the DFG. The DFG entered into a MOU for use of Mud Slough (North) and to ensure that appropriate monitoring of Mud Slough and the San Joaquin River will occur, that water quality objectives will be met, and that Mud Slough will be restored to its pre-1995 condition after the Project is terminated. The project period is from the execution of the MOU through December 31, 2019, or until Mud Slough is restored, whichever is later.”*¹¹

A copy of this MOU should be included with the CEQA for the Mud Slough Restoration Project. To fulfill the Project objective to restore and enhance wildlife habitat at Newman Lake and China Island, the water quality objectives for this Project should be based on the most recent EPA USEPA National Criteria Revision for selenium for lentic waters of 1.5 µg /L on a monthly basis.

Conclusion

Critical information with respect to water and sediment quality is lacking from the IS/MND and therefore the environmental analyses for this Project are incomplete and the public has been denied access to critical information regarding the impacts of the project and its operations. Further, the project's reliance upon existing water quality objectives from the 2019 WDRs for Mud Slough (North) are not protective of aquatic fish and wildlife, not based on the best available science, and will result in significant environmental harm to fish and wildlife resources at Newman Lake and China Island. We therefore recommend that these CEQA documents be rescinded and a full EIR be commenced to include and disclose this critical information along with the environmental affects impacts and then be re-released for public comment.

Specifically, we recommend the following impacts be analyzed and disclosed and alternatives less damaging to the environment be considered:

- Disclose the impacts from heavy rainfall events where drainage discharges can be commingled with stormwater discharges from the GBP that likely will impact downstream water quality including Mud Slough (North) China Island, and Newman Lake.

¹¹ See: <https://ceqanet.opr.ca.gov/2007121110/5>

- Updated selenium water quality objectives for this Project should be based on the EPA's USEPA chronic National Criteria Revision for selenium for lentic waters of 1.5 µg /L on a monthly basis. No acute exceedences of this selenium objective should be allowed under this Project.
- Sediment contaminant concentrations should be measured, disclosed and analyzed for the impacts from construction related activities with regard contaminant mobilization into the water column, and associated water quality impacts to fish and wildlife resources. Operational impacts of from stormwater discharges mobilizing sediments must be analyzed and disclosed and alternatives considered.
- The IS/MND should include copies of the consultations with CDFW and USFWS on effects to threatened and endangered species along with shorebirds, water birds and migratory birds.
- A copy of the MOU between CDFW and the Water Authority should be provided with the CEQA for this Project along with the baseline analysis to ensure this project will result in the successful adherence to mitigations promised for over two decades.

Thank you for your consideration of these comments.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



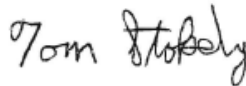
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org




Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



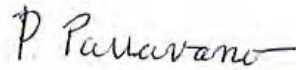
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](#)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net




Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



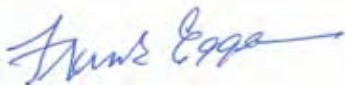
Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



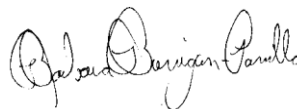
Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



CA Save Our Streams Council



May 25, 2021

Mr. Russ Freeman
 Westlands Water District
 P.O. Box 6056,
 Fresno, California 93703-6056
 Email: rfreeman@wwd.ca.gov

RE: Discharge of Contaminated Groundwater Using Loopholes Created by Emergency Executive Order¹ Likely to Harm Downstream Beneficial Uses and Drinking Water Supplies--Arsenic and Selenium Concerns __Objection to Proposed CEQA Exemption for Westlands Water District’s Groundwater Pump-ins into the California Aqueduct.

Governor Newsom:

On Friday May 21, 2021 Westlands Water District (Westlands) held a special meeting to exempt from CEQA a groundwater pump-in project into the California Aqueduct (pump-in project) that in previous drought years had significant impacts to downstream beneficial uses including fish and wildlife, refuge water supplies and human health², as well as significant subsidence impacts to critical State water

¹ <https://www.gov.ca.gov/2021/05/10/governor-newsom-expands-drought-emergency-to-klamath-river-sacramento-san-joaquin-delta-and-tulare-lake-watershed-counties/>

² See Coalition comments on Westlands pump-in project, 9.30.2020: https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-9-30-2020_WWD-SLC-Pump-in-2020-IS_ND_-Cal-Aqueduct-Corrected.pdf

infrastructure (the California Aqueduct).³ Of particular concern are the constituents selenium and arsenic.⁴ Westlands justified the CEQA exemption for these groundwater pump-ins citing your May 10th Proclamation of a State Drought Emergency⁵ and approval from DWR. The CEQA exemption for the Westlands pump-in project for 2021 is not appropriate without additional assurances, monitoring and enforcement actions to protect the public and fish and wildlife resources that use water from the Aqueduct downstream of Westlands. Governor Newsom, did you know that this CEQA Exemption would arbitrarily benefit one use (Westlands) while harming other beneficial uses?

Background

Westlands Water District (Westlands) has participated in groundwater pump-ins into the California Aqueduct to augment District water supplies during drought years. In April 2020, and then again in September 2020, Westlands released a draft Initial Study/Negative Declaration for public comment on the Pump-in Project (State Clearinghouse #2020050434)⁶ for a five-year Warren Act Contract (for the years 2020-2025) to allow Westlands to pump-in up to 30,000 acre-feet per year (AF/y) (and up to 150,000 AF over the five-year life of the project) of potentially highly contaminated non-Central Valley Project (CVP) groundwater into the California Aqueduct-San Luis Canal (SLC). Such pump-ins occur in years in which Westland's CVP allocation is 20% or less. Non-CVP water introduced into the SLC would either be directly delivered to agricultural users or wildlife refuges located downstream of the points of introduction or operationally exchanged with Reclamation for a like amount, less conveyance losses, of Westlands' available water supplies in San Luis Reservoir. The delivery of non-CVP water to wildlife refuges is a critical aspect to evaluate because of the sensitivity of the refuges and wetland ecosystems to selenium contamination. In response to comments on the draft IS/NDs, in March 2021 Westlands issued a Notice of Preparation (NOP) of an EIR for the Pump-in Project.⁷ The EIR for this project has not yet been completed or released to the public for review and comment.

Key Documents Missing from Westlands Board Packet--Public Participation Precluded.

The Westlands Board Packet that was distributed to the Westlands Board members for the Friday May 21, 2021 Special Board Meeting included several outdated documents in support of the CEQA Exemption including:

1. An expired Warren Act Contract (2016-2019) between Reclamation and Westlands authorizing non-project water inputs in the Federal/State San Luis Canal/California Aqueduct. The Warren Act Contract referenced an Exhibit D which identifies minimum water quality standards for monitoring the non-project water introduced into the Aqueduct. Exhibit D was missing from the CEQA Exemption materials.
2. An expired Agreement between DWR and Westlands (SWPAO 16007, expired 2016) authorizing introduction of local groundwater into the Aqueduct. This Agreement references Attachment 1

³ See DWR comments on Westlands pump in project 10.1.2020: https://calsport.org/news/wp-content/uploads/DWR_10-1-2020-Pump-in-Comment.pdf

⁴ Selenium & Arsenic concentrations in the California Aqueduct at Check 29, downstream of where groundwater has been pumped into the canal increased markedly in 2015 and in the case of Arsenic were approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L.

See: http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

⁵ <https://www.gov.ca.gov/wp-content/uploads/2021/05/5.10.2021-Drought-Proclamation.pdf>

⁶ See: <https://ceqanet.opr.ca.gov/2020090040/2>

⁷ See: <https://wwd.ca.gov/wp-content/uploads/2021/03/notice-of-preparation.pdf>

which establishes water quality standards to be adhered to. Attachment 1 was not included with the CEQA Exemption materials.

Without a current a Warren Act Contract that includes an Exhibit D, and a current Agreement between DWR and Westlands that includes an Attachment 1, the public is left in the dark on the water quality requirements for these groundwater pump-ins into the Aqueduct.

Groundwater inputs into the Aqueduct Likely To Adversely Impact Downstream Fish and Wildlife Beneficial Uses.

The Westlands pump-in project can affect refuge water supplies at Mendota WA⁸ and Kern NWR. The September 2020 IS/ND for the Pump-in Project acknowledged that groundwater from the Pump-in Project would comingle with refuge water supplies. The September 2020 IS/ND assumed the wellhead MCL of 2 µg/L selenium established in the 2020 Water Quality Monitoring Plan (WQMP) for the SLC⁹ will be adhered to, without providing any data on the water quality performance of prior Westlands pump-ins. We note that almost 40% of the discharge points identified in Table 1 of the September 2020 IS/ND had at least one well sample that exceeded MCLs identified in the previous WQMPs for the constituents As, Se or TDS. This information is summarized in Appendix A to our September 30, 2020 comments on the IS/ND for this Project.¹⁰

The water supply for Kern National Wildlife Refuge (NWR) comes from the California Aqueduct and is diverted at Check 29. These refuges provide habitat for rare species including the federally listed Buena Vista Lake Ornate Shrew (Endangered) and the federally listed giant garter snake (Threatened). These species could be impacted by selenium from Westlands' contaminated groundwater discharges from the pump-in project. During drought years cutbacks to water users south of Delta has resulted in reduced freshwater flows in the California Aqueduct. Numerous water actions such as groundwater pump-ins and exchanges into the California Aqueduct have the potential to cumulatively degrade the quality of refuge water delivered to Kern NWR. Past data on the percent of flow in the Aqueduct (POA) comprised of Westlands groundwater pump-ins in the fall of 2014 and early 2015 indicate that the groundwater pump-ins have at times contributed 100% of the flow in the Aqueduct at Check 21 as depicted in the Figures 3-1 and 3-2 from DWR 2015¹¹ and Figure 3-1 from DWR 2016¹² reports and copied below. Some of these time periods overlap with refuge water deliveries to Kern NWR.

DWR has promoted fishing along the aqueduct and identifies five locations within or near Westlands (Fairfax, Three Rocks, Huron, Avenal Cutoff, and Kettleman City sites).¹³ Due to the high percentage of

⁸ See CDFW's comments on the September 2020 IS/ND:
<https://ceqanet.opr.ca.gov/2020090040/2/Attachment/JS3MC2>

⁹ The SLC WQMP for non-project water pump-ins is available beginning at pdf pg 83 of the FEA available here:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=46945

¹⁰ https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-9-30-2020_WWD-SLC-Pump-in-2020-IS_ND_-Cal-Aqueduct-Corrected.pdf

¹¹ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

¹² See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

¹³ *Ibid.*

discharge volumes represented by Westlands' WD's groundwater pump-ins into the Aqueduct during certain time periods, especially under drought conditions, humans who fish the California Aqueduct are likely to be periodically exposed to much higher contaminants than the long-term average. In addition, there will be higher contaminant levels in fish than reported in canal water due to accumulation in fish tissue.

The groundwater contributions from the groundwater pump-ins into the California Aqueduct are conveyed south and stored in four reservoirs (Pyramid Lake, Castiac Lake, Silverwood Lake, and Lake Perris). The Aqueduct and these four reservoirs are regulated under four Regional Water Boards jurisdictions. Currently designated fish and wildlife beneficial uses for these downstream reservoirs include WARM (warm freshwater habitat), COLD (cold freshwater habitat), SPWN (spawning, reproduction and/or early development), and WILD (wildlife habitat). These beneficial uses need to be considered and protected.

Monitoring Requirements are Lax or Absent.

The draft CEQA Exemption distributed at the Westlands May 21, 2021 Board Meeting did include a link to the Bureau of Reclamation's Final Environmental Assessment (FEA) and a 2020 Water Quality Management Plan (WQMP) in Appendix B of the FEA.¹⁴ The WQMP requires that all participating wells must have baseline sampling each year before pumping into the San Luis Canal (SLC, the Federal/State portion of the Aqueduct) begins for those constituents of concern used for screening-out non-compliant wells. Further, the WQMP requires that for all constituents in the Table 5 (including Arsenic and Selenium), except as specified in the footnotes, monitoring will continue to occur weekly for four consecutive weeks, and then monthly for the duration of pumping into the SLC. This sampling frequency is inadequate to protect downstream beneficial uses and public health.

The California Department of Water Resources (DWR) currently conducts monthly monitoring of the California Aqueduct at Check 21 near Kettleman City (station number KA017226), and has documented occurrences of elevated levels of concern for selenium especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct.¹⁵ The once-a-month water quality sampling is insufficient to establish a monthly mean water quality calculation, to capture contaminant spikes that accumulate downstream, or to assess potential bioaccumulation in the food chain. Refuge water delivered to the Kern National Wildlife Refuge is diverted from the California Aqueduct in Kern County near Check 29, downstream of where groundwater from the groundwater inputs into the Aqueduct. Inexplicably, DWR stopped collecting water quality data from Check 29 after November 2016.¹⁶ To ensure fish and wildlife and public health uses are protected, we recommend that DWR collect daily water quality monitoring for arsenic and selenium in the Aqueduct at Check 21 and Check 29 when the groundwater pump-ins are occurring. This daily monitoring would ensure the four-day average contaminant measure required by the Clean Water Act can be met. Further

¹⁴ See Appendix B starting @ pdf pg 83:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=46945

¹⁵ Water quality data for the California Aqueduct near Kettleman City is available here by specifying Station Name Check 21: <https://wdl.water.ca.gov/waterdatalibrary/>

¹⁶ Selenium & Arsenic concentrations in the California Aqueduct at Check 29, downstream of where groundwater has been pumped into the canal increased markedly in 2015 and in the case of Arsenic were approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L.
See: http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

this daily frequency would also measure accumulation and spikes that are likely as the result of discharges into the California Aqueduct of groundwater contaminants.

Compliance with Clean Water Act and Porter Cologne Water Quality Control Act is Absent.

As the USEPA (EPA) noted in comments submitted for the Westlands groundwater pump-ins in 2010, the discharge of contaminated groundwater from Westlands with potentially high salt, boron, chromium, arsenic, selenium and other metals would be subject to the National Pollution Discharged Elimination System (NPDES) permitting requirements pursuant to the federal Clean Water Act. Further EPA noted, “Permits will need to be designed to ensure the discharges do not cause or contribute to exceedences of applicable State water quality standards or degradation of designated beneficial uses.”¹⁷

The Clean Water Act prohibits the discharge of "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. Such a permit would contain limits on what can be discharged, monitoring and reporting requirements, and other provisions to ensure that the discharge does not harm water quality or human health. The term point source is also defined very broadly in the Clean Water Act. It means any discernible, confined and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure, or container.¹⁸ Yet, no compliance with the federal Clean Water Act has been provided for this project.

Further, we note that no Waste Discharge Requirements (WDRs) have been issued for this project. Waste Discharge Requirements established pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13263) permit discharges that “could affect the quality of waters of the state” – both surface and groundwater. These permits shall take into consideration beneficial uses to be protected, water quality objectives required for that purpose, other waste discharges, and the need to prevent nuisance. Some WDRs can also serve as a CWA NPDES permit (Wat. Code, § 13377; Chapter 5.5, Wat. Code, § 13370 et seq.).¹⁹

Without the necessary permits, the public is precluded from analyzing the permit and conditions to ensure protection and non-degradation of water supplies under the NPDES or WDR permit and potential mitigation measures. As we have noted above, groundwater from almost half of the wells included in Table 1 of the FEA have been reported in past monitoring reports to contain elevated concentrations of various metals and constituents such as selenium that can bioaccumulate in the food chain thus have amplifying the impacts on the environment (DWR 2016, 2017).²⁰

¹⁷ See: <http://calsport.org/news/wp-content/uploads/EPA-comments-Westlands-WD-EIR-NOP-3-4-10.pdf>

¹⁸ See: <https://www.epa.gov/npdes/npdes-permit-basics>

¹⁹ See: https://www.waterboards.ca.gov/board_reference/docs/wq_law.pdf

²⁰ DWR Groundwater Data from WWD 2008 Pump Ins at:

<https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>

And the following DWR Groundwater Data from WWD Pump-ins:

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2016.pdf>

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

Subsidence Impacts to the California Aqueduct are Significant.

Land subsidence is a major and growing consequence of groundwater pumping in the project area and threatens the California Aqueduct and other infrastructure. Increases in subsidence, impacts and costs to the California Aqueduct, and long-term cumulative impacts are significant. The Survey data in the 2017 DWR Subsidence Report show this section of the Aqueduct, the San Luis Canal (Los Banos to Kettleman City), has subsided the most over the years.²¹ The DWR report identifies several significant operational impacts of subsidence to the Aqueduct including: reduction in conveyance capacity, increase in power cost, decrease in available freeboard (the difference in elevation between the crest of the canal and the water level as fixed by design requirements). These effects are significant and costly to repair.²²

In DWR comments submitted to Westlands on the IS/ND in 2020, DWR noted that the allowable land subsidence in the IS/ND is not sustainable and would “significantly impact the functioning capacity and operational flexibility of the SWP. This degree of subsidence has resulted in considerable damage to the SLC for many years, impacting the overall functional capacity and operational flexibility of the State Water Project (SWP). The IS/ND determination that a 0.1 feet per year subsidence rate must be re-analyzed.”²³ The impacts of this action are complex, broad and far reaching, and should not be authorized through a CEQA Exemption.

Cumulative Impacts Need to be Considered.

Cumulative impacts from these groundwater discharges and exchanges are not disclosed or analyzed. Monitoring for the long term impacts of discharging these contaminants is not considered or included. In addition to the continued extraction of water from already over-drafted groundwater basins, the impacts from discharging this groundwater to the SLC for irrigation of Westlands’s toxic soils and exacerbating an existing subsurface agricultural drainage problem on the west-side of the San Joaquin Valley are not considered or mitigated in a CEQA Exemption nor considered by federal government partners in accordance with the National Environmental Policy Act (NEPA). Selenium found in groundwater and drainage water in Westlands is known to create life threatening impacts to migratory birds, wildlife and fish, magnifying up the food chain as these pollutants accumulate.

Further, no alternatives to this CEQA Exemption are considered. Additionally compliance with NEPA is absent. For instance, agricultural land fallowing and land retirement are not considered. The Bureau of Reclamation’s San Luis Drainage Feature Re-evaluation Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit (which includes Westlands WD).

The CEQA Exemption fails to consider a reduction in exports, land fallowing and land retirement, issues of irrigability of lands in Westlands, expansion of the Place of Use boundary for the State Water Project and Central Valley Project south of the Delta^{24, 25} the cumulative effects of as groundwater pump-ins and exchanges, and transfers, and impacts of applying water to drainage-impaired lands.

²¹ See: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Engineering-And-Construction/Files/Subsidence/Aqueduct_Subsidence_Study-Accessibility_Compatibility.pdf

²² See: <https://sjvwater.org/the-sinking-central-valley-town/>
<https://www.msn.com/en-us/news/us/800m-in-upgrades-proposed-for-valley-canals-including-delta-mendota-california-aqueduct/ar-BB1fJhsN>

²³ See: : https://calsport.org/news/wp-content/uploads/DWR_10-1-2020-Pump-in-Comment.pdf

²⁴ On May 14, 2021, the Department of Water Resources (DWR), and the U.S. Bureau of Reclamation (Reclamation), collectively Petitioners, filed a petition for temporary change to transfer/exchange up to 431,780 acre-feet of water pursuant to California Water Code section 1725 et seq. The Petitioners request the temporary

More Robust Monitoring Program & Enforcement Requirements Are Needed.

To protect downstream beneficial uses, we recommend the following be State requirements of the Pump-in Project:

- Well water should not be conveyed into the Aqueduct until it has been confirmed that the well water does not exceed the selenium wellhead standard of 2 µg/L.
- Daily monitoring of wells (while pumps are running) that have had at least one water quality sample above 2 µg/L selenium during the 2015 and 2016 pump-ins;
- Daily water quality sampling for selenium at Checks 21 and 29 of the California Aqueduct while Westlands is pumping groundwater into the Aqueduct;
- Consistent with USEPA's selenium criteria guidance document²⁶, the selenium objective for the California Aqueduct should be 1.5 µg/L to be protective of downstream beneficial uses in lentic habitats (e.g., meaning or relating to, or living in still waters such as lakes, ponds or swamps) and associated with water from the Aqueduct and Mendota Pool;
- Well water pumped into the Mendota Pool should not exceed 800 mg/L TDS to protect Mendota Wildlife Area water quality.
- Water monitoring of wells and the Aqueduct at Check 21 should require rapid turnaround so results are received within 7 days and can be responsive to current and changing conditions.
- Well water from Westlands should not be pumped into the Aqueduct if Dos Amigos Pumping Plant is not operating.
- There needs to be an established protocol dictating required actions and enforcement when water quality standards are exceeded at individual wells or in the aqueduct and related conveyance canals.

Conclusion

We ask the Governor's office to rescind this CEQA Exemption for the Westlands pump-in project until sufficient water quality and subsidence monitoring and enforcement mechanisms are established for this project in 2021. We also ask that the current Warren Act Contract (including an Exhibit D), and a current Agreement between DWR and Westlands for introduction of local groundwater into the Aqueduct (that includes an Attachment 1) be provided to the public. Further we seek your intervention to ensure

addition of the State Water Project (SWP) place of use downstream of Harvey O. Banks Pumping Plant (Banks) to Reclamation License 1986 and Permits 11885, 11886, 12721, 11967, 11887, 12722, 12723, 12727, 11315, 11316, 11968, 11969, 12860, 11971, 11973, and 12364 (Applications 23, 234, 1465, 5626, 5628, 5638, 9363, 9364, 9368, 13370, 13371, 15374, 15375, 15764, 16767, 17374, and 17376) and the temporary addition of the Central Valley Project (CVP) place of use downstream of Jones Pumping Plant (Jones) to DWR Permit 16479 (Application 14443): https://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/transfers_tu_notices/2021/14443tt2_10514_notice.pdf

²⁵ On May 5, 2021, Clifton Court LP (Clifton Court) filed with the State Water Resources Control Board (State Water Board) a petition for temporary change to transfer up to 1,539 acre-feet of water pursuant to California Water Code section 1725 et seq under License 1289. Clifton Court proposes to transfer the water between July 1 and September 30, 2021 to the Westlands Water District. Changes include: (1) add the Central Valley Project's Jones Pumping Plant as a point of diversion, and (2) add a portion of the Westlands Water District service area as an additional place of use. See: https://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/transfers_tu_notices/

²⁶ On July 13, 2016 the USEPA published a Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

adequate monitoring and safeguards to protection downstream beneficial uses including the drinking water quality of Southern California residents and ratepayers. Allowing the discharge of these contaminated waters into the California Aqueduct shifts the cleanup and treatment costs from Westlands to other ratepayers. The drought emergency declaration loophole should not allow the transfer of these pollution costs to downstream ratepayers without adequate payment and mitigations.

Thank you for your timely consideration of this matter.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](#)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](#)
mike@ifrfish.org



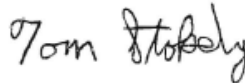
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Acting Calif. Director
Sierra Club California
brandon.dawson@sierraclub.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



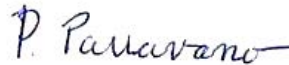
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



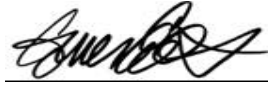
Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](#)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



Gerald Neuburger
Representative
Delta Fly Fishers
gneuburg@gmail.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



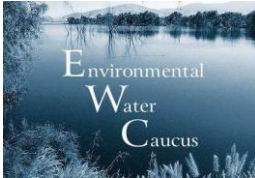
Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS



CA Save Our Streams Council



May 10, 2021

Mr. Robert L'Heureux
Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Drive, #200, Rancho Cordova, CA 95670

Via Email: Robert.LHeureux@waterboards.ca.gov

Re: Comments on the Triennial Review of the Water Quality Control Plan for Sacramento River and San Joaquin River Basins and the Tulare Lake Basin.

Thank you for the opportunity to provide comments on the Triennial Review of the Water Quality Control Plans for Sacramento River and San Joaquin River Basins¹ and the Tulare Lake Basin² (Sac/San Joaquin and Tulare Basin Plans). Our comments focus on the water quality constituent selenium and its effects on fish and wildlife resources in the San Joaquin and Tulare Basins. As we discuss in detail in these comments, the selenium objectives in the Sac/San Joaquin Basin Plan are not protective of fish and wildlife beneficial uses. Further, we note that the Sac/San Joaquin Basin Plan fails to designate a RARE beneficial use for the preservation of

¹ Available at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

² Available at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/tlbp_201805.pdf

rare and endangered species. For the Tulare Basin Plan we find that the Regional Board has failed to designate fish and wildlife beneficial uses in the California Aqueduct. Further the Tulare Basin Plan fails to establish any protective selenium objectives for the protection of fish and wildlife beneficial uses. We also adopt by reference the Triennial comments submitted by Restore the Delta and San Francisco Baykeeper.

To meet requirements of section 303(c) of the federal Clean Water Act and Water Code section 13240, the Central Valley Regional Water Quality Control Board (Regional Board) reviews the water quality standards contained in the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins and in the Water Quality Control Plan for the Tulare Lake Basin (Basin Plans) every three years. The process of soliciting information pertinent to this review and the review itself is referred to as the “Triennial Review.”³

Water quality objectives established pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) must ensure the reasonable protection of beneficial uses, taking into consideration specified factors, including the environmental characteristics of the hydrographic unit under consideration, the water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area, and economic considerations. (Wat. Code, § 13241.) In developing water quality objectives to ensure reasonable protection of fish and wildlife beneficial uses in the San Joaquin Basin, San Francisco Bay/Sacramento San Joaquin Delta Estuary (Bay-Delta), and Tulare Basin, the Regional Board has a “duty to consider and protect all of the other beneficial uses to be made of water bodies including municipal, industrial, and agricultural uses.” (State Water Resources Control Board Cases (2006) 136 Cal.App.4th 674, 778.) The Regional Board’s duty to balance competing interests in formulating water quality objectives can be harmonized with its duty under the common law public trust doctrine to protect public trust resources to the extent feasible and consistent with the public interest. (State Water Resources Control Board Cases, supra, 136 Cal.App.4th at pp. 777-778.) The Basin Plans must include public trust protections and address unreasonable uses from various water agencies including USBR and DWR. This includes the failure to address the control of drainage discharges to ensure downstream beneficial uses are not harmed along with sufficient flows and low enough temperatures in the San Joaquin River and Delta Estuary.

We have organized our comments in the format provided in Attachment 2 - Information for Commenting on 2021 Triennial Review as provided in the Regional Board’s solicitation for comments. As provided in the Triennial Review solicitation, comments will be accepted thru May 10, 2021 on water quality issues in the Central Valley that may need to be addressed through basin plan amendments for the 2021 Triennial Review.⁴

³ See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/triennialreviews/2021_tr_not.pdf

⁴ *Ibid.*

1. Submitting Organizations:

The California Sportfishing Protection Alliance submits these comments on behalf of the eighteen listed fishing, conservation and tribal organizations. See the contact lists with email in response to CVRWQB's format: #5 Supporting Organizations.

2. Contact Person:

Bill Jennings: Executive Director, CSPA; 3536 Rainier Ave, Stockton, CA 95204; 209-464-5067; deltakeep@me.com

Richard McHenry, Director of Permits and Compliance, CSPA; 11934 Rising Sun Way, Gold River, CA 95670, 916-851-1500; rmchenry1403@aol.com

3. Affected Waterbodies and Watersheds:

The waterbodies/watersheds affected by selenium include:

San Joaquin River from mouth of the Merced River to Vernalis
Mud Slough (north), and the San Joaquin River from Sack Dam to the mouth of Merced River
Salt Slough and the Grassland wetland water supply channels
Sacramento-San Joaquin Delta
Delta Mendota Canal
Mendota Pool/Fresno Slough (covered under Valley Floor Waters in Tulare Basin Plan)
The California Aqueduct (San Joaquin and Tulare Basins)

4. Affected section of the Basin Plans

- a.1. Affected Beneficial Uses Currently Designated (San Joaquin Basin)
 - i. Freshwater Habitat (WARM, COLD), Migration (MIGR), Spawning (SPWN), Wildlife Habitat (WILD)
- a.2. Affected Beneficial Use not Currently Designated (San Joaquin Basin)
 - i. Preservation of Rare and Endangered Species (RARE) and the waterbodies to which this beneficial use should apply are:
 - San Joaquin River from mouth of the Merced River to Vernalis
 - Mud Slough (north), and the San Joaquin River from Sack Dam to the mouth of Merced River
 - Salt Slough and the Grassland wetland water supply channels
 - Sacramento-San Joaquin Delta
 - Delta Mendota Canal
 - California Aqueduct
- a.3. Affected Beneficial Uses not Currently Designated in the California Aqueduct (Tulare Basin)
 - i. RARE, WARM and WILD
- a.4. Affected Beneficial Uses Currently Designated for Valley Floor Waters – Mendota Pool/Fresno Slough (Tulare Basin)

i. RARE, WARM, WILD

b.1. Affected Water Quality Objective (San Joaquin Basin)

From Table 3-1 Trace Element Water Quality Objectives in the Basin Plan, page 3-5:

Selenium	0.012 0.005 (4-day average)	San Joaquin River, mouth of the Merced River to Vernalis
	0.020 0.005 (4-day average)	Mud Slough (north), and the San Joaquin River from Sack Dam to the mouth of Merced River
	0.020 0.002 (monthly mean)	Salt Slough and constructed and re-constructed water supply channels in the Grassland watershed listed in Appendix 40.

b.2. Affected Water Quality Objective (Tulare Basin)

We note that the Basin Plan for the Tulare Basin does not include any numerical water quality objectives for selenium. So currently the selenium water quality objective in the Tulare Basin for waters that include a beneficial use designation of MUN (municipal and domestic supply) (such as the California Aqueduct) would be the selenium standard established in Title 22 of the California Code of Regulations for Inorganic Chemicals (Tables 64431-A) and incorporated by reference in the Tulare Basin Plan on page 3-4. The selenium objective to protect public health in drinking water and the MUN beneficial use is 50 µg/L. Because selenium bioaccumulates in aquatic ecosystems to levels that are harmful to fish and their predators, the Title 22 selenium objective is not protective of the fish and wildlife beneficial uses that use water from the California Aqueduct.

Further, the Regional Board does identify fish and beneficial uses of RARE, WARM and WILD for Valley Floor Waters in Table 2-1 on page 2-5 of the Basin Plan. We were able to confirm via emails from Robert L'Heureux to Patricia Schifferle, Pacific Advocates, on May 4, 2021 that the California Aqueduct is not included in the Valley Floor Waters designation, but the Mendota Pool flowing south into Fresno Slough is included. As noted above, there are no numerical water quality objectives for selenium identified in the Tulare Basin plan.

c.1. Affected Implementation Program (San Joaquin Basin)

Grassland Bypass Project (GBP)

Groundwater pump-ins into the California Aqueduct and Delta Mendota Canal and associated water quality monitoring for selenium in those canals.

c.2. Affected Implementation Program (Tulare Basin)

Groundwater pump-ins into the California Aqueduct and in Mendota Pool/Fresno Slough and associated water quality monitoring for selenium in those water bodies.

5. Summary of Suggested Revisions

A. Revise chronic selenium water quality objectives to protect fish and wildlife beneficial uses

We strongly recommend that the Regional Board update the selenium water quality standards for aquatic life for both the San Joaquin Basin and Tulare Basin in this triennial review. Specifically, we recommend that the Regional Board revise the chronic selenium water quality objective consistent with the U.S. Environmental Protection Agency's (EPA) July 13, 2016 the Final Updated Clean Water Act (CWA) section 304(a) national chronic aquatic life criterion for the pollutant selenium in fresh water.⁵ States and authorized tribes must adopt water quality criteria that protect designated uses. Consistent with EPA's regulations at [40 CFR 131.11\(a\)](#), protective criteria must be based on a sound scientific rationale and contain sufficient parameters or constituents to protect the designated uses. Criteria may be expressed in either narrative or numeric form. States and authorized tribes have four options when adopting water quality criteria for which EPA has published section 304(a) criteria. EPA's regulation at [40 CFR 131.20\(a\)](#) provides that if a state does not adopt new or revised criteria parameters for which EPA has published new or updated recommendations, then the state shall provide an explanation when it submits the results of its triennial review to the Regional Administrator consistent with CWA section 303(c)(1). The updated section 304(a) selenium criteria supersede EPA's previous 304(a) recommended criteria for selenium.

The USEPA's 2016 federal register notice identified revised chronic selenium criteria in water for lentic waters (e.g., meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps) and lotic waters (e.g., rivers and streams). EPA's 2016 recommended criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. EPA's revised chronic selenium criterion for lentic waters of 1.5 µg /L on a monthly basis is the criterion that should be applied to protect fish and wildlife beneficial uses in the San Joaquin Basin Plan including the California Aqueduct, Delta Mendota Canal, Grasslands wetland channels, Mud Slough (north), the San Joaquin River, and Delta ecosystem. The Sacramento splittail data published in 2020 (discussed in detail below) demonstrates that the existing selenium objectives are not protective and should be revised to 1.5 µg/L. Standards must protect downstream designated uses. The downstream floodplain habitat in the Delta (that caused the splittail deformities in 2011 and discussed further below) functions more like a lentic (stillwater) habitat than a lotic (flowing water) habitat.

Further, to protect WARM, WILD, and RARE designated beneficial uses in the Tulare Basin (including those at Mendota Pool/Fresno Slough and Mendota Wildlife Area), EPA's revised chronic selenium criterion for lentic waters of 1.5 µg /L on a monthly basis is the criterion that should be applied to water in the Valley Floor Waters category in the Tulare Basin Plan Table 2-1.

Lastly, the Regional Board should revise the Tulare Basin Plan to include a selenium water quality criterion that is protective of fish and wildlife resources that utilize California Aqueduct water (e.g., Kern NWR and downstream reservoirs fed by California Aqueduct water). We

⁵ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambientwater-quality-criterion-for-selenium-in-freshwater>

recommend that the Regional Board adopt EPA’s revised chronic selenium criterion for lentic waters of 1.5 µg /L on a monthly basis for the California Aqueduct.

B. Rescind acute selenium objectives

We recommend that the Regional Board rescind acute selenium objectives from both Basin Plans. The USEPA did not include an acute selenium criterion in their July 13, 2016 Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water under Item IV: “*The criterion document does not include an acute criterion (based on water-only exposure) because selenium is bioaccumulative and toxicity primarily occurs through dietary exposure.*”⁶ The existing relaxed acute selenium objectives are inconsistent with Final national criteria guidance from EPA and allow short term spikes of selenium that can have long term consequences in the ecosystem. Further, the current acute selenium objectives fail to protect designated fish and wildlife beneficial uses.

C. Designate RARE beneficial Uses for Waterbodies in the San Joaquin Basin & Sacramento River Basin

We recommend that the Regional Board designate a RARE beneficial use to the waterbodies covered by these comments including:

- San Joaquin River from mouth of the Merced River to Vernalis
- Mud Slough (north), and the San Joaquin River from Sack Dam to the mouth of Merced River
- Salt Slough and the Grassland wetland water supply channels
- Sacramento-San Joaquin Delta
- Delta Mendota Canal
- California Aqueduct

D. Designate a WARM beneficial use for the California Aqueduct in the San Joaquin Basin

The Department of Water Resources has promoted fishing along the Aqueduct, including 7 sites in the San Joaquin Basin south of Stockton. We recommend that the Regional Board designate a WARM beneficial use for the California Aqueduct in the San Joaquin Basin to protect fisheries and people who use these sites along the Aqueduct for recreational fishing.

E. Designate RARE, WARM, and WILD beneficial uses for the California Aqueduct in the Tulare Basin

We recommend that the Regional Board revise the Tulare Basin Plan to include at a minimum fish and wildlife beneficial uses of RARE, WARM and WILD in the California Aqueduct to protect fisheries, wildlife habitat, and state and federally threatened and endangered species that use water from the Aqueduct.

⁶ *Ibid.*

F. Require daily selenium water quality monitoring of the California Aqueduct at Checks 21 and 29 when groundwater pump-ins into the Aqueduct are occurring

The California Department of Water Resources (DWR) currently conducts monthly monitoring of the California Aqueduct and has documented occurrences of elevated levels of concern for selenium at Check 21 near Kettleman City (station number KA017226), especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct.⁷ The once-a-month water quality sampling is insufficient to establish a monthly mean water quality calculation, to capture contaminant spikes that accumulate downstream, or to assess potential bioaccumulation in the food chain. Refuge water delivered to the Kern National Wildlife Refuge is diverted from the California Aqueduct in Kern County near Check 29, downstream of where groundwater from the groundwater inputs into the Aqueduct. Inexplicably, DWR stopped collecting water quality data from Check 29 after November 2016.⁸ To ensure fish and wildlife beneficial uses are protected, we recommend that the Regional Board require daily water quality monitoring for selenium in the Aqueduct at Check 21 and Check 29. This daily monitoring would ensure the four-day average contaminant measure required by the Clean Water Act can be met. Further this daily frequency would also measure accumulation and spikes that are likely as the result of discharges into the California Aqueduct of groundwater contaminants.

6. Supporting Data, Information or Evidence

A. Supporting Data for updating selenium chronic water quality standards to protect aquatic fish and wildlife beneficial uses

The core regulatory guidelines for aquatic selenium pollution in the United States are the Aquatic Life Water Quality Criteria derived by the US Environmental Protection Agency (USEPA) pursuant to the Clean Water Act (CWA) of 1977 (as amended). Selenium is highly bioaccumulative and its toxicity to fish and wildlife occurs primarily via dietary exposure. Prior to 2016, the USEPA had last promulgated an updated national chronic criterion for selenium in 1987, setting the criterion at 5 µg/L selenium on an acid-soluble basis (USEPA 1987). The procedure EPA used to derive the 1987 objective is much better suited for application to non-bioaccumulative pollutants. Since that time, serious weaknesses in the 1987 national selenium criterion have been revealed.

The 5 µg/L selenium water quality objective in the Sac/San Joaquin Basin Plan and for Mud Slough (North) and the San Joaquin River from Sack Dam to Vernalis and referenced in Table

⁷ Water quality data for the California Aqueduct near Kettleman City is available here by specifying Station Name Check 21: <https://wdl.water.ca.gov/waterdatalibrary/>

⁸ Selenium & Arsenic concentrations in the California Aqueduct at Check 29, downstream of where groundwater has been pumped into the canal increased markedly in 2015 and in the case of Arsenic were approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L.
See: http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

5.2 of Attachment A in the 2019 GBP WDRs (ORDER R5-2019-0077)⁹ is based on EPA's 1987 national selenium criterion and is not protective of downstream beneficial uses including fish and wildlife resources that use those surface waterways. We further note that no selenium objective has been established for protection of aquatic life and designated fish and wildlife beneficial uses in the Tulare Basin Plan.

Below we highlight key references and supporting information that identify or support more restrictive selenium criteria to protect fish and wildlife beneficial uses in the Basin Plans.

1. Regulation of Agricultural Drainage to the San Joaquin River, Summary of the San Joaquin River Technical Committee Report August 1987

The California State Water Board (State Board) in Order 85-1¹⁰ (dated February 5, 1985) directed the formation of the San Joaquin River Technical Committee (Technical Committee) made up of State Board and Central Valley Regional Board staff and tasked the Technical Committee (among other things) to report back to the State Board on proposed water-quality objectives for the San Joaquin River Basin that would protect all beneficial uses. The Technical Committee reported back (via a technical report to the State Board, in August, 1987¹¹) that available scientific information indicated an appropriate selenium objective for the San Joaquin River at Hills Ferry would likely need to be 2 µg/L. The Technical Committee noted that 2 µg/L coincidentally also reflected selenium concentrations at Hills Ferry in the mid-1970's, which was viewed as important because 1975 is the benchmark year for compliance with the CWA antidegradation policy (i.e., beneficial uses existing as of November 28, 1975 must be protected). In part, because of uncertainties concerning how much it would cost dischargers to implement a 2 µg/L objective on the San Joaquin River at Hills Ferry, the Technical Committee allowed an "interim selenium objective" of 5 µg/L. It was recommended that this "interim" objective be reviewed during the 1991 triennial review of the Basin Plan and the Regional Board should assess the data from water quality monitoring and studies of direct toxicity and bioaccumulation to determine whether the 5 µg/L interim selenium objective is still appropriate. That interim objective has effectively been extended to the present day (and potentially beyond if the selenium objective is not addressed in the 2021 triennial review). The Technical Committee recommendations were summarized in Gerald Johns' presentation in the Proceedings of the 4th Selenium Symposium (published by The Bay Institute in 1989), pages 202-205 (and included with the comment letter as Attachment 1).

⁹ See Attachment B Item D @ pdf pg 90:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

¹⁰ See: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/1985/wq1985_01.pdf

¹¹ See: https://www.google.com/url?client=internal-element-cse&cx=001779225245372747843:6ygtx6llvco&q=https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/wq_control_plans/1995wqcp/exhibits/sdwa/sdwa-exh-14.pdf&sa=U&ved=2ahUKEwiCtOuz_6vwAhUHGDQIHdkaANcQFjAAegQIBBAB&usg=AOvVaw2AnnpOj4kvyzmyLbB5HWkh

A University of California Committee of Consultants was formed to evaluate the water quality objectives for the San Joaquin River Basin (originally proposed in the Technical Committee Report) recommended a waterborne selenium criterion range between 1 and 1.5 µg/L as a “...highly conservative estimate of no adverse effect...[which] ...may account for the possible deleterious effect of bioaccumulation” (UC 1988). This range of concentrations is the same as that recommended by scientists in 1988 from the University of California, Davis, using data from their selenium toxicity research and other scientific literature. They stated that a “...conservative water quality goal for the protection of aquatic organisms, a level where no adverse effects should occur, appears to be between 1.0 and 1.5 µg/L” (Davis et al., 1988). Finally, taking bioaccumulation into effect, the State Board determined that a waterborne concentration of 0.9 µg/L selenium would be necessary to ensure no adverse effects on aquatic life (CSWRCB Technical Committee Report Aug 1987 [partially revised in Mar 1988]).

2. California Toxics Rule ESA Consultation

The USEPA in the 1990’s had proposed a 5 µg/L selenium water quality objective for California in the California Toxics Rule (CTR). Pursuant to the Endangered Species Act (ESA), and prior to the USEPA promulgating water quality objectives (including selenium) for the CTR, the USEPA was required to consult with the US Fish and Wildlife Service and the National Marine Fisheries Service (collectively, “Services”) and obtain the Services’ concurrence that none of the proposed criteria would jeopardize any ESA-listed species. Upon that review, the Services found that the 5 µg/L chronic criterion for selenium proposed by USEPA in the CTR would likely jeopardize 15 ESA-listed species (Emphasis added).¹² To avoid a final “Jeopardy Opinion” from the Services, and the associated legal ramifications, the USEPA agreed to reevaluate their CWA criteria guidance for selenium by 2002 and will proposed revised selenium aquatic life criteria for selenium in California by 2003 (FWS and NMFS 2000).¹³

The Services determined the following species would likely be adversely affected by the 5 µg/L proposed selenium objective in the CTR Biological Opinion:

- Birds: bald eagle, California clapper rail, California brown pelican, California least tern, light-footed clapper rail, marbled murrelet, and the Yuma clapper rail, based on the potential for these species to be impacted by elevated levels of selenium through their dietary habits, dependence on the aquatic ecosystem, and their limited distribution.
- Reptiles and Amphibians: Red-legged frog and giant garter snake.

¹² Final Biological Opinion on the effects of the U.S. Environmental Protection Agency's "Final Rule for the Promulgation of Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California (March 24,2000), available at: <https://downloads.regulations.gov/EPA-HQ-OW-2018-0056-0009/content.pdf>

¹³ *Id.*

- Fish: bonytail chub, coho salmon (California ESUs), delta smelt, desert pupfish, steelhead (California ESUs) Razorback sucker, Chinook salmon (California ESUs), Sacramento splittail (the splittail was proposed as Threatened at the time of this consultation). There was also discussion of adverse effects to sturgeon (the green sturgeon had not been listed yet).

3. USEPA National Se Criteria Revision

On July 13, 2016 the USEPA published a Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water. The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 recommended criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. Draft versions of the criterion underwent public review in 2014 and 2015 and external peer review in 2015. EPA considered all public comments and peer reviewer comments in the development of the 2016 final selenium criterion document. EPA's water quality criterion for selenium provides recommendations to states and tribes authorized to establish water quality standards under the CWA.¹⁴

Comparison of Final 2016 Selenium Criterion to 1999 Criteria

Criterion version	Chronic					Short-term
	Egg-Ovary ¹ (mg/kg dw)	Whole Body ¹ (mg/kg dw)	Muscle ¹ (mg/kg dw)	Water, ¹ Lentic (µg/L)	Water, ¹ Lotic (µg/L)	Water (µg/L)
2016 Final Update	15.1	8.5	11.3	1.5 (30 d)	3.1 (30 d)	Intermittent exposure equation.
1999 Selenium Criteria	N/A	N/A	N/A	5 (4 d)	5 (4 d)	Acute Equation based on water column concentration.

¹ A note on hierarchy of table: when fish egg/ovary concentrations are measured, the values supersede any whole-body, muscle, or water column elements except in certain situations. Whole body or muscle measurements supersede any water column element when both fish tissue and water concentrations are measured, except in certain situations (see examples in text above). Water column values are derived from fish tissue concentrations.

¹⁴ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

The EPA's 2016 final revised Section 304(a) guidance for selenium makes clear that the Sac/San Joaquin Basin Plan chronic selenium standard of 5 µg/L will not protect aquatic life and wildlife designated beneficial uses and therefore would bring the state out of compliance with the requirements of Section 303(c)(2)(B) of the Clean Water Act (CWA). As per the EPA's 2014 *"Water Quality Standards Handbook, Chapter 6: Procedures for Review and Revision of Water Quality Standards"*, @ page 7:¹⁵ *"It is important to note that, although a state or tribe may have fully complied with the requirements of Section 303(c)(2)(B) previously, states and tribes may be required to adopt new toxic criteria in the following situations:*

- *The EPA publishes new Section 304(a) criteria recommendations for a priority pollutant.*
- *New information on existing water quality and pollution sources indicates that a toxic pollutant for which a state or tribe had not previously adopted criteria could now be reasonably expected to interfere with the designated uses adopted by the state or tribe.*

We strongly recommend that the Regional Board update the selenium water quality standards for protection of fish and wildlife beneficial uses in this triennial review.

4. USEPA Proposed CA Se water quality criteria applicable to SF Bay and Delta

On July 15, 2016 the USEPA published a Proposed Rule in the Federal Register to revise the current federal Clean Water Act selenium water quality criteria applicable to the San Francisco Bay and Delta to ensure that the criteria are set at levels that protect aquatic life and aquatic-dependent wildlife, including federally listed threatened and endangered species.¹⁶ The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium, and State and Federal actions are underway to restore the waterway. Scientific evidence indicates that elevated selenium levels can contribute to the decline of fish and aquatic-dependent birds. EPA promulgated the San Francisco Bay and Delta's existing selenium criteria in 1992 as part of the National Toxics Rule, using EPA's recommended aquatic life criteria values at the time. However, the latest science on selenium fate and bioaccumulation indicates that the existing criteria are not protective of aquatic life and aquatic-dependent wildlife in the San Francisco Bay and Delta. Therefore, EPA published a Proposed Rule to revise the existing selenium criteria, based on best available science, legal requirements, and EPA policies and guidance. EPA's Determination of Necessity (page 46036 Item III B.) found that *"Because California's existing aquatic life criteria for selenium in the salt and estuarine waters of the San Francisco Bay, upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta, as promulgated by EPA in the NTR, are not protective of the applicable designated uses per the CWA and EPA's regulations at 40 CFR 131.11, EPA determines under CWA section 303(c)(4)(B) that new or revised WQS for the protection of aquatic life and aquatic-dependent wildlife are necessary to meet the requirements of the CWA for these California waters. EPA, therefore, proposes the revised selenium aquatic life and*

¹⁵ See: <https://www.epa.gov/wqs-tech/water-quality-standards-handbook>

¹⁶ See: <https://www.regulations.gov/document?D=EPA-HQ-OW-2015-0392-0001>

aquatic-dependent wildlife criteria in this rule in accordance with this 303(c)(4)(B) determination.”

The USEPA noted on page 46036 of the Federal Register Notice 81(36) that “[t]he analyses to develop the fish tissue and the avian egg tissue benchmarks used in the modeling, and the modeling results used to derive the proposed water column criteria, indicate the health of these species would be negatively impacted from exposure to selenium water column concentrations above 0.2 µg /L, which would be allowed to occur under the existing NTR selenium criterion of 5.0 µg /L. Accordingly, EPA finds that it is necessary to propose revised and more protective criteria for selenium in order to help ensure the continued protection of these vulnerable species and associated designated uses.”

Table 2. Proposed Selenium Water Quality Criteria for the San Francisco Bay and Delta

Media Type	Tissue		Water Column ¹		
			Dissolved		Particulate
Criteria	Fish Whole Body or Muscle	Clam	Chronic	Intermittent Exposure ²	Chronic
Magnitude	8.5 µg/g dw whole body or 11.3 µg/g dw muscle	15 µg/g dw	0.2 µg/L	$WQC_{int} = \frac{0.2 \mu\text{g/L} - C_{bkgrnd}(1 - f_{int})}{f_{int}}$	1 µg/g dw
Duration	Instantaneous measurement	Instantaneous measurement	30 days	Number of days/month with an elevated concentration	30 days
Frequency	Not to be exceeded	Not to be exceeded	Not more than once in three years	Not more than once in three years	Not more than once in three years

¹ Dissolved and particulate water column values are based on total selenium (includes all oxidation states, i.e., selenite, selenate, organic selenium and any other forms) in water.

² Where C_{bkgrnd} is the average background selenium concentration in µg/L, and f_{int} is the fraction of any 30-day period during which elevated selenium concentrations occur, with f_{int} assigned a value ≥ 0.033 (corresponding to one day).

The USFWS submitted comments on this proposed rule dated October 28, 2016. This letter is included with our comments as Attachment 2. The FWS identified a substantive error in the proposed criteria with respect to the percentage of white sturgeon diet that is clam-based. This percentage was used for the basis of deriving “protective” selenium criterion for the aquatic food chain (clam - Corbula) and a dissolved chronic water criterion. As noted by FWS, the percentage of clams in white sturgeon’s diet in EPA’s Technical Support Document is inaccurate: “FWS estimated the diet of white sturgeon to be approximately 40 percent clam based...” FWS pointed out the error, and noted that more recent studies showed a much higher incidence of clam (Corbula) in the diet of white sturgeon (>90 percent). If other calculations are unchanged, this correction brings the maximum allowable Corbula tissue concentration (to protect sturgeon) to about 8.6 µg/g dw which is much lower than the EPA proposed Corbula tissue criterion of 15 µg/g dw to protect all clam eating species such as green sturgeon. This will also impact the calculation of a protective dissolved selenium water concentration resulting in a value closer to 0.1 µg/L (half of what EPA proposed as a chronic dissolved selenium water criteria – 0.2 µg /L). To date, USEPA has not issued a Final Rule for these site-specific selenium criteria as specified

in the CTR Biological Opinion and has not addressed the errors in the proposed rule for selenium criteria in clam tissue and chronic dissolved water.

5. Species at Risk in the San Joaquin Valley and Bay Delta Estuary from Selenium Exposure

Supporting documentation for this USEPA docket for Selenium in California includes two reports by USFWS: (1) Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries, which gives a list of species considered most at risk for selenium exposure in CA;¹⁷ and (2) Species at Risk from Selenium Exposure in the San Francisco Estuary.¹⁸ The species identified at most risk for selenium exposure in the San Joaquin Valley and San Francisco Estuary were denoted as:

- Mammals: Buena Vista Lake Ornate Shrew;
- Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
- Reptiles: Giant Garter Snake;
- Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

Further, in a letter from National Marine Fisheries Service (NMFS) to the SWRCB regarding the San Joaquin River Selenium Control Plan Basin Plan Amendment (dated September 22, 2010), NMFS states that selenium contamination in the San Joaquin River is problematic in restoring spring and fall-run Chinook salmon to the upper reach of the San Joaquin River. The NMFS letter noted that selenium in the San Joaquin River could negatively affect Central Valley steelhead and the Southern distinct population segment of the North American green sturgeon.¹⁹

The USFWS provided a technical report to the USEPA evaluating the toxicity of selenium to white and green sturgeon.²⁰ This technical report found that “...*white and green sturgeon are among the most sensitive of fish to adverse effects of selenium, with the listed green sturgeon being the more sensitive of these two species. These levels of sensitivity evidently put sturgeon at substantial risk at current levels of exposure in the San Francisco Bay area. Selenium concentrations in food items of sturgeon in the San Francisco Bay area are almost always high enough that they may cause at least 10 percent mortality in hatchling green sturgeon (≥ 3.58 $\mu\text{g/g}$), and they are frequently high enough that they may cause at least 10 percent mortality among hatchling white sturgeon (≥ 10.8 $\mu\text{g/g}$) as well. Below is a summary of benchmark*

¹⁷ Available at: <https://downloads.regulations.gov/EPA-HQ-OW-2018-0056-0144/content.pdf>

¹⁸ Available at: <https://downloads.regulations.gov/EPA-HQ-OW-2015-0392-0005/content.pdf>

¹⁹ Available at: https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/howard_brown.pdf

²⁰ See: <https://downloads.regulations.gov/EPA-HQ-OW-2015-0392-0007/content.pdf>

concentrations of selenium derived here for the diets, whole body, muscle, and eggs of these two sturgeon species.”

The Buena Vista ornate shrew (BV shrew) was not considered in the CTR ESA consultation (it was listed in 2002) and is not protected from selenium impacts under current water quality requirements in the Tulare Basin Plan. The existing water quality objective for selenium that applies to refuge water delivered to Kern NWR by the U.S. Bureau of Reclamation is the old National aquatic life criterion of 5 µg/L. The BV shrew are at risk from selenium contamination in their diet. In the Final Rule to list the BV shrew as an endangered (67 FR 10101)²¹, the Service found that, “*Selenium toxicity represents a serious threat to the continued existence and recovery of the Buena Vista Lake shrew, not only at the two known locations at the Kern Preserve and the Kern NWR, but any potential locations throughout the Tulare Basin... Between 1984 and 1989, the selenium concentration in shallow groundwater was measured from wells throughout the Tulare Basin and ranged from less than 5 µg/L to greater than 200 µg/L. The groundwater beneath the Kern NWR ranged between 5 and 50 µg/L selenium and between 50 and 200 µg/L under the Kern Preserve, both well above water quality criteria determined by EPA. Thus, careful surface and groundwater management in these areas is critical to avoid selenium bioaccumulation in fish and wildlife...selenium can then enter the food chain of the Buena Vista Lake shrew by becoming concentrated in insects that forage on the vegetation or reside in soils that concentrate these salts...*”

6. Splittail Deformities from Elevated Selenium Exposure in the Delta

Johnson et al 2018 submitted a Final Report to USEPA on August 26, 2018 titled “Unraveling sources and pathways of elevated selenium exposure over the lifetime of an imperiled migratory fish.” Our organizations received this final report via a FOIA request from NMFS in February 2020. We have included a copy of this report as Attachment 3. The report describes splittail with visible morphological and spinal deformities observed in the Delta. As described on page 3 of this report, “*these gross deformities were found to be consistent with selenium toxicity which include scoliosis (lateral curvature of the spine), kyphosis (outward curvature of the spine), lordosis (concave curvature of the lumbar and caudal regions of the spine; as well as deformities of fins, skull, jaws, and bulging eyes.*”

The Johnson et al 2018 report to EPA concludes on Page 10:

"The strontium isotopic composition (87Sr:86Sr) in the otoliths of all wild splittail indicated they acquired Se toxicity while rearing in the freshwaters of the San Joaquin River." And, "The otolith data and the presence of multiple spinal malformations support the interpretation that juvenile splittail in this study fed directly on Se-enriched diets in the San Joaquin River prior to capture."

Two journal articles were subsequently published from this study in 2020 that identified adverse effects from selenium to Sacramento splittail. These publications by the USGS and NMFS have documented elevated levels of selenium in the benthic clam food chain used by the Sacramento

²¹ See: <https://www.govinfo.gov/link/fr/67/10101?link-type=pdf>

splittail and the federally listed green sturgeon in the San Francisco Bay Delta. In the spring of 2011, young-of-year splittail were found to have a high incidence (>80%) of spinal deformities characteristic of selenium toxicity at the site of a water diversion station in the San Joaquin Valley of the Delta (U.S. Department of the Interior, Bureau of Reclamation Tracy Fish Collection Facility) (Johnson et al 2020). This study identified various sources of selenium contamination and points to agricultural drainage as a significant source:

“These data suggest that individuals acquired Se toxicity while feeding in the freshwaters of the San Joaquin River but already started with significantly higher Se burdens from females maturing in the estuary (Figure 3, Table1 and Supporting Information).”²²



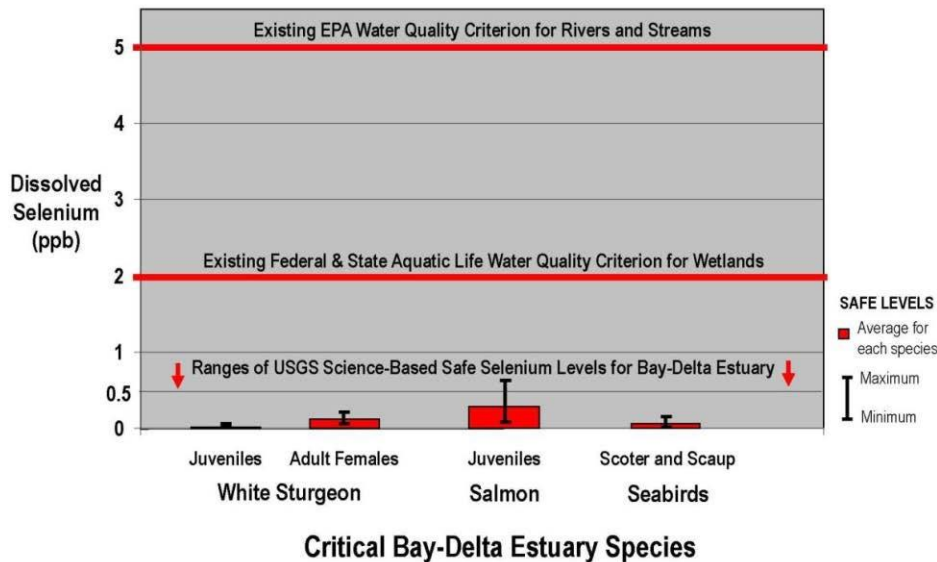
A second publication (Stewart et al 2020) compared splittail tissue concentrations with those proposed by EPA in 2016 for the Bay Delta and found that “Despite the consistently low muscle Se concentrations across all regions and years and no exceedances, the frequency of exceedance in liver and ovary were high for Pacheco, ranging from 60 to 80% (range for both tissues and years), followed by Suisun in 2011 (33%) and the Confluence in 2010 (17%).” These findings are significant as they document harm in a fish foraging in a benthic clam food web in the Delta, which is also utilized by the federally listed green sturgeon.

²² See: <https://dx.doi.org/10.1021/acs.est.9b06419>

The chart below presents in chart-form the USGS findings.²³

Existing Selenium Water-Quality Standards Do Not Protect Bay-Delta Species:

A new USGS study, which will be used by EPA to revise standards, shows that much lower levels of selenium will be required to protect critical species.



The Regional Board should consider how the selenium discharges allowed in the Sac/San Joaquin Basin Plan and the 2019 GBP WDRs for the next 25 years will affect the Bay-Delta ecosystem and could affect compliance with EPA’s water quality criteria for San Francisco Bay and Delta. The 5.0 µg/L Basin Plan selenium objective for Mud Slough and the San Joaquin

²³ The above graph prepared by CSPA & CWIN is directly based on the results from a U.S. Geological Survey (USGS) study. http://www.epa.gov/region9/water/ctr/selenium-modeling_admin-report.pdf. The USGS study evaluated a series of selenium exposure scenarios using a set of specific guidelines and modeling choices from the range of temporal hydrodynamic conditions, geographic locations, food webs, and allowable dissolved, particulate, and prey Se concentrations (which we have referred to as “safe levels”). According to the USGS, “[t]he specificity of these scenarios demonstrates that enough is known about the biotransfer of Se and the interconnectedness of habitats and species to set a range of limits and establish an understanding of the conditions, biological responses, and ecological risks critical to management of the Bay-Delta.” The following scenarios were evaluated by USGS for a range of hydrologic conditions and residence times (See Tables 17, 18 and 19 in the USGS report): (1) predicted allowed dissolved Se concentrations for Bay-Delta transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>C. amurensis>sturgeon food web; (2) predicted allowed dissolved Se concentrations for Bay-Delta transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>C. amurensis>clam-eating bird species food web; and (3) predicted allowed dissolved Se concentrations for landward transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>aquatic insect>juvenile salmon food web. The summary graphic of this data shows the results for critical Bay-Delta species, aggregated across all combinations of target tissues (e.g., Whole body, eggs, or diets) that have known levels of concerns, as summarized by the U.S. Fish and Wildlife Service. Results are also combined across all hydrologic conditions for each species. The ranges of “allowable” or safe levels of dissolved selenium clearly show that, although EPA will need to specify exact safety levels, flow conditions, and species, new standards for the Bay-Delta will need to be substantially less than 0.5 parts per billion dissolved selenium to be protective.

River will result in non-compliance with USEPA’s Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for selenium.²⁴

7. North SF Bay TMDL Draft Staff Report for Basin Plan Amendment, Sources of Selenium in North SF Bay²⁵

On page 7-52 of the North San Francisco (SF) Bay TMDL Draft Staff Report for a Basin Plan Amendment there is a discussion of the sources of selenium in North SF Bay. The main inputs of selenium into the North Bay are from the San Joaquin River which includes contributions from the Sacramento and San Joaquin Rivers as Central Valley watershed load (4070 kg/yr), local tributaries (520 kg/yr), atmospheric deposition (<30 kg/yr), discharges from petroleum refineries (571 kg/yr), and municipal and industrial wastewater dischargers (117 kg/yr). While loads from the Sacramento River, local tributaries, including urban runoff, and atmospheric deposition represent natural background, the San Joaquin River loads include an anthropogenic source, agricultural drainage, generated by irrigation of seleniferous soils.

Also, on page 7-52 the Staff Report includes numeric targets for selenium including a water column target of 0.5 ug/L dissolved total selenium to protect fish and wildlife beneficial uses.

Table 7.2.4-1 Numeric Targets for Selenium

Fish Tissue Targets	Water Column Target
8.0 µg/g whole-body dry weight	0.5 µg/L (dissolved total Se)
11.3 µg/g muscle tissue dry weight	

8. USEPA Proposed Selenium water quality criteria for fresh waters of California

On December 13, 2018 the EPA published a Proposed Rule in the Federal Register to establish a federal Clean Water Act (CWA) selenium water quality criterion applicable to California that protects aquatic life and aquatic-dependent wildlife in the fresh waters of California. The EPA is proposing to amend the California Toxics Rule to include a revised statewide chronic selenium water quality criterion for California fresh waters to protect aquatic life and aquatic-dependent wildlife²⁶ which builds upon the science in the EPA's 2016 *Final Aquatic Life Ambient Water Quality Criteria for Selenium—Freshwater*.

This proposed rule has not been finalized. The proposed rule exempted several waterbodies in the San Joaquin Basin (EPA determined that the rule does not apply to the San Joaquin River

²⁴ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

²⁵ See: https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/northsfbayselenium/SeTMDL_DraftReport_PublicReview_July24-2015.pdf

²⁶ See: <https://www.regulations.gov/document?D=EPA-HQ-OW-2018-0056-0001>

from Sack Dam to Vernalis, Mud Slough, or Salt Slough because they have selenium criteria from the NTR and/or approved CVRWQCB site-specific criteria (objectives): 5 µg /L and an acute maximum criterion of 12 µg /L). However the USFWS and NMFS in 2000 had already determined that these San Joaquin Basin selenium criteria would not be protective of listed species in the CTR Biological Opinion.²⁷

The Proposed Rule did not exempt waterbodies in the Tulare Basin. Under Section III. A. (83 FR 64064) of the Proposed Rule EPA states, “*The proposed criterion would establish levels of selenium that protect California’s aquatic life and aquatic-dependent wildlife designated (beneficial) uses for fresh waters of California consistent with California’s implementation of the CTR. California’s applicable designated uses for the protection of aquatic life and aquatic-dependent wildlife are listed in Table 2.*”

TABLE 2—APPLICABLE DESIGNATED (BENEFICIAL) USES FOR CALIFORNIA¹⁶

Use	Abbreviation	Definition
Warm Freshwater Habitat	WARM	Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Cold Freshwater Habitat	COLD	Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
Migration of Aquatic Organisms	MIGR	Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.
Spawning, Reproduction, and/or Early Development.	SPWN	Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.
Estuarine Habitat	EST	Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).
Wildlife Habitat	WILD	Uses of water that support terrestrial ecosystems including, but not limited to, preservation or enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
Rare, Threatened, or Endangered Species.	RARE	Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

We note that the Tulare Basin Plan currently does not include any fish and wildlife designated beneficial uses for the California Aqueduct. The Tulare Basin Plan does include fish and wildlife beneficial uses of WARM, WILD, RARE for Valley Floor Waters (listed in Table 2-1 of the Tulare Basin Plan) which includes Mendota Pool/Fresno Slough. The Tulare Basin Plan currently does not include any selenium objectives that would protect fish and wildlife beneficial uses. The Regional Board should adopt selenium objectives that protect fish and wildlife designated beneficial uses.

9. Grassland Bypass Project Stormwater Plan

In 2019 the Regional Board approved a 25-year WDR for the Grassland Bypass Project’s Stormwater Plan. The 2019 GBP WDR requires compliance with the selenium water quality objectives (5 µg/L, 4-day average) specified in the 2018 Sac/San Joaquin Basin Plan and

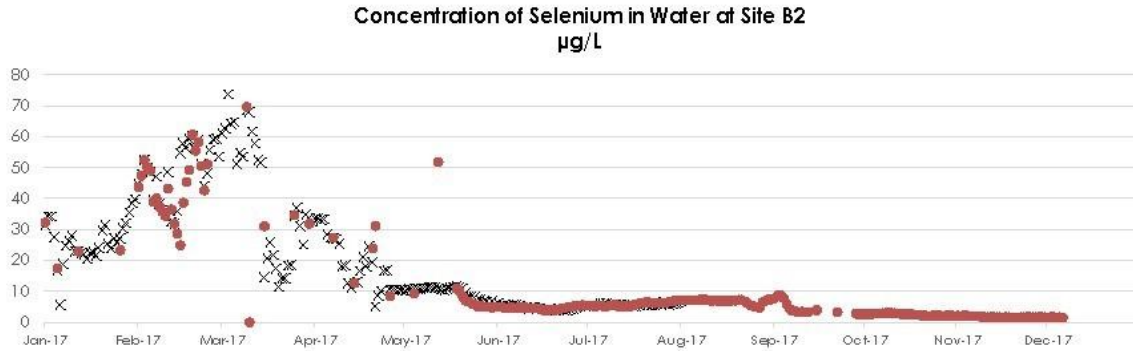
²⁷ Available at: <https://downloads.regulations.gov/EPA-HQ-OW-2018-0056-0009/content.pdf>

referenced in Table 5.2 of Attachment A in the 2019 GBP WDRs (ORDER R5-2019-0077).²⁸ These water quality objectives apply to the San Joaquin River from Sac Dam to Vernalis and Mud Slough (north) to the San Joaquin River. However, this proposal allows acute spikes of selenium (as described in Table 3-1 of the Basin Plan and ranging from 12 to 20 µg/L depending on location) that will bio-accumulate throughout the ecosystem. These chronic and acute selenium water quality objectives will result in harm to fish and aquatic-dependent wildlife as denoted in the Service's 2000 Biological Opinion on the CTR. Further, these water quality objectives are not protective of designated fish and wildlife beneficial uses and likely result in harm to rare and endangered species, migratory birds and endangered anadromous fish populations.

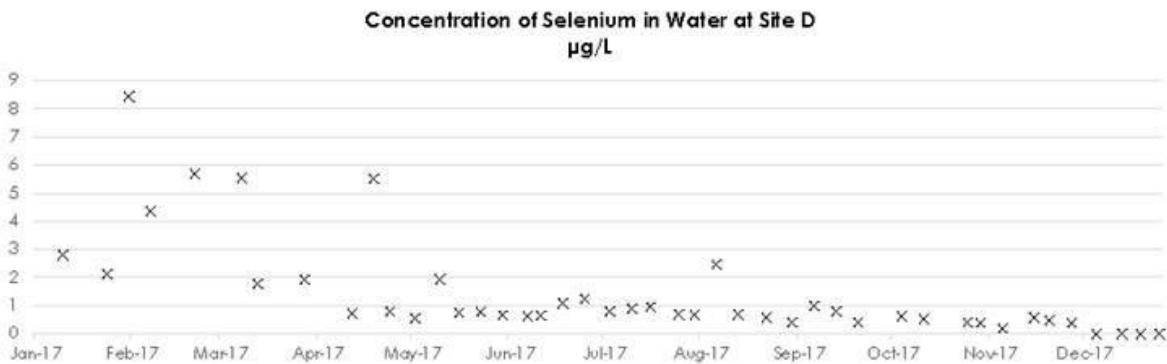
The 2019 WDRs effectively sanction continued excessive pollution, especially during stormwater events, of Mud Slough (North), the San Joaquin River, and ultimately the Sacramento-San Joaquin Delta and San Francisco Bay, by failing to enforce science-based protective water quality standards for selenium and allowing the continued contamination of these water bodies. Excess selenium in streams kills or deforms fish and other aquatic life and is a human health concern in drinking-water supplies. Under the 2019 GBP WDRs, selenium (and other harmful drain water pollutants, such as salt, sulfates, boron, molybdenum, and mercury) will continue to be discharged from the federally owned San Luis Drain directly into the waters of California and the United States. The failure to enforce protective selenium water quality objectives transfers pollution from Grassland drainers, through the federal San Luis Drain, to the waters of the State, and thus harms beneficial uses of these waters for our members' domestic water supplies, public health, fishing, recreation and other public trust values.

There is significant ongoing discharge of selenium-laden drainage and contaminated groundwater from the GBP. For example, during the winter/spring of 2017, water quality monitoring data show high selenium concentrations (e.g., 20-40 µg/L) associated with high flow conditions in water entering the San Luis Drain from the GBP. The figure below shows selenium concentrations at Site B2 in the San Luis Drain during 2017.

²⁸ See Attachment B Item D @ pdf pg 90:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf



Although the San Luis Drain adds a relatively small percentage of flow to Mud Slough, it nevertheless substantially increased the selenium concentrations in Mud Slough in 2017 to unacceptably high levels of 5-10 µg/L. Dilution is not the solution to pollution—especially in the case of selenium, which bioaccumulates in the food chain and magnifies impacts on fish, wildlife, migratory birds, and terrestrial species (Lemly and Skorupa, 2007; Skorupa 1998; USDI 1998). According to selenium expert Dr. Dennis Lemly, the 5 µg/L is an outdated number from the 80's and 90's, which has been shown repeatedly through field case study research to be under protective. In other words, 5 µg/L won't protect downstream fish and wildlife, including salmon.²⁹



As was noted above, new information was published in early 2020 that identifies adverse effects from selenium to Sacramento splittail. Of particular note, Johnson et al. (2020)³⁰ found that agricultural drainage was a significant source of selenium contamination in the food web of the

²⁹ Dr. Dennis Lemly personal communication to Pacific Advocates, dated 10-26-19: "... refer to the peer reviewed published guidelines for selenium toxicity given in my book (Lemly, A.D. 2002. Selenium Assessment in Aquatic Ecosystems: A Guide for Hazard Evaluation and Water Quality Criteria. Springer-Verlag, New York), and the current national regulatory criteria issued by EPA in 2016 (https://www.epa.gov/sites/production/files/2016-06/documents/se_2016_fact_sheet_final.pdf). These information sources establish water limits for protection of fish and other aquatic life, at 1-2 ug/L (my book, <1 for organic selenium, 2 for inorganic selenium; EPA = 1.5)."

³⁰ See: <https://pubs.acs.org/doi/10.1021/acs.est.9b06419>

splittail. Although the Sacramento splittail is not currently listed as threatened or endangered by the Federal or State government, they serve as an indicator species for species such as federally listed as threatened green sturgeon³¹ which feed on the same species of clam (Asian clam) as splittail. The NMFS in their 2019 ESA consultation on the effect of the 10-year extension of the Use Agreement for the San Luis Drain failed to consider impacts to the Green Sturgeon.³² Reclamation in their request for consultation with NMFS for this project arbitrarily limited the downstream end point of the action area to the San Joaquin River at Crows Landing. Therefore, impacts downstream of Crows Landing, including impacts to the federally listed green sturgeon, were not considered. Given the new splittail data was published in early 2020 and after the NMFS ESA consultation had been completed, this new information warrants reinitiation of consultation under the ESA for effects to green sturgeon.

B. Rescind Acute Selenium Objectives

As we noted previously, EPA did not include an acute water quality criterion for selenium in their final updated CWA section 304(a) selenium criteria revision.³³ This is because selenium bioaccumulates in the ecosystem and toxicity is primarily through dietary exposure.

In 1998-1999 EPA published a revised acute criterion, a formula that recognized that the two oxidation states, selenate and selenite, appeared to have substantially different acute toxicities. This acute criterion assumed toxicity was based on water-only exposure. Subsequent research has demonstrated that sulfate levels influence selenate toxicity in water-only exposures.³⁴

Short term spikes of selenium in a waterway can have longer lasting effects in an ecosystem. Beckon (2016) noted that when a bioaccumulative substance such as selenium is introduced into or removed from the environment, the processes by which it is assimilated into upper trophic levels of the ecosystem may be complex and prolonged. These processes include several levels of trophic transfer, each entailing the time required to consume food, assimilate the substance of interest, and the time span during which the organism continues to survive before being eaten by a member of the next higher trophic level. Beckon noted that for some species of piscivorous fish the lag time for selenium exposure to bioaccumulate in the upper trophic level of fish is over 1 year from the initial exposure.

Selenium bioaccumulates rapidly in aquatic organisms and a single pulse of selenium (>10 µg/L) into aquatic ecosystems could have lasting ramifications, including elevated selenium concentrations in aquatic food webs (Besser *et al.* 1993; Graham *et al.* 1992; Maier *et al.* 1998; Nassos *et al.* 1980; Hamilton 2004). Besser *et al.* (1993) reported that within 24-hours

³¹ <https://www.fisheries.noaa.gov/species/green-sturgeon>

³² See NMFS ESA consultation starting at pdf pg 243:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

³³ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

³⁴ See pg 1 of EPA's 2016 Aquatic Life Ambient Water Quality Criterion for Selenium – Freshwater, available at:
<https://downloads.regulations.gov/EPA-HQ-OW-2004-0019-0437/content.pdf>

waterborne treatment levels of 100 µg /L selenium in the form of selenite and selenate bioaccumulated to greater than 40 µg/g in algae and 8-15 µg/g in daphnids (both extremely dangerous levels of food web selenium for higher trophic level consumers). Graham *et al.* (1992) also documented rapid bioaccumulation from waterborne spikes of selenium and much slower elimination of that selenium from the food web. Based on standard acute toxicity testing, Nassos *et al.* 1980 concluded that, "... organisms can concentrate Se [selenium] several hundred times the level in the water within a period of 24 h." Maier *et al.* (1998) documented that a brief pulse of selenium of about 10 µg/L in a Sierra Nevada stream for less than 11 days (selenium was 10.9 µg/L at 3 hrs post-treatment and at < 1 µg/L when next measured 11 days post-treatment) resulted in elevated invertebrate selenium concentrations of > 4 µg/g (composite invertebrate samples collected before application of the selenium pulse to the treatment area contained 1.67 µg/g selenium (dry weight)). Maier *et al.* found that the invertebrate food web was still contaminated at > 4 µg/g 12 months after selenium treatment when the monitoring ended even though water concentrations were < 1 µg/L.

Field examples have shown that very nominal increases in water concentrations of selenium above 5 µg /L can lead to catastrophic changes in an ecosystem. At Belew's Lake, a man-made reservoir in North Carolina contaminated by coal-fly ash waste, 16 species of fish were extirpated in a freshwater environment with only 10 µg /L selenium. Although cleanup efforts were able to reduce the waterborne concentration of selenium to less than 1 µg /L, a full decade after cleanup, concentrations of selenium in sediment, invertebrates, and fish ovaries were still slightly to moderately elevated (Skorupa 1998). Substantial evidence suggests that once selenium has entered biotic pathways, it is very efficiently recycled over time (Lemly 1997; Skorupa 1998; Presser and Luoma 2006). Skorupa (1998) concluded that in some systems, the peak waterborne concentration of selenium in a freshwater system may be more relevant to assessing environmental risk than longer term averages.

Thus, short-term exceedances of the 5 µg/L selenium objective allowed by acute selenium objectives in the Sac/San Joaquin Basin Plan (ranging from 12 to 20 µg/L depending on location) can have deleterious effects to the upper trophic level species several months to over a year after the event. We therefore urge the Regional Board to rescind acute selenium objectives from both Basin Plans and adopt chronic selenium objectives that are protective of designated fish and wildlife beneficial uses.

C. Designate RARE beneficial Uses for Waterbodies in the Sac/San Joaquin Basin Plan.

The Porter-Cologne Act establishes a comprehensive program for the protection of beneficial uses of the waters of the state. California Water Code section 13050(f) describes the beneficial uses of surface and ground waters that may be designated by the State or Regional Board for protection as follows: "Beneficial uses of the waters of the state that may be protected against quality degradation include, but are not necessarily limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves."³⁵

³⁵ See:

https://www.waterboards.ca.gov/rwqcb9/water_issues/programs/basin_plan/docs/update082812/Chpt_2_2012.pdf

The RARE designation has been added where there is substantial evidence that the water body supports threatened or endangered species. By definition water bodies with a RARE designation support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.³⁶ We see no reason why the Regional Board has failed to designate RARE beneficial uses in the Sac/San Joaquin Basin Plan. We urge the Regional Board to designate RARE beneficial uses for waterbodies in the Sac/San Joaquin Basin Plan.

D. Designate a WARM beneficial use for the California Aqueduct in the San Joaquin Basin.

On line 94 of Table 2-1 of the Sac/San Joaquin Basin Plan the beneficial uses for the California Aqueduct are listed as: Municipal and Domestic Supply (MUN), Agriculture (AGR), Contact Recreation (REC-1), Other Non-Contact Recreation (REC-2), and Wildlife Habitat (WILD). The Department of Water Resources has promoted fishing along the Aqueduct, including 7 sites in the San Joaquin Basin south of Stockton (Grant Line Road, Niels Hansen, Orestimba, Cottonwood Road, Canyon Road, Mervel Avenue, and Fairfax sites).³⁷ We recommend that the Regional Board designate a WARM beneficial use for the California Aqueduct in the San Joaquin Basin to protect fisheries and people who use these sites along the Aqueduct for recreational fishing.

E. Designate RARE, WARM, and WILD beneficial uses for the California Aqueduct in the Tulare Basin.

1. The California Aqueduct is promoted for recreational fishing.

The Tulare Basin Plan does not include fish (WARM) as a beneficial use for the Aqueduct. Yet, the Department of Water Resources (DWR) has promoted fishing along the aqueduct and identifies five locations within or near Westlands (Fairfax, Three Rocks, Huron, Avenal Cutoff, and Kettleman City sites).³⁸ Due to the high percentage of discharge volumes represented by Westlands' WD's groundwater pump-ins into the Aqueduct during certain time periods, especially under drought conditions, humans who fish the California Aqueduct are likely to be periodically exposed to much higher contaminants than the long-term average. In addition, there will be higher contaminant levels in fish than reported in canal water due to accumulation in fish tissue. This exposure, warnings, and monitoring should be disclosed, especially to low-income communities in the surrounding areas.

2. Downstream fish and wildlife beneficial uses in reservoirs fed by the California Aqueduct need to be considered and protected.

The groundwater contributions from the groundwater pump-ins into the California Aqueduct are conveyed south and stored in four reservoirs (Pyramid Lake, Castiac Lake, Silverwood Lake, and

³⁶ *Ibid.*

³⁷ See: https://calsport.org/news/wp-content/uploads/DWR_Fishing-Along-the-SWP.pdf

³⁸ *Ibid.*

Lake Perris). The Aqueduct and these four reservoirs are regulated under four Regional Water Boards jurisdictions. Currently designated fish and wildlife beneficial uses of the Aqueduct and downstream reservoirs are listed in Table 1.

Table 1. Fish and Wildlife Beneficial Uses Associated with CA Aqueduct

Waterbody Name	WARM	COLD	SPWN	WILD	RARE
California Aqueduct (San Joaquin Basin) ³⁹				E	
California Aqueduct (Tulare Basin) ⁴⁰					
Castiac Lake ⁴¹	E	I	E	E	E
Pyramid Lake ¹⁸	E	E		E	E
Silverwood Lake ⁴²	E		E	E	
Lake Perris ⁴³	E	E		E	E

E: Existing beneficial use.

I: Intermittent beneficial use.

WARM: Warm Freshwater Habitat - Uses of water that support warm water ecosystems including but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

COLD: Cold Freshwater Habitat - Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

SPWN: Spawning, Reproduction, and/or Early Development - Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

³⁹ On line 94 of Table 2-1 of Sac/San Joaquin Basin Plan the beneficial uses for the California Aqueduct are listed as: Municipal and Domestic Supply (MUN), Agriculture (AGR), Contact Recreation (REC-1), Other Non-Contact Recreation (REC-2), and Wildlife Habitat (WILD).

See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

⁴⁰ We confirmed via email from Robert L’Heureux to Patricia Schifferle on May 4, 2021, that “the Tulare Lake Basin Plan does not specifically cite the California Aqueduct and, therefore, does not have associated beneficial uses... Moreover, Central Valley Regional Water Quality Control Board staff interpret the beneficial uses associated with the California Aqueduct in the Sacramento River Basin – San Joaquin River Basin Plan as being associated with that plan, only, and not extending into the Tulare Lake Basin.”

⁴¹ See Beneficial Use Designations of Inland Surface Waters, Los Angeles Regional Water Board: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/2020/Chapter_2/Chapter_2_Table_2_1/Chapter_2_-_Table_2-1.pdf

⁴² See: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/ch2_bu.pdf

⁴³ See: https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2019/New/Chapter_3_June_2019

WILD: Wildlife Habitat - Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

RARE: Endangered Species - Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

3. Beneficial uses to refuges and wetland habitats in the Tulare Basin need to be considered and protected.

As described in Reclamation's 2020 DEA for the Westlands Groundwater pump-in project,⁴⁴ both Mendota Wildlife Area and Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the Westlands Pump-in Project, as well as downstream State Water Project reservoirs. Rare species that could be impacted by selenium from Westlands' contaminated groundwater discharges from the Pump-in Project include the federally listed Buena Vista Lake shrew (endangered), federally listed giant garter snake (threatened), and federally protected bald eagle (USFWS 2017).

We therefore recommend that the Regional Board revise the Tulare Basin Plan to include at a minimum fish and wildlife beneficial uses of RARE, WARM and WILD in the California Aqueduct to protect fisheries, wildlife habitat, and state and federally threatened and endangered species that use water from the Aqueduct.

F. Require daily Water Quality monitoring for selenium in the Aqueduct at Checks 21 and 29 when groundwater pump-ins into the Aqueduct are occurring.

1. Westlands groundwater pump-ins into the Aqueduct.

Westlands Water District (Westlands) has participated in groundwater pump-ins into the California Aqueduct to augment District water supplies during drought years (Pump-in Project). In April 2020, and then again in September 2020, Westlands released a draft Initial Study/Negative Declaration for public comment on the Pump-in Project (State Clearinghouse #2020050434)⁴⁵ for a five-year Warren Act Contract (for the years 2020-2025) to allow Westlands to pump-in up to 30,000 acre-feet per year (AF/y) (and up to 150,000 AF over the five-year life of the project) of potentially highly contaminated non-Central Valley Project (CVP) groundwater into the California Aqueduct-San Luis Canal (SLC). Such pump-ins occur in years in which Westland's CVP allocation is 20% or less. Non-CVP water introduced into the SLC would either be directly delivered to agricultural users or wildlife refuges located downstream of the points of introduction or operationally exchanged with Reclamation for a like amount, less conveyance losses, of Westlands' available water supplies in San Luis Reservoir. The delivery of non-CVP water to wildlife refuges is a critical aspect to evaluate because of the sensitivity of the refuges and wetland ecosystems to selenium contamination. In response to

⁴⁴ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=46185

⁴⁵ See: <https://ceqanet.opr.ca.gov/2020090040/2>

comments on the draft IS/NDs, in March 2021 Westlands issued a Notice of Preparation (NOP) of an EIR for the Pump-in Project.⁴⁶

Our organizations provided comments on the April⁴⁷ and September 2020⁴⁸ IS/ND for this project, as well as scoping comments on the NOP of an EIR in April 2021⁴⁹ and we incorporate those comments by reference. Our organizations also submitted comments on the Draft Environmental Assessment (DEA) for Groundwater Pump-ins Enabled by the U.S. Bureau of Reclamation (Reclamation) Warren Act Contract for Westlands Water District (EA-20-008, CGB-EA-2020- 032) dated August 20, 2020 and we incorporate those comments by reference as well.⁵⁰

2. Groundwater inputs into the Aqueduct can Affect Water Quality of Refuge Water Supplies

The September 2020 IS/ND acknowledged that groundwater from the Pump-in Project would comeingle with refuge water supplies: *“The Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the proposed Project, and this would occur partly during times of the year when these refuges would receive water supplies. However, the selenium levels are expected to remain well below the threshold for an adverse effect on wildlife, which is 2 parts per billion (0.002 mg/L) as measured in the water column (USBR and San Luis & Delta-Mendota Water Authority 2009 and references therein). Water introduced under the Project would be monitored and managed to ensure the quality of water does not exceed the requirements of the Water Quality Monitoring Plan, which establishes limits on the quality of water for selenium to 2 micrograms per liter...”* The September 2020 IS/ND assumed the wellhead MCL of 2 µg/L selenium established in the 2020 Water Quality Monitoring Plan (WQMP) for the SLC⁵¹ will be adhered to, without providing any data on the water quality performance of prior Westlands pump-ins. We note that almost 40% of the discharge points identified in Table 1 of the September 2020 IS/ND had at least one well sample that exceeded MCLs identified in the previous WQMPs for the constituents As, Se or TDS. This information is summarized in Appendix A to our September 30, 2020 comments on the IS/ND for this Project. We have included a copy of our September 30, 2020 comments as Attachment 4 to this letter.

⁴⁶ See: <https://wwd.ca.gov/wp-content/uploads/2021/03/notice-of-preparation.pdf>

⁴⁷ See: https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-WWD-SLC-Pump-in-2020-IS_ND_6-10-2020-Cal-Aqueduct.pdf

⁴⁸ https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-9-30-2020_WWD-SLC-Pump-in-2020-IS_ND_-Cal-Aqueduct-Corrected.pdf

⁴⁹ https://calsport.org/news/wp-content/uploads/PCL-et-al_EIR-WWD-Groundwater-Pumping-and-Conveyance-Final-Scoping-Cmts_4-10-2021.pdf

⁵⁰ Coalition comments begin at pdf pg 37 of the FEA available here: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=46945

⁵¹ The SLC WQMP for non-project water pump-ins is available beginning at pdf pg 83 of the FEA available here: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=46945

3. Selenium in Groundwater pump-ins into the California Aqueduct and Delta Mendota Canal can affect fish and wildlife beneficial uses

The water supply for Kern National Wildlife Refuge (NWR) comes from the California Aqueduct. In 2003 the U.S. Bureau of Reclamation entered into a 25-year conveyance agreement with the Buena Vista Water Storage District to convey Kern NWR CVP refuge water supplies from the California Aqueduct to the refuge. Buena Vista Water Storage District diverts water from California Aqueduct near Check 29 through a pipe into the Main Drain Canal. The Main Drain Canal moves the water north into the Goose Lake Canal which conveys the water to Kern NWR boundary (USBR 2003).

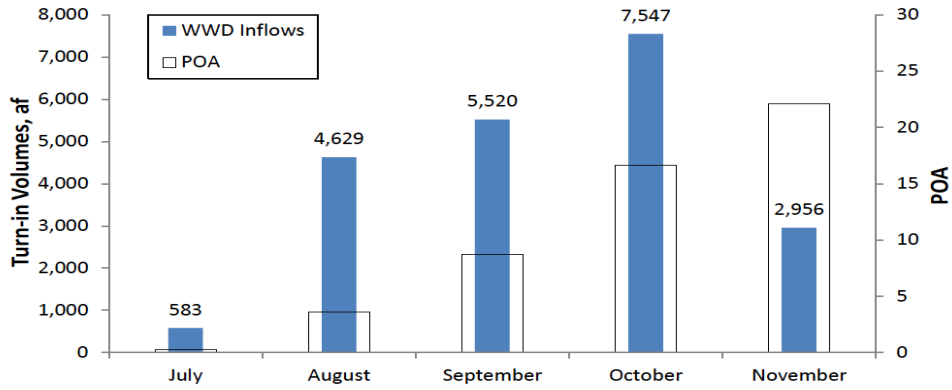
Drought cutbacks to water users south of Delta has resulted in reduced freshwater flows in the California Aqueduct. Numerous water actions such as groundwater pump-ins and exchanges into the California Aqueduct have the potential to cumulatively degrade the quality of refuge water delivered to Kern NWR.

Past data on the percent of flow in the Aqueduct (POA) comprised of Westlands groundwater pump-ins in the fall of 2014 and early 2015 indicate that the groundwater pump-ins have at times contributed 100% of the flow in the Aqueduct at Check 21 as depicted in the Figures 3-1 and 3-2 from DWR 2015⁵² and Figure 3-1 from DWR 2016⁵³ reports and copied below. Some of these time periods overlap with refuge water deliveries to Kern NWR.

⁵² See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

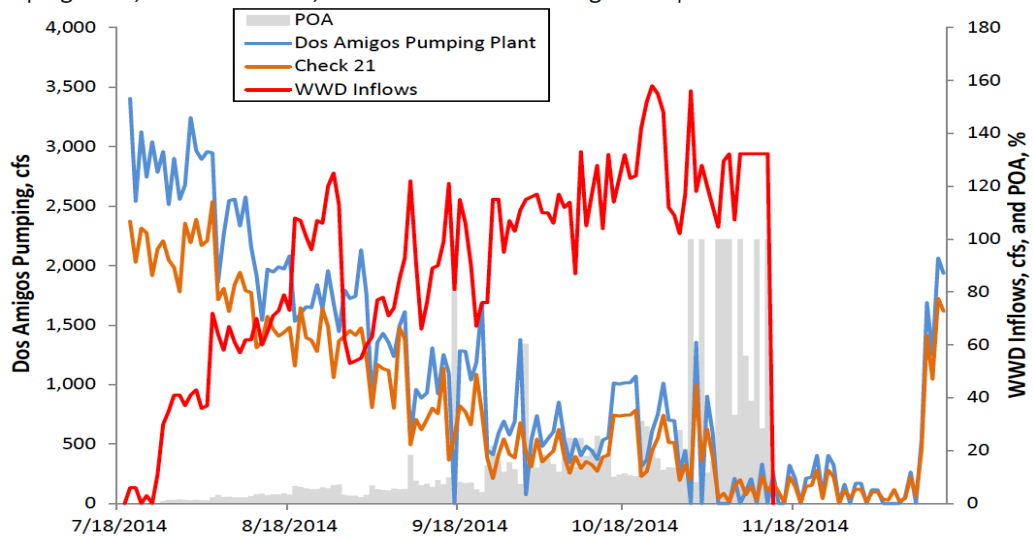
⁵³ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

Figure 3-1. Monthly Inflows to the Aqueduct from Westlands Water District and Calculated Percentage-of-Aqueduct Values



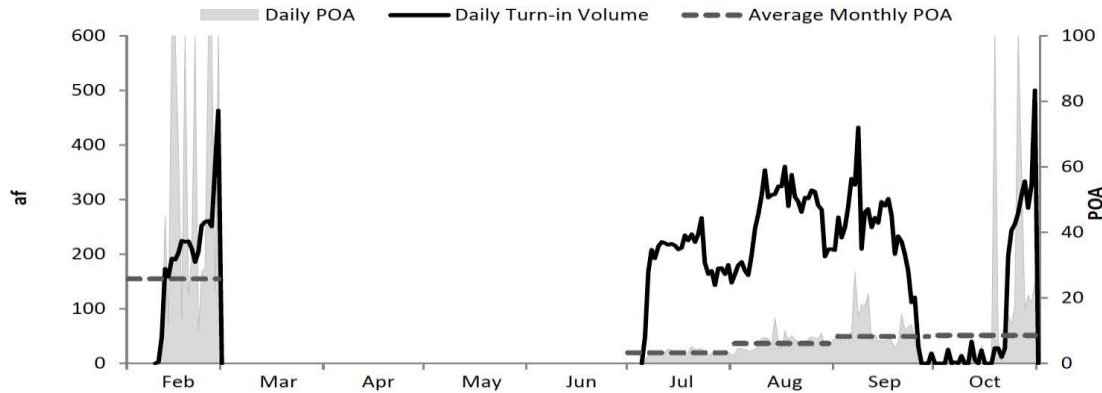
Notes: af = acre-feet, POA = percentage-of-Aqueduct, WWD = Westlands Water District

Figure 3-2. Daily Inflows to the Aqueduct from Westlands Water District, Pumping at Dos Amigos Pumping Plant, Check 21 Flows, and Calculated Percentage-of-Aqueduct Values



Notes: cfs = cubic feet per second, POA = percentage-of-Aqueduct, WWD = Westlands Water District

Figure 3-1 Daily Inflows to the Aqueduct from Westlands Water District and Calculated Percentage-of-Aqueduct Values



DAPP Pumping	18,297	66,662	110,738	150,896	175,307	190,325	127,735	70,871	31,353
Total Turn-in Volume	4,297	-	-	-	-	5,014	8,251	6,341	2,932
Average Monthly POA	26 ^a	-	-	-	-	3.3 ^a	6.1	8.2	8.6

Notes:

af = acre-feet, DAPP = Dos Amigos Pumping Plant, POA = percentage-of-Aqueduct

POAs of 100 percent during February and October represent days when Dos Amigos PP was inactive.

^aCalculations for monthly POAs begins on the first day of turn-in operations.

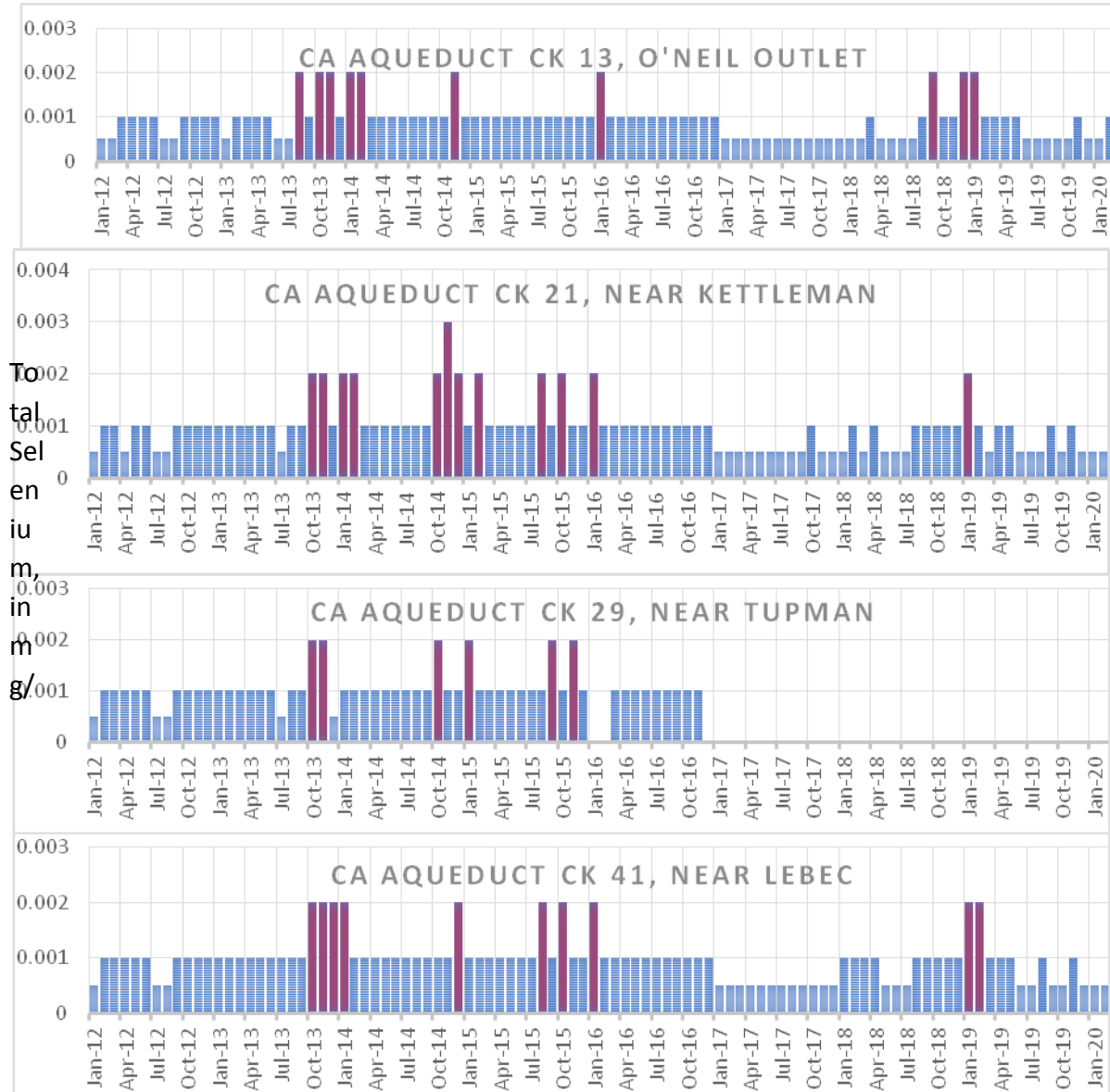
4. Monthly Monitoring of Selenium in Aqueduct Water near Kettleman City is Insufficient to Protect Downstream Fish and Wildlife Resources.

The California Department of Water Resources (DWR) conducts monthly monitoring of the California Aqueduct and has documented occurrences of elevated levels of concern for selenium at Check 21 near Kettleman City (station number KA017226), especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct.⁵⁴ As denoted in Figure 1 below, monthly water quality samples at Check 21 have exceeded the USEPA’s July 2016 Final Updated CWA section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water 12 times between January 2012 and January 2020. These proposed objectives include a lentic water quality objective of 1.5 µg/L,⁵⁵ which would be the applicable selenium objective for Kern National Wildlife Refuge and other wetlands and reservoirs that are fed by water from the California Aqueduct.

⁵⁴ Water quality data for the California Aqueduct near Kettleman City is available here by specifying Station Name Check 21: <https://wdl.water.ca.gov/waterdatalibrary/>

⁵⁵ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-lifeambient-water-quality-criterion-for-selenium-in-freshwater>

Figure 1. Total selenium concentrations in water samples from the California Aqueduct at Checks 13, 21, 29, and 41. Light-shaded bars at 0.0005 mg/L are non-detections, dark blue bars are detections at 0.001 mg/L, and red bars are samples that equaled or exceeded 0.002 mg/L, and exceeded the lentic water quality objective for selenium of 0.0015 mg/L (1.5 µg/L).



Sample Date, mo-yr

Further, the once-a-month water quality sampling is insufficient to establish a monthly mean water quality calculation, to capture contaminant spikes that accumulate downstream, or to assess potential bioaccumulation in the food chain.

As part of EPA’s National Selenium Criterion revision, a numerical value for the lentic and lotic water criterion elements averaging period, or duration, is specified as a 30-day average, because the presence of selenium in water is the initial step in the process of bioaccumulation from the water column to fish tissue.⁵⁶ EPA publication “Technical Support Document for Water Quality-based Toxics Control”⁵⁷ @ page D-2 states that a “4-day averaging period is recommended for application of the CCC [criteria continuous concentration] in aquatic-life criteria for both individual pollutants and whole effluents. This document at page D-3 also notes that the “averaging period should be substantially less than the lengths of the tests” on which it is based.⁵⁸

5. DWR no Longer Collects Water Quality Data in the California Aqueduct at Check 29

Refuge water delivered to the Kern National Wildlife Refuge is diverted from the California Aqueduct in Kern County near Check 29, downstream of where groundwater is pumped into the Aqueduct. Inexplicably, DWR stopped collecting water quality data from Check 29 after November 2016.⁵⁹

We recommend that the Regional Board require daily water quality monitoring for selenium in the Aqueduct at Check 21 and Check 29 when groundwater is being pumped into the Aqueduct to protect downstream fish and wildlife beneficial uses. Further this water quality data should be applied as a 4-day averaging period for implementing aquatic life criteria for selenium.

Conclusions

Thank you for the opportunity to provide comments on the Triennial Review of the Water Quality Control Plans for Sacramento River and San Joaquin River Basins and the Tulare Lake Basin (Sac/San Joaquin and Tulare Basin Plans). A summary of our recommendations is as follows:

- A. Revise chronic selenium water quality objectives to protect fish and wildlife beneficial uses,
- B. Rescind acute selenium objectives,
- C. Designate RARE beneficial Uses for Waterbodies in the San Joaquin Basin,

⁵⁶ See @ page 31: <https://downloads.regulations.gov/EPA-HQ-OW-2004-0019-0437/content.pdf>

⁵⁷ Available at: https://static.azdeq.gov/legal/subs_techdoc_wq_toxics_control.pdf

⁵⁸ *Ibid.*

⁵⁹ Selenium & Arsenic concentrations in the California Aqueduct at Check 29, downstream of where groundwater has been pumped into the canal increased markedly in 2015 and in the case of Arsenic were approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L.

See: http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

- D. Designate a WARM beneficial use for the California Aqueduct in the San Joaquin Basin,
- E. Designate RARE, WARM, and WILD beneficial uses for the California Aqueduct in the Tulare Basin,
- F. Require at daily water quality monitoring of the California Aqueduct at Checks 21 and 29 when groundwater pump-ins into the Aqueduct are occurring.

5. Stakeholder Support for Suggested Revisions to the Basin Plan: If applicable, please explain any widespread stakeholder support for the suggested revisions. Also, if available, please list supportive stakeholder(s) with phone or email contact(s):



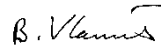
Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



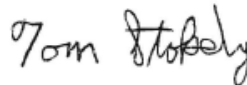
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](#)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



Gerald Neuburger
Representative
Delta Fly Fishers
gneuburg@gmail.com



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



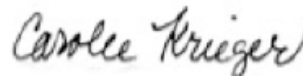
Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com

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List of Attachments

Attachment 1: Gerald Johns. 1989. Executive Summary: Regulation of Agricultural Drainage to the San Joaquin River. Presentation Proceedings of the 4th Selenium Symposium (published by The Bay Institute in 1989), pages 202-205.

Attachment 2: USFWS. Oct 28, 2016. Comments on SF Bay and Delta Selenium Criteria (Docket ID No. EPA-HQ-OW-2015-0392). Sacramento, CA, 10 pp.

Attachment 3: Johnson, R.C., R. Stewart, K. Limburg, R. Huang, D. Cocherell and F. Feyrer. Aug 26, 2018. Unraveling sources and pathways of elevated selenium exposure over the lifetime of an imperiled migratory fish. Final Report to USEPA, Region 9, San Francisco. 31 pp.

Attachment 4: Coalition Comments on the September 2020 Draft Initial Study/Negative Declaration for Westlands Water District Warren Act Contract for Groundwater Pump-Ins and Conveyance in the San Luis Canal. September 30, 2020. Sacramento, CA. 33 pp.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
San Francisco Bay-Delta Fish and Wildlife Office
U.S. Fish and Wildlife Service
650 Capitol Mall, Suite 8-300
Sacramento, CA 95814

OCT 28 2016

Erica Fleisig
Office of Water
Standards and Health Protection Division (4305T)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Ms. Fleisig:

The U.S. Fish and Wildlife Service (Service) is pleased to provide comments on the U.S. Environmental Protection Agency (EPA) proposed selenium criteria for San Francisco Bay and Delta (Docket ID No. EPA-HQ-OW-2015-0392). The Service has been working with EPA on selenium criteria for California since 2000 after completing Endangered Species Act section 7 consultation on the California Toxics Rule (CTR). In 2008, our Sacramento Fish and Wildlife Office provided a report on species at risk to selenium in the estuary, and we provided a follow-up report evaluating sturgeon sensitivity to selenium in 2012.

We compliment the extraordinary effort your Region 9 staff has made in developing these criteria—it was not an easy task. The EPA has proposed a clam (*Corbula*) tissue concentration of 17 $\mu\text{g/g}$ and a dissolved selenium water concentration of 0.2 $\mu\text{g/l}$. We are focusing on three key issues regarding these proposed criteria: the diet of the white sturgeon, the weighted trophic transfer factor for sturgeon, and the partitioning coefficients (K_{ds}). Our comments (attached) show that a protective clam tissue criterion is closer to 8.6 $\mu\text{g/g}$ and that a protective dissolved selenium water concentration is a value closer to 0.1 $\mu\text{g/l}$.

We look forward to assisting EPA in fulfilling your obligations under the CTR 2000 biological opinion, and we anticipate EPA will be providing a biological evaluation and initiating Endangered Species Act section 7 consultation on the proposed selenium criteria in the near future. If you have questions regarding these comments please contact Dan Welsh at (916) 930-5639 (daniel_welsh@fws.gov) or Thomas Maurer in our Sacramento Fish and Wildlife Office at 916-414-6594 (thomas_maurer@fws.gov).

Sincerely,

Kaylee Allen
Field Supervisor

Attachment: U.S. Fish and Wildlife Service Comments on EPAs Proposed Selenium Criteria for San Francisco Bay and Delta (Docket ID No. EPA-HQ-OW-2015-0392), October 2016

CC:

Diane E. Fleck, P.E., Esq.
Water Division (WTR-2-1)
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, CA 94105
Fleck.Diane@EPA.gov

Joseph Dillon
Water Quality Specialist
NMFS West Coast Region - CA Coastal Area Office
777 Sonoma Avenue, Ste 325
Santa Rosa, CA 95404
joseph.j.dillon@noaa.gov

U.S. Fish and Wildlife Service Comments on EPA's Proposed Selenium Criteria for
San Francisco Bay and Delta
(Docket ID No. EPA-HQ-OW-2015-0392)
October 2016

Main Criteria Document

- Please provide a clear definition of the area where the proposed criteria will be applied in the San Francisco Bay-Delta closer to the front of the proposed rule document rather than at the end.
- p. 20-21: More recent data on water concentrations since 2012 should be available to summarize current selenium conditions in the San Joaquin River, Sacramento River, the Delta and areas of San Francisco Bay. This would be especially important for the San Joaquin River as selenium loads have declined significantly since 2012.
- p. 22: The paragraph describing the selenium loads in the San Joaquin River due to the Grassland Bypass Project should be updated with more recent data to properly characterize current selenium loading. Selenium loading from the Grassland Bypass Project has declined significantly since 2012 and is now below 500 pounds per year. In 2014 selenium loading was 458 pounds and in 2015 it was 220 pounds (see <http://www.sfei.org/projects/grassland-bypass-project#sthash.VBuggDeI.dpbs>).

Technical Support Document

General

A map of the transect sites in the estuary where water quality data were collected for determining the K_{ds} would be useful either in the TSD or Appendix H.

Sturgeon Diet and Weighted Sturgeon TTF

The Technical Support Document (TSD), on p. 24, states that “FWS estimated the diet of white sturgeon to be approximately 40 percent clam-based...” This percent number is inaccurate. First, neither USFWS (2008) nor USFWS (2012) made estimates of percent clam diets for white sturgeon. USFWS (2012) included no data, discussion, or estimate of the composition of the diet of either species of sturgeon; it only mentioned *Corbula* (*Potamocorbula amurensis*) as diet. USFWS (2008) only summarized the diets of species at risk to selenium from literature available at the time but did not attempt to “estimate” the clam diet of sturgeon.

Second, the 40 percent value appears to come from Table 2 (p. 7) in our report USFWS (2008). Table 2 summarizes worst case clam diets found in the literature for the various species at risk from selenium exposure. Unfortunately, this value is a typographical error because the corresponding footnote (#11) cites Table 10 (on p. 57 of the same report) where the cited value (fall, percent by volume) is 77 percent (the worst case). That value (77) is not a USFWS estimate, but rather, a notation of the highest of several different values (percent clams in diet by volume) for different seasons at two different locations in the 1960s, published by McKechnie and Fenner (1971).

More importantly, the data in those tables was the best available to the authors at the time of that report (USFWS, 2008), however, they noted (p. 56) that those data were outdated by the subsequent invasion of the Bay by *Corbula*. More recent studies show that what was once a conservative worst-case scenario of 77 percent clam-based diet is now the norm and that a worst-case *Corbula* diet is now >90 percent. At times and in places, the bottom of the North Bay has high densities, greater than 10,000 *Corbula* per square meter (Carlton et al., 1990). More recently, stomachs of white sturgeon have been found to be packed with clams (Fig.8 in Linares-Casenave et al., 2014). The best estimates of the current sturgeon diet are derived from the work by Zeug et al. (2014); cited and discussed in your TSD. Zeug et al. (2014) reported that clams (96 percent of them *Corbula*) constituted 93 percent (by volume) of the diets of white sturgeon from 117 to 168 cm in total length sampled from September 2001 through September 2003. Using a stable isotope mixing model, they estimated with a 95 percent probability that the overbite clam (*Corbula*) contributed more than 70.3 percent but less than 83 percent to sturgeon biomass. The stable isotope method accounts for *Corbula* actually assimilated in the diet and what has been eaten over a longer period of time than the gut content method. Based on Zeug et al. (2014) Table 2 (75th percentile probability), a more representative diet for the white sturgeon is 80 percent *Corbula*, 17 percent fish (primarily starry flounder), and 3 percent annelids/crustaceans. Based on this new information, rather than the weighted $TTF_{(prey)}$ of 7.6 as calculated on p. 65 of the TSD, a more appropriate weighted $TTF_{(prey)}$ for the sturgeon should be 13.8 ($[0.8 \times 17] + [0.17 \times 1.1] + [0.03 \times 1.3]$). If other calculations are unchanged, this correction brings the maximum allowable *Corbula* tissue concentration (to protect sturgeon) from 17 $\mu\text{g/g dw}$ to about 8.6 $\mu\text{g/g dw}$ which is much lower than the proposed *Corbula* tissue criterion of 15 $\mu\text{g/g dw}$ to protect all clam eating species (See p.75 of the TSD). This will also impact the calculation of a protective dissolved selenium water concentration resulting in a value closer to 0.1 $\mu\text{g/l}$.

Finally, starry flounder (*Platichthys stellatus*) are known to eat mollusks and in the San Francisco Bay they are a key consumer of *Corbula* (Lovvorn et al. 2013). Starry flounder in the area where high densities of *Corbula* are present likely have elevated selenium levels, suggesting that the weighted sturgeon TTF may be even higher than 13.8 (i.e. the $TTF_{(fish)}$ of 1.1 in the equation above may be higher). Presser and Luoma (2010) note a TTF for starry flounder of 1.6. If the diet of starry flounder is just 10 percent *Corbula* ($TTF=17$) and 80 percent annelids/crustaceans ($TTF=1.3$) then a weighted TTF for the flounder would be 2.7 ($[0.1 \times 17] + [0.8 \times 1.3]$). Either of these starry flounder TTF values used in the equation above pushes the sturgeon weighted TTF above 14. This adds additional support that an allowable *Corbula* tissue concentration (to protect sturgeon) is closer to 8.6 $\mu\text{g/g dw}$ and a protective dissolved selenium water concentration is a value closer to 0.1 $\mu\text{g/l}$.

Partitioning Coefficients (K_d s)

The final partitioning coefficients (K_d) used for the modeling effort should be higher than the 3,966 used in the TSD. Figure 1 charts selenium in *Corbula* (Kleckner et al. 2010) and water (dissolved; CEDEN) from matched data at various sites in Suisun Bay, Carquinez Strait, and East San Pablo Bay from 1995 to 2010 (Table 1). These points represent a larger data set from the same area and across more years and variety of seasons and water year types than the four focused seaward transect data sets used in the TSD to determine K_d s. Also charted for comparison are the constants for the *Corbula* TTF of 17 and several K_d s of interest (using $C_{\text{water}} = [C_{\text{clam}} * 1000] / [K_d * 17]$). The K_d of 3,966 is used in the TSD to model the final criteria and represents the average of four 75th percentiles from sites around Carquinez Strait. The 75th percentiles were used because the data set did not represent below normal and dry years when K_d s tend to be much higher due to longer water residence times. The line for the K_d of 3,966 is near the central tendency of the charted data but is slightly lower. Two of the four transects have limited data points (two and three) so calculating 75th percentiles for those may not be appropriate. It may be more appropriate to take the 75th percentile of the entire data set rather than the average of each transect 75th percentile. That K_d , shown on the chart, is 5,553. The transect for June 1998, which was an unusually wetter than normal year, has only two values that happen to be the two lowest values in the entire data set. This drives the average of the four 75th percentiles lower. The critical exposure period for white sturgeon is the months before spawning, i.e., the fall and winter months when residency times are longest and K_d s highest. Thus, a K_d representative of fall and winter is more appropriate. Removing the two values of the 1998 transect gives an average 75th percentile K_d for the remaining transects of 4,816. The K_d of 4,816 also appears to be much closer to the central tendency of the larger data set that includes time periods with K_d s well above 10,000.

Another way to look at the larger data set is to calculate K_d s for each matched clam and water concentration using the formula $K_d = (C_{\text{clam}} * 1000) / (C_{\text{water}} * 17)$. Table 1 shows that those K_d s range from 1,211-16,176. The average K_d is 5,298 while the median is 4,390. This and the analysis above suggest that a more appropriate K_d would be between 4,390 and 5,553.

Reviewing the data in this way also supports the *Corbula* TTF of 17 as any value lower than 17 will push the line below the central tendency of the data. This is shown in Figure 1 by using the K_d of 3,966 and a TTF of 10.

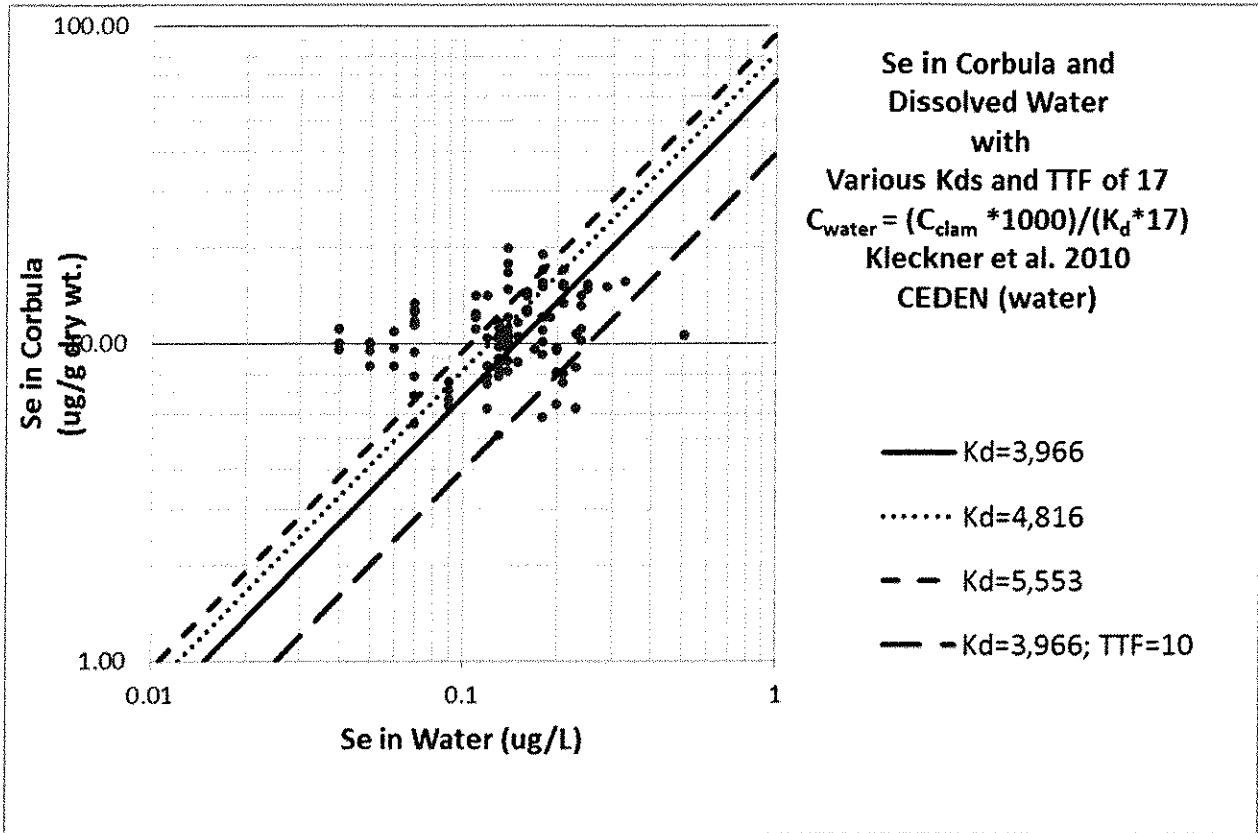


Figure 1. A comparison of the *Corbula* trophic transfer factor of 17 and several partitioning coefficients with the relationship of matched *Corbula* and dissolved selenium concentrations from the North San Francisco Bay area (Table 1). $K_d=3,966$ is the average of the 75th percentiles from four sampling transects as used in the EPA Technical Support Document; $K_d=4,816$ is the average of three 75th percentile less the 1998 data; and $K_d=5,553$ is the 75th percentile of all focused seaward matched data used in TSD.

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Table 1. Matched water and *Corbula* (*Potamocorbula amurensis*) selenium data from East San Pablo Bay, Carquinez Strait, and Suisun Bay with calculated K_d s. *Corbula* data are those from Kleckner et al. 2010 with the best matched water data from the California Environmental Data Exchange Network (CEDEN; <http://ceden.waterboards.ca.gov/AdvancedQueryTool>).

Date	Water ug/L (dissolved)	Tissue ug/g (dry wt.)	Location	Calculated K_d s $K_d =$ $(C_{clam} * 1000) / (C_{water} * 17)$
6-Jan-10	0.14	10.73	Suisun Bay 4.1	4508
2-Dec-09	0.14	9.92	Suisun Bay 4.1	4168
17-Nov-09	0.14	9.37	Suisun Bay 4.1	3937
17-Dec-08	0.14	10.97	Suisun Bay 4.1	4609
19-Nov-08	0.14	8.97	Suisun Bay 4.1	3769
16-Oct-08	0.14	8.41	Suisun Bay 4.1	3534
17-Sep-08	0.14	10.28	Suisun Bay 4.1	4319
12-Dec-07	0.04	10.79	Suisun Bay 4.1	15868
15-Nov-07	0.04	9.34	Suisun Bay 4.1	13735
24-Oct-07	0.04	9.84	Suisun Bay 4.1	14471
7-Feb-07	0.09	7.42	Suisun Bay 4.1	4850
10-Jan-07	0.09	7.02	Suisun Bay 4.1	4588
13-Dec-06	0.09	6.42	Suisun Bay 4.1	4196
15-Nov-06	0.09	6.85	Suisun Bay 4.1	4477
11-Jan-06	0.12	6.4	Suisun Bay 4.1	3137
8-Dec-05	0.12	8.29	Suisun Bay 4.1	4064
9-Nov-05	0.12	7.86	Suisun Bay 4.1	3853
14-Dec-04	0.2	8.32	Suisun Bay 4.1	2447
4-Nov-04	0.2	6.65	Suisun Bay 4.1	1956
13-Jan-04	0.07	6.9	Suisun Bay 4.1	5798
17-Dec-03	0.07	8.32	Suisun Bay 4.1	6992
19-Nov-03	0.07	9.25	Suisun Bay 4.1	7773
18-Nov-03	0.07	5.55	Suisun Bay 415.1	4664
8-Jan-03	0.13	8.55	Suisun Bay 4.1	3869
11-Dec-02	0.13	11.07	Suisun Bay 4.1	5009
10-Dec-02	0.13	7.98	Suisun Bay 415.1	3611
14-Nov-02	0.13	10.85	Suisun Bay 4.1	4910
13-Nov-02	0.13	8.61	Suisun Bay 415.1	3896
9-Oct-02	0.13	9.79	Suisun Bay 4.1	4430
8-Oct-02	0.13	8.78	Suisun Bay 415.1	3973
18-Dec-01	0.11	11.98	Suisun Bay 415.1	6406
27-Nov-01	0.11	14.64	Suisun Bay 415.1	7829
16-Oct-01	0.11	10.66	Suisun Bay 415.1	5701
18-Jul-01	0.14	9.31	Suisun Bay 415.1	3912
19-Jun-01	0.14	11.15	Suisun Bay 415.1	4685

Date	Water ug/L (dissolved)	Tissue ug/g (dry wt.)	Location	Calculated K_{ds} $K_d =$ $(C_{clam} * 1000) / (C_{water} * 17)$
22-May-01	0.14	9.91	Suisun Bay 415.1	4164
24-Apr-01	0.14	9.46	Suisun Bay 415.1	3975
12-Dec-00	0.06	8.43	Suisun Bay 415.1	8265
14-Dec-99	0.07	13.14	Suisun Bay 411.1	11042
10-Nov-99	0.07	13.18	Suisun Bay 6.1	11076
9-Nov-99	0.07	11.14	Suisun Bay 411.1	9361
20-Oct-99	0.07	13.09	Suisun Bay 6.1	11000
19-Oct-99	0.07	12.38	Suisun Bay 411.1	10403
15-Sep-99	0.05	9.39	Suisun Bay 6.1	11047
14-Sep-99	0.05	9.06	Suisun Bay 411.1	10659
18-Aug-99	0.05	10.19	Suisun Bay 6.1	11988
17-Aug-99	0.05	10.51	Suisun Bay 411.1	12365
7-Jul-99	0.06	10.8	Suisun Bay 6.1	10588
6-Jul-99	0.06	9.01	Suisun Bay 411.1	8833
12-Oct-98	0.11	9.46	Suisun Bay 6.1	5059
16-Jun-98	0.13	5.5	Suisun Bay 6.1	2489
5-Nov-97	0.12	14	Suisun Bay 6.1	6863
17-Oct-96	0.14	13.84	Suisun Bay 6.1	5815
10-Nov-99	0.24	11.09	E San Pablo Bay 12.5	2718
20-Oct-99	0.24	9.85	E San Pablo Bay 12.5	2414
20-Oct-99	0.24	10.48	E San Pablo Bay 12.5	2569
12-Oct-98	0.17	9.71	E San Pablo Bay 12.5	3360
2-Sep-98	0.51	10.97	E San Pablo Bay 12.5	1265
16-Jun-98	0.18	6.29	E San Pablo Bay 12.5	2056
5-Nov-97	0.29	16.09	E San Pablo Bay 12.5	3264
18-Dec-96	0.15	10.85	E San Pablo Bay 12.5	4255
17-Oct-96	0.15	9.58	E San Pablo Bay 12.5	3757
17-Sep-96	0.21	8.1	E San Pablo Bay 12.5	2269
14-Aug-96	0.21	8.71	E San Pablo Bay 12.5	2440
18-Jul-96	0.2	10.21	E San Pablo Bay 12.5	3003

Date	Water ug/L (dissolved)	Tissue ug/g (dry wt.)	Location	Calculated K_{ds} $K_d =$ $(C_{clam} * 1000) / (C_{water} * 17)$
13-Jun-96	0.18	11.11	E San Pablo Bay 12.5	3631
18-Dec-01	0.21	16.75	Carquinez Strait 8.1	4692
27-Nov-01	0.21	14.68	Carquinez Strait 8.1	4112
16-Oct-01	0.21	13.34	Carquinez Strait 8.1	3737
18-Jul-01	0.18	12.88	Carquinez Strait 8.1	4209
19-Jun-01	0.18	11.01	Carquinez Strait 8.1	3598
22-May-01	0.18	9.74	Carquinez Strait 8.1	3183
24-Apr-01	0.18	14.28	Carquinez Strait 8.1	4667
13-Dec-00	0.16	13.07	Carquinez Strait 8.1	4805
8-Nov-00	0.16	11.76	Carquinez Strait 8.1	4324
11-Oct-00	0.16	12.46	Carquinez Strait 8.1	4581
19-Jul-00	0.12	10.02	Carquinez Strait 8.1	4912
14-Jun-00	0.12	8.35	Carquinez Strait 8.1	4093
9-Nov-99	0.25	14.38	Carquinez Strait 8.1	3384
20-Oct-99	0.25	16.18	Carquinez Strait 8.1	3807
7-Jul-99	0.19	11.65	Carquinez Strait 8.1	3607
11-Nov-98	0.24	14.74	Carquinez Strait 8.1	3613
12-Oct-98	0.24	12.57	Carquinez Strait 8.1	3081
2-Sep-98	0.33	15.45	Carquinez Strait 8.1	2754
5-Nov-97	0.21	17.19	Carquinez Strait 8.1	4815
6-Aug-97	0.18	12.12	Carquinez Strait 8.1	3961
16-Jul-97	0.2	10.99	Carquinez Strait 8.1	3232
11-Jun-97	0.23	9.8	Carquinez Strait 8.1	2506
15-May-97	0.23	8.59	Carquinez Strait 8.1	2197
23-Apr-97	0.23	13.39	Carquinez Strait 8.1	3425
18-Dec-96	0.14	15.36	Carquinez Strait 8.1	6454
1-Nov-96	0.14	18.76	Carquinez Strait 8.1	7882
17-Oct-96	0.14	19.71	Carquinez Strait 8.1	8282
19-Sep-96	0.16	14.8	Carquinez Strait 8.1	5441
14-Aug-96	0.16	13.16	Carquinez Strait 8.1	4838
18-Jul-96	0.15	12.32	Carquinez Strait 8.1	4831
13-Jun-96	0.13	12.57	Carquinez Strait 8.1	5688
2-May-96	0.13	12.89	Carquinez Strait 8.1	5833
8-Feb-96	0.18	20.51	Carquinez Strait 8.1	6703
12-Jan-96	0.18	16.42	Carquinez Strait 8.1	5366
15-Dec-95	0.18	17.53	Carquinez Strait 8.1	5729

Selenium and Agricultural Drainage:

Implications for San Francisco Bay and the California Environment


PROCEEDINGS OF
THE FOURTH SELENIUM SYMPOSIUM

MARCH 21, 1987
BERKELEY, CALIFORNIA

ALICE Q. HOWARD, EDITOR-IN-CHIEF

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University of California at Berkeley

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Adrienne Morgan

In addition to that of the speakers, we gratefully acknowledge the help of Arnold Schultz and the Department of Conservation and Resource Studies of the University of California, Berkeley.

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—W. T. Davoren

Executive Director

The Bay Institute of San Francisco

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Cover photo of a mallard embryo showing severe abnormalities of the beak, legs, and head, typical of the effects of selenium on waterfowl and other aquatic birds. This embryo was found at an evaporation pond in the Tulare Basin. Photograph by S. W. Woo, University of California, Davis, courtesy of the U.S. Fish and Wildlife Service.

*The Bay Institute of San Francisco
10 Liberty Ship Way, #120
Sausalito, California 94965
(415) 331-2303*



GERALD E. JOHNS
Division of Water Rights
California State Water
Resources Control Board
P.O. Box 100
Sacramento, California 95801

Mr. Johns is assistant division chief and program manager for agricultural drainage for the State Water Resources Control Board. He received his B.S. in zoology in 1972 and his M.S. in aquatic ecology in 1973, both from the University of California, Davis. He has been with the State Board since 1973, working on both water-quality and water-rights issues. He helped develop the present water quality-water rights standards for the Sacramento-San Joaquin Delta contained in Board Water Decision 1485, adopted in 1978. He has served as program manager of the Board's Bay-Delta Program since 1980. He has also served as chairman of the ad hoc State and Regional Board Technical Committee for the San Joaquin River Basin, established under State Board Order WQ 85-1.

EXECUTIVE SUMMARY: REGULATION OF AGRICULTURAL DRAINAGE TO THE SAN JOAQUIN RIVER

IN FEBRUARY 1985 the State Water Resources Control Board (State Board) adopted Order WQ 85-1.* This order addressed the waterfowl problems at Kesterson Reservoir from selenium-laden subsurface agricultural drain

*Editor's note: At the time of this conference, the State Water Resources Control Board (continued)

REGULATION OF AGRICULTURAL DRAINAGE TO SAN JOAQUIN RIVER / JOHNS

age water discharged into this facility. In this order the State Board also expressed concerns related to the discharge of agricultural drainage water into the San Joaquin River (River). The State Board directed the formation of the San Joaquin River Basin Technical Committee made up of State and Central Valley Regional Board staff. The Technical Committee was to investigate water-quality concerns in the San Joaquin River Basin (Basin) related to agricultural drainage and to report back to the State Board on (1) proposed water-quality objectives for the San Joaquin River Basin, (2) proposed effluent limitations for agricultural drainage discharges in the Basin to achieve these objectives, and (3) a proposal to regulate these discharges. This report and its appendices contain the results of the Technical Committee's efforts.

Throughout this effort the Technical Committee has received valuable guidance from six advisory groups. They are: (1) Grassland Water Task Force, (2) South Delta Water Agency, (3) U.S. Environmental Protection Agency, (4) Interagency San Joaquin Valley Drainage Program, (5) California Department of Water Resources, and (6) Environmental Defense Fund and Natural Resources Defense Council. These groups have provided extremely valuable information and guidance to the Technical Committee. While these groups do not necessarily endorse the conclusions or recommendations of the Technical Committee, their contributions have been essential to this effort.

PURPOSE OF REPORT

This Technical Committee Report is intended to be used by the Central Valley Regional Water Quality Control Board (Regional Board),

Board had, by a unanimous vote, just adopted an order directing the Bureau of Reclamation to proceed with the cleanup of Kesterson utilizing on-site fill and cover, thereby rejecting the "wet-flex" methodology proposed by the Bureau. The process was intended to complete cleanup by about August 1988. The Board's original Kesterson order had directed formation of a Technical Committee to examine and make recommendations for changes to objectives for water quality in the Basin that would protect the beneficial uses of water. Although the report was supposed to be available by August 1986, there were many problems in meeting this goal, as Mr. Johns discussed in his remarks at this conference. Instead of reproducing those remarks here, we are instead presenting an adaptation of the Executive Summary of the report itself, which also reviews these problems and presents the conclusions of the Committee, which were more tentatively suggested by Mr. Johns at the conference. The report itself, supported by ten appendices, was issued in August 1987 and may be consulted upon application to the State Water Resources Control Board, P.O. Box 2000, Sacramento, CA 95810.

along with other information, in its review of the San Joaquin River Basin Water Quality Control Plan (Basin Plan).

REGIONAL BOARD BASIN PLAN AMENDMENT PROCESS

The Technical Committee's report, along with other information, will be used by the Regional Board staff in developing draft Basin Plan amendments. The Regional Board will hold public hearings on the draft Basin Plan amendments. According to the schedule set forth in Order WQ 85-1, the Regional Board is to complete its review of the Basin Plan within six months of approval of the Technical Committee's report by the State Board. However, due to the complexity of the task before the Regional Board, it will probably take longer than six months for the Regional Board to make these revisions.

HISTORICAL WATER QUALITY

The San Joaquin River Basin is shown in Figure 1. Water quality in the San Joaquin River has degraded greatly since the late 1940s. Salt concentrations in the lower reaches of the River near Vernalis have about doubled since that time due to two primary factors. First, reservoir development on the east-side tributaries of the San Joaquin River and its upper reaches has decreased river flow, causing salt concentrations to increase. Second, since the 1960s subsurface agricultural drainage from the west side of the Basin has been discharged into the system in larger and larger quantities, increasing concentrations of salts and other constituents found in agricultural drainage. Also, changes in water management operations by entities in the Drainage Study Area (DSA) in 1983 and 1985 have greatly increased the selenium concentrations in the San Joaquin River.

CONSTITUENTS OF CONCERN

The Technical Committee initially identified 26 constituents of concern in subsurface agricultural drainage water. This list was then narrowed to eleven constituents for which water-quality criteria are discussed in the report. **Water-quality objectives are recommended for all 11 constituents.** From this group, four constituents were identified as being of primary concern. These constituents are: selenium, salts, boron, and molybdenum. Special attention is given to selenium because of possible public-health concerns related to the ingestion by humans of fish or waterfowl from the Basin with elevated levels of selenium in their edible tissues.

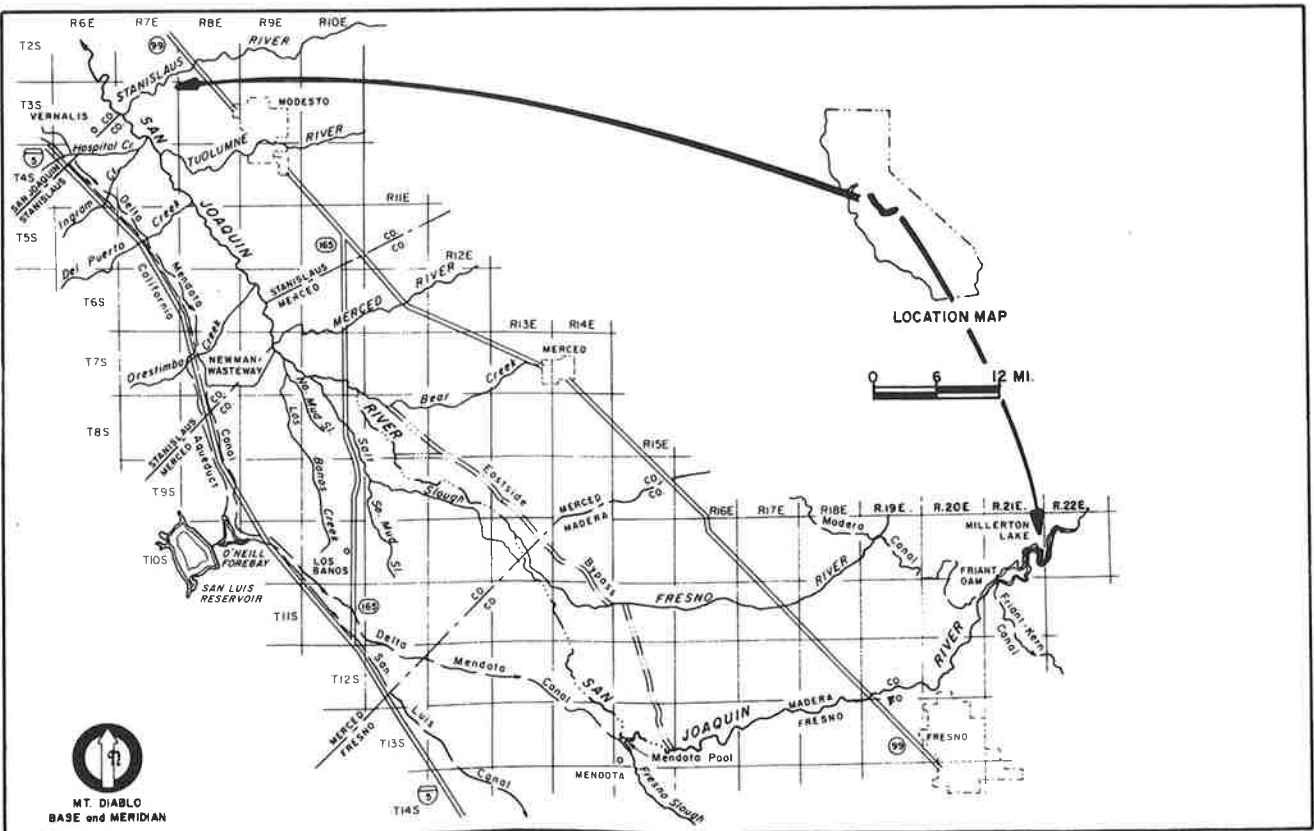


FIGURE 1. San Joaquin River Basin.

SOURCES

The major source of selenium (81 percent), boron (69 percent), salt (46 percent), and molybdenum (44 percent) in the San Joaquin River is the agricultural area in the drainage basin of Mud and Salt Sloughs that is upstream of the juncture of the San Joaquin River and the Merced River (Hills Ferry). In 1985, the year for which the loading percentages above are calculated, this area supplied only 12 percent of the flow in the San Joaquin River. Control measures focus on a Drainage Study Area of 94,480 acres, of which about half has subsurface (or "tile") drains (see Figure 2).

BENEFICIAL USES

The Technical Committee has reviewed and updated beneficial uses in the Basin by stream segment. They are discussed in the report and summarized in Figure 3.

WATER QUALITY OBJECTIVES FOR SELENIUM AND OTHER CONSTITUENTS

Based on today's knowledge of the public-health effects of selenium and the adverse effects that selenium can have on fish and waterfowl, an appropriate concentration of selenium in the San Joaquin River at Hills Ferry appears to be 2 ppb (parts per billion). This value is based on data on bioaccumulation of selenium in aquatic ecosystems from throughout the United States. It also generally reflects the selenium levels experienced at this location in the mid-1970s, important because 1975 is a benchmark used for compliance with the antidegradation policy of the Federal Clean Water Act.

The limited available data on bioaccumulation are principally from habitat in water impounded in lakes throughout the country. Water in the San Joaquin River Basin is impounded to maintain important waterfowl habitat in the grasslands area and in some areas of the San Joaquin River below its juncture with the Merced River (Hills Ferry). Data collected recently from the flowing waters in the San Joaquin River Basin suggest a lower bioaccumulation factor for selenium compared with data from other areas of the country. The reasons are unclear. It may be that bioaccumulation of selenium is greater in impounded waters than in the flowing waters of small rivers and sloughs. However, it might also be that high levels of other chemical constituents in the waters of the San Joaquin River Basin inhibit selenium uptake. These differences are the subject of several on-going and proposed studies.

Because of scientific uncertainties associated with the applicability

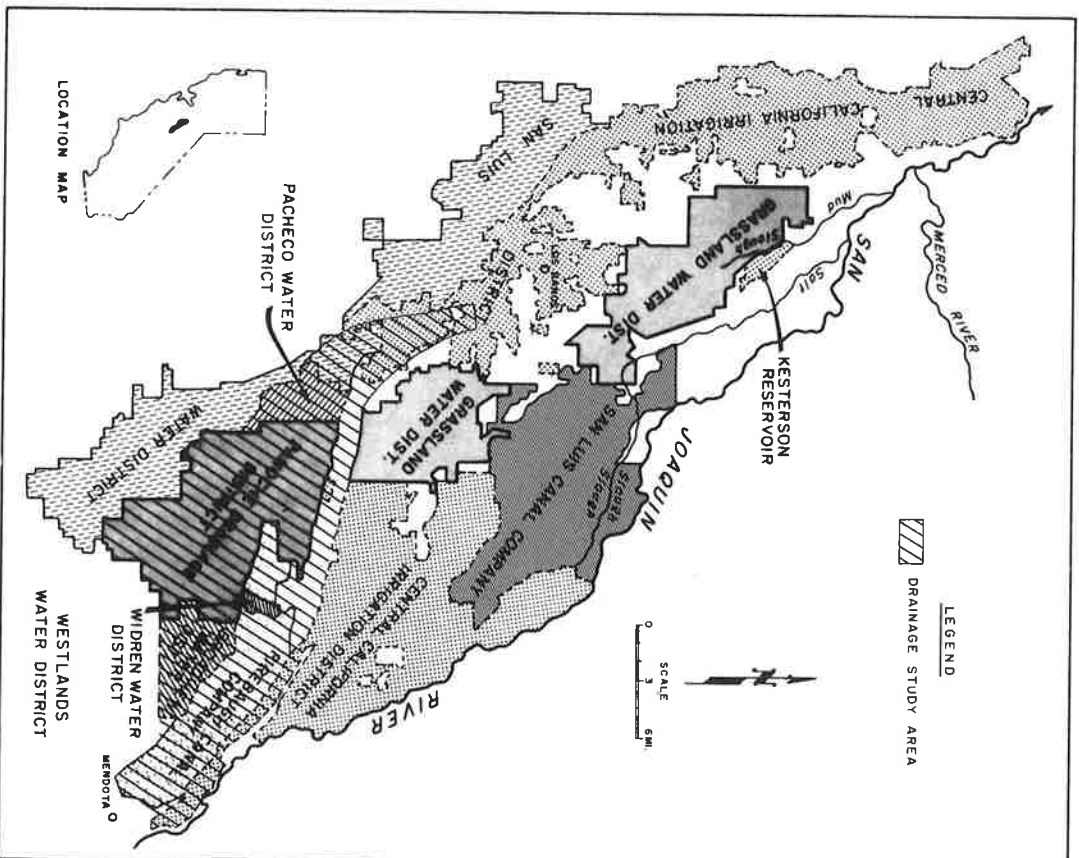


FIGURE 2. Drainage study area.

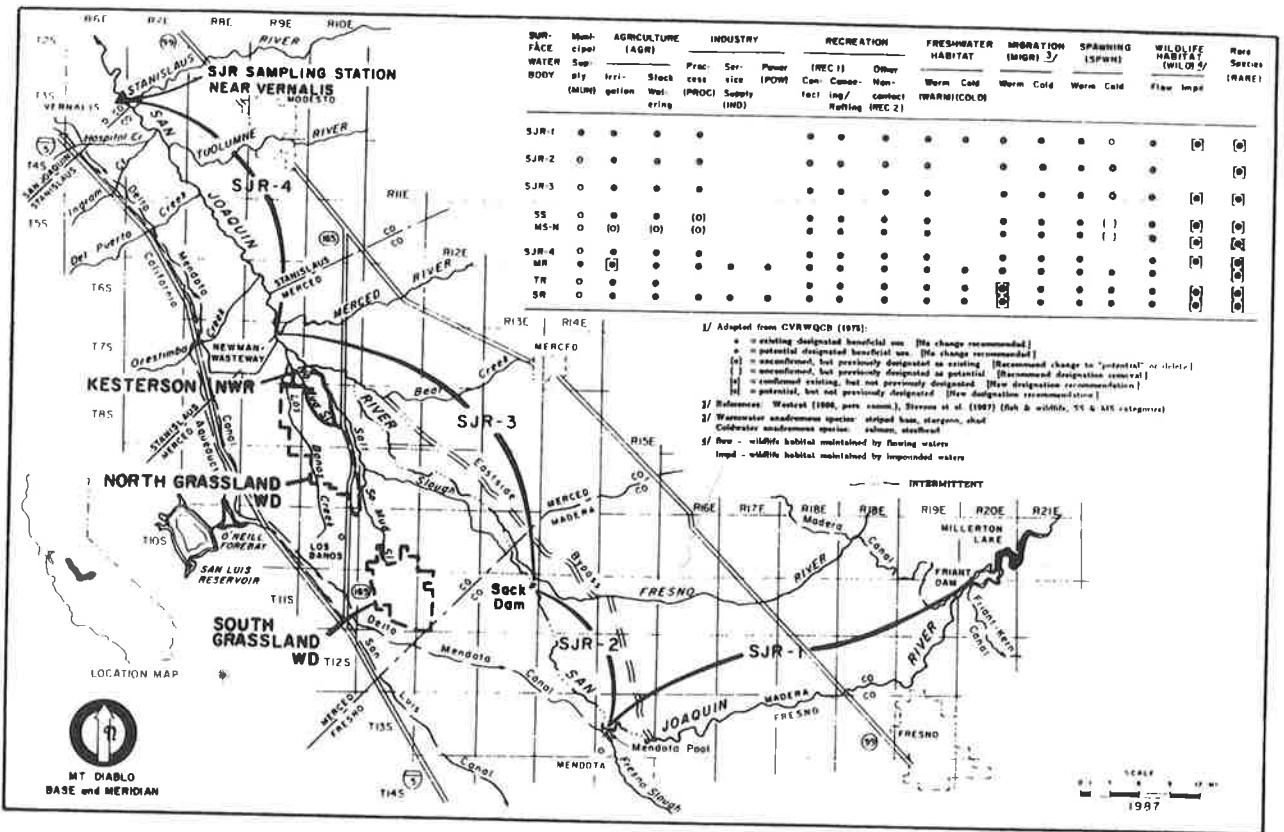


FIGURE 3. Review of beneficial uses for the San Joaquin River Basin.

of an objective of 2 ppb selenium and the large costs to achieve this value in the San Joaquin River at any location below the confluence of the River and Salt Slough, the Technical Committee recommends that an interim water-quality objective for selenium of 5 ppb be adopted by the Regional Board, and a long-term objective for selenium not be adopted at this time. This interim objective provides reasonable interim protection to beneficial uses, based on the balancing of (1) the need for site-specific data on selenium levels that will protect use of impounded water, (2) the limited uses of impounded water downstream of Hills Ferry, and (3) the economic effects of more restrictive objectives. Additional site-specific data should be collected before a long-term selenium objective to protect habitat in impounded waters is adopted by the Regional Board. Compliance with the interim objective is proposed to be measured at Hills Ferry on the San Joaquin River and locations downstream. Long-term water-quality objectives for selenium for Mud and Salt Sloughs are also recommended, based on site-specific bioaccumulation data collected in these areas.

In order to meet the interim water-quality objective of 5 ppb at and below Hills Ferry on the San Joaquin River, selenium loads from the DSA would need to be reduced by about 30 percent. To reach 2 ppb selenium at this location, loads would need to be reduced by about 70 percent.

The Technical Committee has also recommended water-quality objectives for boron, salts, and molybdenum that call for general improvement in water quality for these constituents. Table 1 summarizes these recommended water-quality objectives for selenium, boron, salts, and molybdenum and their proposed compliance dates.

WATER QUALITY OBJECTIVES FOR WATERFOWL AREAS

The recommended water-quality objective for selenium in the water supply to the waterfowl areas in the Grassland Water District, San Luis National Wildlife Refuge, and the Los Banos State Waterfowl Area is 2 ppb selenium. Low selenium levels are needed in this area to expedite leaching of high concentrations of selenium in the marsh environments that have accumulated through the past use of selenium-laden drainage as a partial water supply to this area. However, this objective can be met either in the historic water-supply canals for this area or via a substitute supply provided to protect these existing off-stream uses. If a substitute supply is provided, the amount of water should be equal to that used in these areas for waterfowl purposes in the mid-1970s or the amount available in these channels, whichever is less.

SCHEDULE OF IMPLEMENTATION

The interim objective for selenium is recommended to become effective in October 1991. The Regional Board needs to collect additional information to determine an appropriate time schedule for implementation of the long-term objectives.

TABLE 1. Recommended water quality objectives for the San Joaquin River Basin.

Location	Constituent	Maximum Mean		Compliance Date
		Monthly Level	Instantaneous Maximum	
<i>Interim Objectives</i>				
San Joaquin River at Hills Ferry and downstream	Selenium	5 ppb	26 ppb	October 1991
Grassland WD, San Luis NWR and Los Banos SWA	Selenium	2 ppb	(can be provided via a substitute supply) ^a	October 1989
<i>Long-term Objectives</i>				
San Joaquin River at Hills Ferry and downstream	Selenium	To be determined based on site-specific data.		To be determined
	EC	1.0 mmho		
	Boron	700 ppb	5,800 ppb	
	Molybdenum	10 ppb	440 ppb	
Salt & Mud Sloughs & San Joaquin River Lander Ave. to Hills Ferry	Selenium	10 ppb	26 ppb	To be determined
Salt Slough and San Joaquin River Lander Ave. to Hills Ferry	EC	3.0 mmho		To be determined
	Boron	2,000 ppb	5,800 ppb	
	Molybdenum	10 ppb	440 ppb	
Grassland WD, San Luis NWR and Los Banos SWA	Selenium	To be determined based on site-specific data (can be provided via a substitute supply) ^a		To be determined

^a If a substitute supply of 2 ppb or lower is provided, the quantity of this supply should be in a volume equal to the lesser of either (1) the quantity of water (mid-1970s) diverted by these waterfowl areas or (2) the actual flow in the canals available to these areas.

Before a long-term selenium objective for impounded-water habitat is adopted and implemented, the Technical Committee recommends that further site-specific biological tests be conducted. These tests are outlined in the report. The results from these tests will assist the Regional Board in determining what the long-term objective should be to provide reasonable protection for beneficial uses. Also, more information on the effect of better water management of existing irrigation systems needs to be assessed before implementing a long-term selenium objective. Information from the San Joaquin Valley Drainage Program should also be evaluated.

Recommendations developed by the San Joaquin Valley Drainage Program will become available in October 1990. Data from this program and the initial results of achieving the interim objectives should be evaluated by the Regional Board in their triennial review of the Basin Plan by October 1991.

The Technical Committee believes that the objectives should be implemented as rapidly as possible, given the water-quality concerns with selenium. However, implementation must recognize the need for additional biological and drainage data and the large capital costs involved with options for water treatment.

COSTS OF TREATMENT

The costs of implementing three alternative selenium objectives (2, 5, and 10 ppb) at various locations in the San Joaquin River Basin are evaluated in detail in the report. They are summarized in Table 2. Achieving a water-quality objective of 2 ppb through treatment to remove selenium would cost between \$74 and \$82 (present value) per acre in the DSA.²⁰ Costs of achieving a 5-ppb selenium objective through selenium treatment range from \$53 to \$77 per acre in the DSA, depending on the location of achieving the objective. Total capital costs for these treatment alternatives range from \$52.4 million to \$64.4 million. Comments received from the San Joaquin Valley Drainage Program indicate that these treatment cost estimates may be low. The Drainage Program is completing a detailed evaluation of treatment costs.

ACHIEVING OBJECTIVES THROUGH REDUCTIONS IN DRAINAGE VOLUMES AND LOADS OF POLLUTANTS

Reduction of subsurface drainage volumes and loads of pollutants through an aggressive program of water conservation can have a dramatic

effect on reducing not only selenium concentrations in the San Joaquin River, but also boron, salts, and the other elements of concern. Deep percolation of irrigation water could be reduced by about 34 percent if better water management practices were employed with the furrow irrigation techniques predominately used in the DSA. The cost of improvements in both water use and regulation of drainage flow is estimated to be about \$16 per acre. Better water management techniques are readily implementable. Improved irrigation techniques, which would be significantly more efficient than furrow irrigation as now practiced, could reduce drainage volumes about 70 percent over those currently generated in the DSA. The cost associated with improved irrigation technology is estimated at about \$60 per acre. This technology is available but may need to be field-tested in this area before being implemented on a large scale. The costs of implementing these alternatives are shown in Table 2. It is important to note that (1) there are essentially no capital costs involved with the alternative involving better water management, and (2) the total capital costs associated with the improved irrigation technology alternative are estimated at \$33 million.

Improved water management in the entire DSA could save about 46,000 acre-feet of water each year. Improved irrigation technology in the entire DSA could save at least 75,000 acre-feet of water per year. Not taking delivery of this water will save farm operators the energy costs associated with pumping this water by the water districts. This cost savings is reflected in the per-acre costs of this alternative stated above. The water itself would be available for use in the waterfowl areas in the San Joaquin River Basin that have been adversely affected by drainage with high selenium levels, or in other parts of the state.

The interim objectives appear to be achievable through better water management with existing irrigation systems. This is a logical first step in achieving the long-term water-quality objectives recommended by the Technical Committee. Assuming that the long-term selenium objective will eventually be determined to be about 2 ppb, both better management and improved irrigation technology will probably be needed to achieve this concentration in the San Joaquin River at Hills Ferry. Treatment to remove selenium may not be needed to achieve a long-term selenium objective if better water management and irrigation technologies are implemented. Achievement of the long-term selenium objectives through better water management and increased irrigation efficiency will be an effective first step toward achieving the salinity and boron objectives. However, additional actions in areas outside the DSA may be needed to achieve these water-quality objectives in the future.

An aggressive program of drainage reduction through improved irrigation efficiencies is a logical first step toward addressing the agricul

tural drainage issues in the San Joaquin River Basin. If future studies show that additional actions beyond reduction of drainage flows are needed to further reduce the loading of pollutants in agricultural drainage, the costs will be less than they would be otherwise because there will be less volume to handle. Therefore, drainage reduction through improved irrigation efficiencies is the one alternative that promises rapid, near-term, inexpensive improvements in water quality in the San Joaquin River. It will also be an integral part of any long-term program that may be developed to deal with agricultural drainage in a more comprehensive manner.

REGIONAL DRAINAGE DISTRICT

Over the last several decades there has been much discussion about the formation of regional drainage districts for specific areas in the San Joaquin Valley. The formation of such districts with responsibility for the control of agricultural drainage would be a great benefit to the farming community by coordinating its actions into a unified program. The agricultural drainage problem in the DSA, and areas up-gradient, is a regional problem and would be addressed most effectively at the regional level. A regional program of drainage reduction would provide greater flexibility in achieving water-quality objectives and would provide more efficient management of the regional shallow-water table than individual programs developed by each farming operation. Such a regional program would also be less costly than the sum of the individual programs. The Regional Board would also be spared the expense and administrative burden of developing individual waste-discharge requirements for each farming operation to ensure that the water-quality objectives were maintained.

BEST MANAGEMENT PRACTICES

The Technical Committee recommends that the Regional Board consider the adoption of best management practices to reduce pollutant loads and achieve the interim water-quality objective for selenium 0.5 ppb at Hills Ferry. The Regional Board can include best management practices into waste-discharge requirements to aid in the enforceability of such practices. One goal of this program would be for all areas in the DSA and areas uplope to increase their infiltrated water-use efficiency (as defined in this report) from the existing 70 percent to 80 percent. Available information indicates that this could be achieved through best management practices using existing systems. The types of practices that should be employed include: (1) better managed pre-irrigation, (2) better managed initial irrigation through better water scheduling, and (3) us

of the high groundwater table in summer as a source of water for some crops. The other goal of such practices would be to reduce subsurface tile drainage from existing tile-drained areas in the DSA to 0.45 AF/acre (acre-feet per acre). The Regional Board should consider incremental steps in reduction of drainage flows from the existing 0.7 AF/acre in order to achieve the goal by October 1991 (e.g., 0.55 AF/acre by 1989, 0.5 AF/acre by 1990, 0.45 AF/acre by 1991).

As the Regional Board reviews the progress of this program, it may need to revise its goals to 90 percent infiltrated water-use efficiency and 0.2 AF/acre in order to achieve the long-term water-quality objectives.

ECONOMIC EFFECTS

In order to evaluate the economic effects of implementing the various possible water-quality objectives, a model of farm profitability was developed for the lands within the DSA. The model estimates the gross profits (after paying for farm operating costs) generated by these lands. With estimates of debt burdens, the model predicts those lands that may become insolvent (no longer generate income for the farm operator) or go out of production (lands that cannot generate enough income to pay for costs of farm operation) due to incremental increases in costs, such as those related to management of drainage flows. The model is summarized in the report.

Economic effects of the various alternatives are evaluated in the report. Farming in the DSA provides an economic benefit to the cities within Merced and Fresno Counties, the counties themselves, and the state as a whole. The loss in benefits will be felt most directly in the west-side areas of Merced and Fresno Counties and the City of Fresno. The areas most directly affected by these economic effects would be the west-side cities of Mendota, Firebaugh, Los Banos, and Dos Palos. The revenues generated directly and indirectly from all farming activities in the DSA make up about 12 percent of the total tax-generated revenues to these cities. **Implementation of a long-term selenium objective of 2 ppb at Hills Ferry would result in a loss of tax-generated revenues to the west-side cities of less than 1 percent.** The losses to these areas are discussed in the report. It is important to keep in mind that the DSA represents 94,480 acres, or less than 7 percent of the approximately 1.4 million acres of farm land in the San Joaquin River Basin.

Economic effects of achieving 2 ppb and 5 ppb selenium in the San Joaquin River at Hills Ferry through reduction of drainage flows are summarized in Table 3. The economic effects on the agricultural community in the DSA of implementing the interim selenium objectives through drainage reduction via better water use and management of drainage are

relatively small—an additional cost of \$16 per acre. The economic model predicts that about 1,900 acres (or 2 percent) of the land in the DSA would become insolvent and that no lands are expected to go out of production due to these increased costs. Implementation of an objective of 2 ppb selenium may result in about 16,000 acres (or 17 percent) of land in the DSA becoming insolvent at these higher operating costs. The rents or mortgage payments, i.e., land values on these lands, would probably be lowered through market forces in order for farming to continue on this acreage. About 3000 acres (3 percent of the DSA) might go out of production because enough income could no longer be produced to cover the increased cost of farming these lands.

Direct economic effects of implementing an objective of 2 ppb selenium would be expected to reduce benefits of agricultural production

TABLE 3. Economic effects of achieving selenium concentrations for the San Joaquin River at Hills Ferry through drainage flow reduction.

	Selenium 5 ppb	Selenium 2 ppb
Cost/acre	\$16	\$59
Land insolvent in DSA	2%	17%
Land out of production	0%	3%
Direct		
Jobs	0%	5%
Assessed valuation	10%	38%
Personal income	0%	21%
Indirect		
Personal income	0%	13%
Employment	0%	6.6%
Population	0%	6.7%
Dwelling units	0%	6.7%
Residential property value	0%	<1%
Commercial property value	5.7%	24%
Taxable retail sales	0%	11%
Tax generated revenues		
Westside cities	0%	.5%
(Mendota, Firebaugh, Dos Palos, Los Banos)		
Fresno City	0%	<0.1%
Fresno County	0.1%	0.5%
Merced County	<0.1%	0.4%

to personal income from farming in the DSA by about 21 percent, while the benefits of agricultural production to assessed valuation of land in the DSA would be expected to be reduced by an average of about 38 percent.

Indirect and induced effects (or ripple effects) through the economy are also discussed in the report. The recommended interim objectives would have essentially no negative indirect effects, because all the increased drainage costs are for needed services that would actually create jobs and compensate for losses in farm profits. However, an objective of 2 ppb selenium would be expected to reduce the economic benefits from farming in the DSA by about 6 percent in categories such as employment, population, dwelling units, and student population. Personal income generated from farming in the DSA would be expected to be reduced by about 13 percent and the benefit of farming in the DSA to assessed valuation of commercial property would be reduced by 24 percent. However, residential property values are expected to be reduced by less than 1 percent. Taxable retail sales generated by farming in the DSA would be expected to drop by about 11 percent.

FUNDING SOURCES

The capital costs, if any, to achieve the interim objective of 5 ppb selenium through best management practices are small. In comparison, the capital costs of implementing the long-term objective for selenium through reduction of drainage flows would be an estimated \$33 million for improved irrigation equipment. The Technical Committee has assumed that these capital costs can be financed with state or federal assistance to reduce the interest to around 4 percent, as is currently available through the state's Water Conservation and Water Quality Bond Law of 1986. However, funds under this act are not sufficient to cover these costs. Therefore, consideration should be given to enlarging this assistance program. If such a program is not available, the per-acre cost of achieving a 2-ppb objective would increase by at least \$14 per acre.

CONCLUSION

Based on the available information, the Technical Committee believes that the improvement in water quality resulting from implementation of the interim selenium objective and long-term objectives for salts, molybdenum, and boron is necessary to provide reasonable protection for beneficial uses, and finds that the economic costs needed to do so are also reasonable. However, the Technical Committee strongly recommends that data on the (1) concentrations of selenium that protect aquatic ecosystems in the Basin, (2) concentrations of selenium that protect

human consumers of fish and wildlife, and (3) drainage flows and quality produced in and up-gradient of the DSA be developed and reviewed by the Regional Board in 1991 before a long-term water-quality objective for selenium is implemented.

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Unraveling sources and pathways of elevated selenium exposure over the lifetime of an imperiled migratory fish

R.C. Johnson,^{1,2*†}, R. Stewart,³ K. Limburg,⁴ R. Huang,⁵ Dennis Cocherell² and F. Feyrer⁶

¹ NOAA Fisheries, Southwest Fisheries Science Center, Fisheries Ecology Division, 110 McAllister Way, Santa Cruz, CA USA, Rachel.Johnson@noaa.gov.

² University of California Davis, Center for Watershed Sciences, 1 Shields Avenue, Davis, CA USA.

³ U.S. Geological Survey, Water Resources Division, 345 Middlefield Rd. MS496, Menlo Park, CA USA.

⁴ State University of New York, 249 Illick Hall, 1 Forestry Dr., Syracuse, New York USA.

⁵ Cornell University, Cornell High Energy Synchrotron Source, 161 Synchrotron Drive, Ithaca, NY USA.

⁶ U.S. Geological Survey, California Water Science Center, 6000 J Street, Placer Hall, Sacramento, CA USA.

* Corresponding author

† First and last author contributed equally to this work.

Abstract

Aquatic ecosystems around the world face growing threats from elevated levels of contaminants from human activities. The influence of selenium (Se) toxicity shown to cause deformities in birds, fish, and mammals can be transferred from parents to progeny during embryonic development or directly through Se-enriched diets. For migratory species that move across landscapes, understanding where in the life cycle elevated Se is encountered is vital to mitigating vulnerabilities. Se concentrations in tissues provide recent Se exposure. Here we apply a new method in biominerals to reconstruct Se exposures over the lifetime of an organism to chronicle when, where, and for how long individuals were exposed to elevated Se levels. The method successfully determined that spinal deformities observed in wild Sacramento Splittail (*Pogonichthys macrolepidotus*), an imperiled migratory minnow, were caused by elevated Se acquired during early life stages via diet in freshwater. This approach paves the way for diagnosing the sources and pathways of Se toxicity relevant for wildlife conservation.

Introduction

Chemical contaminants from industry, agriculture, and urban runoff seep into aquatic environments and disrupt biological systems at levels ranging from molecules to ecosystems. While large-scale environmental disasters such as oil spills injure and kill organisms making impacts tangible to observers, cryptic sub-lethal levels may be more common and have profound population-level impacts where examined [Schwarzenbach et al. 2006].

Bioaccumulation of contaminants can affect an organism's physiology, health, and fitness as well as the community of organisms in a foodweb [Cutter 1989]. Selenium (Se) is found naturally in soils and minerals, and is an essential nutrient that is required for oxidative and enzymatic processes. However, it has a narrow range of levels between those that are nutritionally optimal and those that are toxic. Elevated dietary exposure exceeding $3 \mu\text{g} \times \text{g}^{-1}$ can disrupt protein synthesis by substituting Se for sulfur in ionic disulfide bonds, resulting in deformities in developing offspring of fish, birds, and mammals (Lemly 2002). Human activities, including coal combustion, mining, and agricultural practices can concentrate Se to toxic levels in the aquatic environment that can further bioaccumulate in foodwebs (Simmons and Wallschläger 2005).

Effluent from oil refineries within the estuary and legacy agricultural practices in the upstream watershed are the two leading point sources of anthropogenic Se in the upper San Francisco Estuary (estuary), California (USA) [Cutter 1989]. Sacramento splittail (splittail), *Pogonichthys macrolepidotus*, a cyprinid benthivore endemic to the the San Francisco Bay Estuary and Watershed, feed, migrate, and reproduce between these two potentially elevated Se

environments at different life stages. The extent to which splittail are threatened by point sources of Se resulting in spinal deformities in the estuary and/or freshwater has direct bearing on which water bodies may remain impaired for wildlife.

Splittail was formerly listed as Threatened under the US Endangered Species Act and is a species of special management concern. Reproducing splittail migrate from the estuary to spawn in freshwater channels and floodplains of the Sacramento and San Joaquin Rivers and recruit as sub-yearlings into the estuary where they feed, grow, and live the majority of their lives (Moyle 2002). Extensive work has been done to establish Se thresholds and reduce the exposure of wildlife to elevated Se in the estuary and San Joaquin River over several decades, yet juvenile splittail with visible morphological (Fig. S1) and spinal deformities (Fig. S2) have recently been observed. These gross deformities and morphological distortions are consistent with Se toxicity which include scoliosis (lateral curvature of the spine), kyphosis (outward curvature of the spine), lordosis (concave curvature of the lumbar and caudal regions of the spine; Fig 1 A-C), as well as deformities of fins, skull, jaws, and bulging eyes.

There are two primary pathways for Se toxicity to result in observed spinal deformities in organisms. Elevated Se can be transferred from females to their progeny altering embryonic development or an individual can directly be exposed to toxic levels in water or food modifying the spine subsequent to development. A growing body of toxicological research on Se exposure across taxa suggests that spinal deformities in young are primarily transgenerational (Lemly 1993). Deformed progeny resulted when parents were given elevated Se diets during pregnancy (Rosenfeld and Beath 1954) or exposed prior to spawning (Woock et al. 1987, Hermanutz et al. 1992). Because of this, there is concern that splittail are at heightened risk to Se toxicity in the estuary because their diet includes the invasive Asian clam, *Potamocorbula amurensis* which is

known to bioaccumulate Se (Feyrer et al. 2003). Selenium levels in the clam have exceeded dietary concentrations known to cause reproductive toxicity in wildlife (Engberg et al. 1998, Presser & Luoma 2013, Janz et al. 2010) making vulnerable other clam-eating native fish like white sturgeon, *Acipenser Transmontanus*, as well as diving ducks (Linville et al. 2002, Poulton et al. 2004). Therefore, females with high Se body burdens from foraging in the estuary could produce progeny with the observed deformities through maternal transfer of Se in yolk during development.

There is also evidence that juvenile fish, including splittail, directly exposed to waters with elevated sodium selenite or selenium dioxide or fed Se- enriched diets develop the same deformities (Niimi and LaHam 1975, Teh et al. 2004). Se-enriched feeding experiments with 7-month-old juvenile splittail induced spinal deformities (Teh et al. 2004). Flowing into the estuary, the San Joaquin River is also known to have elevated Se from agricultural practices shown to impact wildlife (Saiki et al. 1992). One of the most well documented cases of Se toxicity occurred in the 1980s when laboratory and field studies confirmed that Se in agricultural irrigation drainwater in the San Joaquin River caused extensive deformities in wild populations of aquatic birds. This included disfiguring impacts with birds missing eyes, beaks, wings, legs, and feet and reproductive failures (Ohelendorf et al. 1986, Hoffman and Heinz 1988). When splittail are young and first begin to feed on plankton and insects in the freshwater floodplains, they can be exposed to elevated levels of Se directly in their diets.

The ecological and conservation significance for revealing the source and pathway of spine-deforming Se-toxicity in nature is immense, yet remains one of the greatest challenges in toxicological studies (Chapman et al. 2010). Discovering fish with spinal deformities is rare in the wild and investigations are often limited to detecting recent exposures because contaminants

in muscle or soft-tissues change over time due to depuration, metabolic transformation, and tissue re-compartmentalization making measurements difficult to interpret. For migratory species, such as splittail, the observation of deformed individuals with symptoms of Se toxicity presented an opportunity to apply new analytical tools to diagnose sources and pathways of exposure in nature.

Here, we combine for the first time, chemistry and deposition chronology in a biomineral (fishes' otolith) to reveal when and where during development individuals with spinal deformities were exposed to elevated Se. Specifically, we were able to map selenium concentrations and strontium isotopes in otoliths to deduce whether individuals in nature obtained Se toxicity through their parents in the estuary or from direct ingestion of Se-enriched prey in the freshwater. Otoliths are metabolically stable and they provide a permanent chronology of Se exposure over the lifetime of fish (Limburg et al. 2010, Halden and Friedrich 2016, Lochet et al. 2010). Otoliths are concentric layers of CaCO_3 and protein that reflect daily deposition of a range of elemental constituents from a fish's local environment (Campana and Thorrold 2001). Some trace elements, such as strontium, are benign to fish and their isotopic ratios can also be used to track movements in fish as they migrate among chemically different waterways such as estuaries and rivers (Barnett-Johnson et al. 2008). When chemistry data are linked to the daily growth bands in fish otoliths, information on when a fish was exposed to particular contaminants and for how long can be revealed. We chronicled Se exposure histories over the lifetime in wild fish with spinal deformities to deduce a maternal (core of otolith) from direct diet pathway (10 days post hatch; first feeding) of Se exposure and thus the aquatic habitats (estuary vs. freshwater) linked to Se toxicity.

Materials and Methods

Experimental Design

Young of the year splittail (30-90 days of age) were collected in the San Francisco Delta on the San Joaquin River at the Fish Salvage Collection facility, Byron, California (USA) between February and March, 2011 and transported to the University of California, Davis' Center for Aquatic Biology and Aquaculture Facility as part of on-going genetic and physiology studies on the species. The majority (>80%) were observed to exhibit spinal deformities. A total of 16 fish that ranged in the severity of morphological deformities were selected for x-ray and otolith analyses. Two additional fish that were progeny from a different cohort and cultivated in the aquaculture facility were used as controls. Individuals were externally examined, photographed (Fig. S1), and assessed visually as either having normal or deformed morphology (Table 1). Individuals were then radiographed at the University of California's Veterinary Medical Clinic (Fig. S2). X-rays were read and individuals were diagnosed as having scoliosis, kyphosis, lordosis, or normal spine morphology (Table 1). The severity of spinal aberration was further scored (1-5) depending on the visual phenotype (deformed or normal) and the number of visible vertebrae from the X-ray that were affected (>2, 1 or 0). The following criteria were used:

Score 5: Morphology = Deformed; >2 impacted vertebrae;

Score 4: Morphology = Deformed; 1 impacted vertebrae;

Score 3: Morphology = Normal; >2 impacted vertebrae;

Score 2: Morphology = Normal; 1 impacted vertebrae;

Score 1: Morphology = Normal; 0 impacted vertebrae.

Otolith preparation and daily ages

One lapilli otolith per fish was embedded in West Systems 105 epoxy resin before being sectioned in the frontal plane using a low speed diamond saw. The core and natal portions were further revealed using 1500 grit sandpaper and 3 μm lapping film. Finished preparations were cleaned by sonicating in deionized water and surface wiped with ethanol prior to elemental mapping. All otolith microstructure imaging and age and growth measurements were performed in Image Pro Premier at 200x magnification. Daily increments were counted along the primary growth axis on the rostral side starting with the first increment after the hatch check (Fig. S7). This transects and increment data were later used to link the chemical maps with daily ages.

Elemental mapping in wild splittail otoliths

Selenium, strontium (Sr), and Calcium (Ca) concentrations were analyzed in splittail otoliths at Cornell's High Energy Synchrotron Source (Cornell University, Ithaca New York) using scanning X-ray fluorescence microscopy (SXFEM) on the F3 beamline per established techniques (Limburg et al. 2007, 2010; Lochet et al. 2010). This instrument allows for spatial mapping of elemental concentrations using a non-destructive technique with minimal interferences among Se and other elements. Briefly, a multi-layer monochromator (0.6-1% bandwidth) produced an X-ray ranging from 10-29 KeV focused on the otolith with a single glass capillary necessary to achieve 10-30 μm spot resolution over the entire otolith. The photon flux was 10^{11} counts per second and a fluorescence spectrum was integrated for 5-45s. To increase the sensitivity of Se and reduce the potential for overwhelming Ca fluorescence, an aluminum attenuator was applied to the Vortex (SII) detector. Spectra were calibrated with PyMCA software using an in-house otolith pellet previously described (Sole' et al. 2007; Limburg et al.

2010). Concentration data were imported from text files for further spatial analysis into geographical information system (Arc GIS).

Strontium isotope measurements

Sr isotopes ($^{87}\text{Sr}:$ ^{86}Sr) provide information on fish movement among tributaries, rivers, estuaries, and Bays in California's Central Valley (Barnett-Johnson et al. 2008; Sturrock et al. 2015; Feyrer et al. 2015). We used a Laser-Ablation Multi-Collector Inductively Coupled Plasma Mass Spectrometer and the University of California Davis, (MC-LA-ICPMS; Nu plasma HR interfaced with a New Wave Research Nd:YAG 213 nm laser) to measure $^{87}\text{Sr}:$ ^{86}Sr from the core to the edge of the splittail otoliths to reconstruct the portion of the juvenile otolith under maternal influence and associate the portion of the otoliths exhibiting elevated Se:Ca with the location in the watershed the juvenile was rearing at the time. The transect consisted of consecutive spots that were 40 μm in diameter. At each spot the laser pulsed at 10 Hz for 25 seconds and varied between 3 and 8 j/cm^2 depending on sample strontium concentrations (Supplemental Data Files). Data corrections included: measuring background ^{86}Kr voltages for 30 seconds prior to each batch of analysis for blank subtraction of Krypton interference, monitoring ^{85}Rb to correct for and remove the ^{87}Rb influence on the measured ^{87}Sr value, and accounting for instrument bias by systematically analyzing a marine carbonate standard (*A. nobilis*). The measured value in the standard was normalized to 0.70918 and this correction was applied to all analyses. The accuracy (average $^{87}\text{Sr}:$ ^{86}Sr) and precision (1 standard deviation) of 18 measurements was (0.709042 ± 0.000078) during the analytical session.

Chemical chronology analysis

Transects used to generate daily ages in individual fish (Fig. S7) were georeferenced in the GIS chemistry layer. Daily elemental chemistry data (Se:Ca and Sr:Ca) along the growth transect from the core to the edge was extracted (Fig. S4 and Fig. S5). $^{87}\text{Sr}:$ ^{86}Sr isotope data were also georeferenced to the same daily growth transect (Fig. S6). Because otoliths grow incrementally throughout a fish's lifetime, these transect are analogous to a time-series of chemistry and exposure histories.

Results:

Deformities observed in wild splittail

Splittail were observed to have three primary categories of spinal deformities that ranged in severity (Fig. 1; Table 1). The most common diagnoses among the sixteen fish were lordosis (38%), kyphosis (31%) and scoliosis (6%). The remaining fish (25%) appeared to have normal morphology (Fig. S1; Table 1).

Chemical chronologies

All wild splittail showed elevated concentrations of Se in otoliths (Se:Ca), whereas individuals born and reared in captivity did not. The distribution of elevated Se occurred after maternal influence (>10 days post hatch and beyond yolk absorption), indicating an increase in Se exposure from direct ingestion of contaminated prey (Fig. 2; Fig. S3; Fig. S4). The values of Se:Ca in the otolith cores varied, but all wild individuals showed an increase in Se:Ca after yolk absorption as evidenced by a halo of increased Se surrounding the center of the otolith (Fig. S3, Fig. S4). Individuals were exposed on average to elevated Se (Se:Ca >0.004) on days 25-80 after hatch (Fig. 2).

The strontium isotopic composition ($^{87}\text{Sr}:^{86}\text{Sr}$) in the otoliths of all wild splittail indicated they acquired Se toxicity while rearing in the freshwaters of the San Joaquin River. Previous work and additional water sampling has identified the San Joaquin River as having a diagnostic $^{87}\text{Sr}:^{86}\text{Sr}$ of 0.70716 ± 0.00013 (Sturrock et al. 2015). Splittail otoliths in this study converged on the range of San Joaquin River $^{87}\text{Sr}:^{86}\text{Sr}$ values coincident with the elevated Se:Ca peak in the otolith around day 50 post hatch (Fig. 2, Fig. S6). The Sr isotope profiles also provide information on the transition zone in the otolith between maternal yolk and the San Joaquin River value providing further support that the higher Se:Ca occurs outside the maternal influence (Fig. S6).

Discussion

Waterbodies are becoming increasingly threatened by multiple human-mediated sources of contaminants. For migratory species that occupy often distant aquatic habitats, understanding where in their life cycle they are encountering toxic levels of contaminants that can originate from multiple sources is vital to understanding where vulnerabilities occur for a species. Se toxicity that results in significant deformities has been shown to occur transgenerationally through parents to progeny as well as somatically to individuals directly exposed to Se enriched foodwebs. The extent to which splittail are threatened by point sources of Se in the estuary and/or freshwater has direct bearing on which water bodies are considered impaired for wildlife and at what threshold levels.

The otolith data and the presence of multiple spinal malformations support the interpretation that juvenile splittail in this study fed directly on Se-enriched diets in the San Joaquin River prior to capture. The Se:Ca ratios in the otoliths of all juvenile splittail in this study, with the exception of those bred and raised in captivity, showed elevated Se:Ca >10 days

post hatch. Larval development studies confirm otoliths in splittail form prior to hatching and that yolk absorption occurs approximately 10 days after hatching (Deng et al. 2012). These laboratory studies also highlight that several important developmental transitions occur between exogenous feeding and 50 days when juveniles form their adult fin-structures but still haven't formed scales (Deng et al. 2012). It is this time during splittail development (days 25-80; Fig. 2) that we estimate Se toxicity to have occurred. Splittail that were 7 months of age and fed Se-enriched diets ≥ 2.7 mg of Se kg^{-1} for 5-9 months produce spinal deformities in the laboratory identical to those observed in nature (Teh et al. 2004). The levels of Se:Ca measured in otoliths in this study (10ppm) and resulting Se concentrations in these juveniles rival those recorded in Walleye and White sucker in polluted lakes in New York (Limburg et al. 2010, Freidrich et al. 2011). In this species, these otolith values are linked to direct impacts to the organism.

The water in the San Joaquin River has a distinct $^{87}\text{Sr}:^{86}\text{Sr}$ value and high Sr:Ca relative to surrounding freshwater sources in the San Francisco Estuary and Watershed (Weber 2002, Barnett-Johnson et al. 2008, Sturrock et al. 2015). The spatial distribution of Se:Ca, $^{87}\text{Sr}:^{86}\text{Sr}$, and Sr:Ca in the otoliths all corroborate that juveniles were exposed to elevated Se while feeding and rearing in the San Joaquin River. Previous research documents that the Sr isotopes in the estuary are higher relative to the mainstem San Joaquin River (Barnett-Johnson et al. 2008). Therefore, as juvenile splittail feed on the yolk, the Sr isotope ratio in the otolith reflects contributions from the yolk (estuary) and the water in the natal habitat (San Joaquin River). When juveniles deplete yolk and exogenous feeding begins then the isotopic value in the otolith reaches equilibrium with the Sr isotopic value of the prey in their foraging habitat where they hatched and are feeding.

Several factors besides Se toxicity can result in spinal deformities such as kyphosis, lordosis, and/or scoliosis in fish including elevated temperatures (ØRnsrud et al. 2004), diseases (e.g., whirling disease, *Myxobolus* sp.; Treasurer 1992), other contaminants (e.g., organophosphate, organochlorine, and carbamate intoxications reviewed in Bengtsson 1975), nutritional deficiencies such as a lack of vitamin C (Lim et al. 1978), as well as interactions among multiple stressors (ØRnsrud et al. 2004, Bengtsson 1975). While it is possible that fish in this study were exposed to other stressors that could be linked to their skeletal deformities, the otolith chemistry confirms juveniles were indeed exposed to elevated Se, suggesting this as a plausible and known stressor for those individuals. Additional investigations on habitat conditions including temperature, contaminate and disease prevalence, and nutritional status would assist in characterizing the extent to which other factors coincident with Se may be functioning as a stressor linked to spinal deformities in the wild.

Because Se is an essential nutrient and is lipophilic, it is commonly present in elevated concentrations in eggs (Holm et al. 2006). Indeed, this maternal transfer has been captured in the otolith cores of other fish species, which may be expected given the high protein concentrations of this section of the otolith (Chittaro et al. 2006, Belcher et al. 1996). Therefore, if female splittail were exposed to elevated Se in the estuary during vitelligenesis, one would expect to observe elevated levels in the core of the otoliths of progeny. While all individuals did show elevated levels outside of maternal influence, there was significant variation among individuals in the otolith core Se:Ca values. For example, one individual had a value of Se:Ca=0.008 within the first 10 days post hatch, which is comparable to the elevated values observed post exogenous feeding in some deformed individuals. Therefore, it is possible that female body burdens (Se exposure in the estuary) varies among females and may also be a contributing factor in the observed deformities. Further laboratory and field studies are necessary to understand the

relationship between deformities and exposure of elevated Se in multiple life stages and Se:Ca in otoliths and toxic levels in the environment. Empirical data coupled with population modeling and cohort reconstructions are necessary to quantify potential population-level effects of Se toxicity in this imperiled species and other wildlife in the watershed.

The abnormalities found in this study closely resemble those observed in the same geographic region for populations of wild aquatic birds exposed to selenium in agricultural irrigation drainwater at Kesterson Reservoir in the San Joaquin River. The Grasslands Bypass was created as a solution to divert the Se-enriched soils and water around the Kesterson Reservoir to reduce wildlife impacts (McCarthy and Grober 2001). This Bypass effort has significantly reduced the concentrations of Se that enter the San Joaquin River downstream of Mud Slough (McCarthy and Grober 2001). However, in wet years such as that experience in 2010-2011 (this study year), portions of floodplain habitats accessible to spawning and rearing splittail may expose splittail to elevated Se levels. Indeed, splittail have been documented spawning in regions near Mud Slough where Se levels still exceed EPA criteria of < 5ug/L monthly average (Baxter et al. 1995, McCarthy and Grober 2001).

One of the greatest challenges in aquatic ecotoxicology is detecting sub-lethal exposures of contaminants, as these individuals are likely eliminated due to predation or competition functionally disappearing from sampling opportunities. This study provided a rare opportunity to use otoliths in several fish that exhibited skeletal deformities to test hypotheses about where in the life cycle and thus the aquatic habitat Se toxicity may be occurring. Indeed, Se toxicity producing skeletal deformities could be an important, but easily overlooked phenomenon contributing to recruitment failure in Se-contaminated aquatic habitats.

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Data and materials availability: Raw data included in supplemental materials

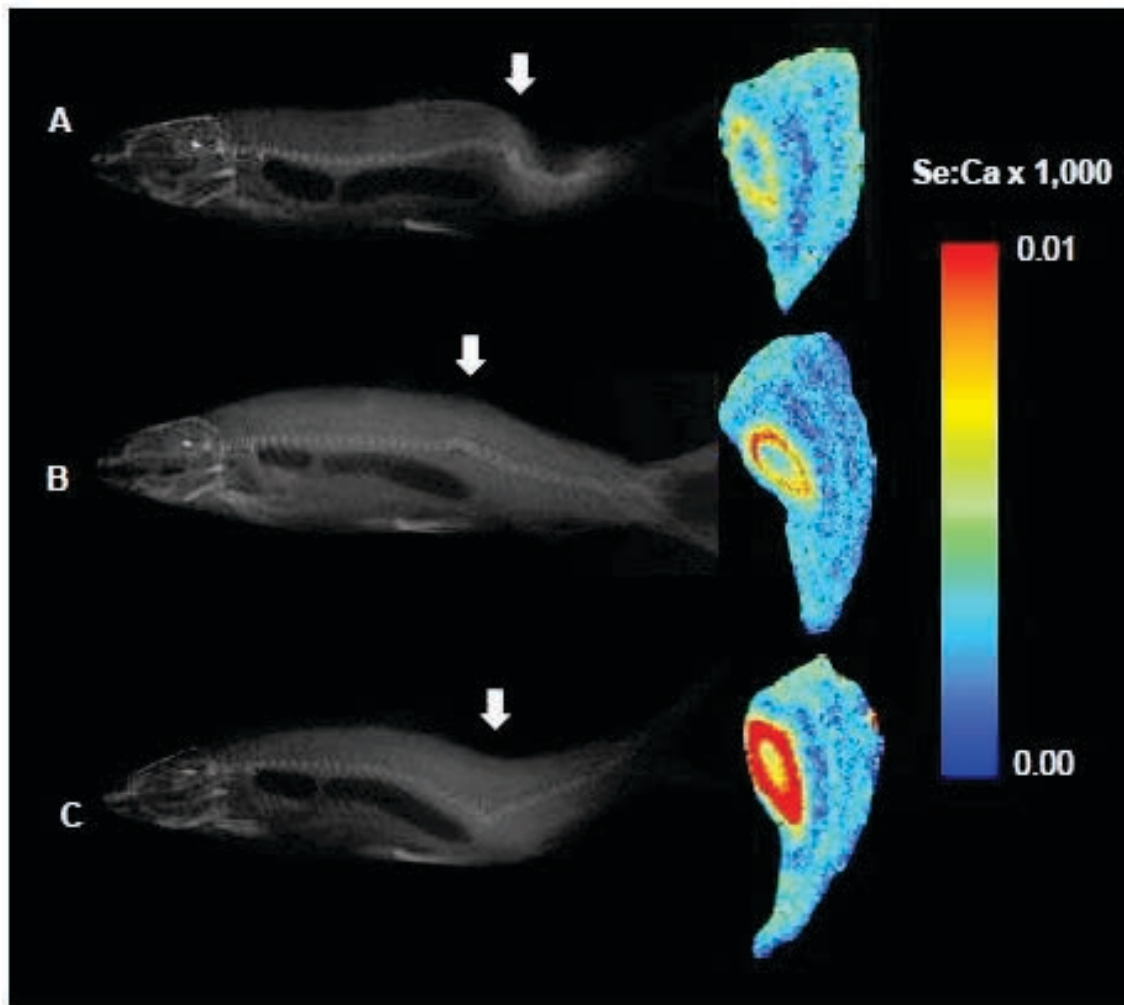


Fig. 1. Juvenile splittail spinal deformities and selenium chronology. Three categories of spinal deformities with affected vertebrae (white arrow) were observed including scoliosis (A), kyphosis (B), and lordosis (C). Selenium to calcium (Se:Ca) distribution in the otoliths for the same individuals show a halo of elevated selenium outside of the core (maternal influence) suggestive of an elevated selenium diet while in freshwater.

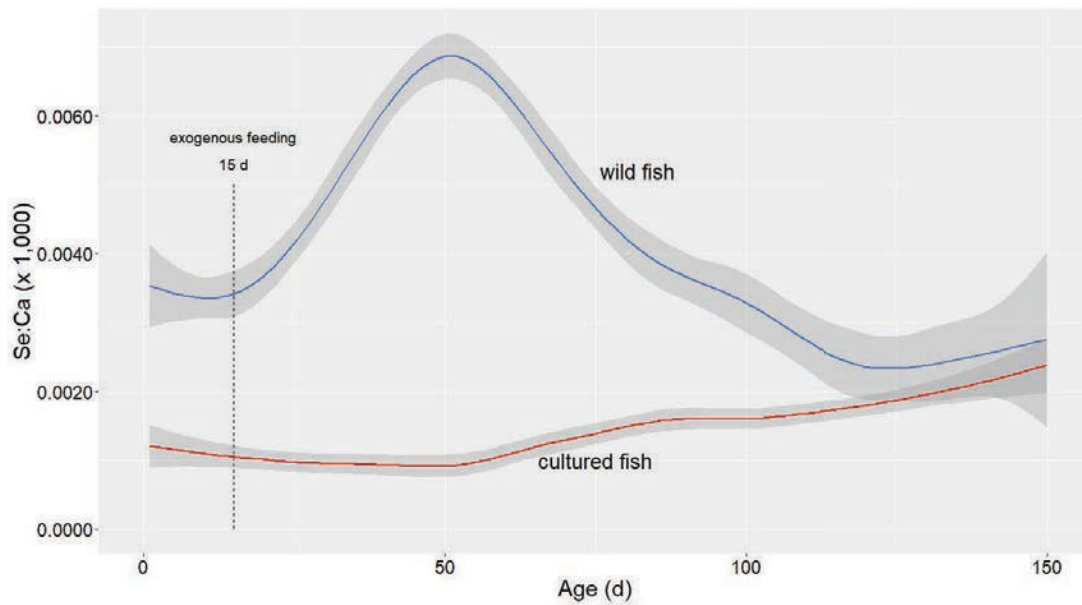


Fig. 2. Ratio of selenium and calcium in splittail otoliths. Smoothed function of selenium-calcium ratio in wild-caught splittail (blue; N= 16) and cultured individuals that were spawned and rearing in captivity (red; N=2). Results indicate elevated levels post maternal yolk absorption and first-feeding (vertical dashed line) for wild-caught individuals.

Table 1. Diagnosis and severity of spinal deformities and severity in juvenile splittail.

Juvenile splittail were x-rayed at the UC Davis Veterinary Sciences Radiology Laboratory and diagnosed for spinal deformities (scoliosis, lordosis, kyphosis, normal) prior to elemental mapping of otoliths. Severity of spinal aberration was further scored (1-5) depending on the visual morphological phenotype (deformed or normal; Fig. S1) and number of visible vertebrae from the X-ray that were effected (>2, 1 or 0): Score 5: Morphology = Deformed; >2 impacted vertebrae; Score 4: Morphology = Deformed; 1 impacted vertebrae; Score 3: Morphology = Normal; >2 impacted vertebrae; Score 2: Morphology = Normal; 1 impacted vertebrae; Score 1: Morphology = Normal; 0 impacted vertebrae.

FISHID	SCORE	DIAGNOSIS
14001C	5	Lordosis
14002C	5	Scoliosis
14003C	5	Kyphosis
14004C	5	Lordosis
14005C	5	Lordosis
14007C	5	Kyphosis
14008C	5	Kyphosis
14010C	4	Lordosis
14016N	2	Lordosis
14017N	2	Kyphosis
14018N	1	Normal
14020N	1	Normal
14023N	1	Normal
14024N	3	Kyphosis
14025N	2	Lordosis
14028N	1	Normal

Supplementary Materials

Supplement Figures:



Fig. S1. Photographs capturing external morphology of juvenile splittail. Individuals range in their visible aberrations and scored as ‘deformed’ or ‘normal’ in Table 1.

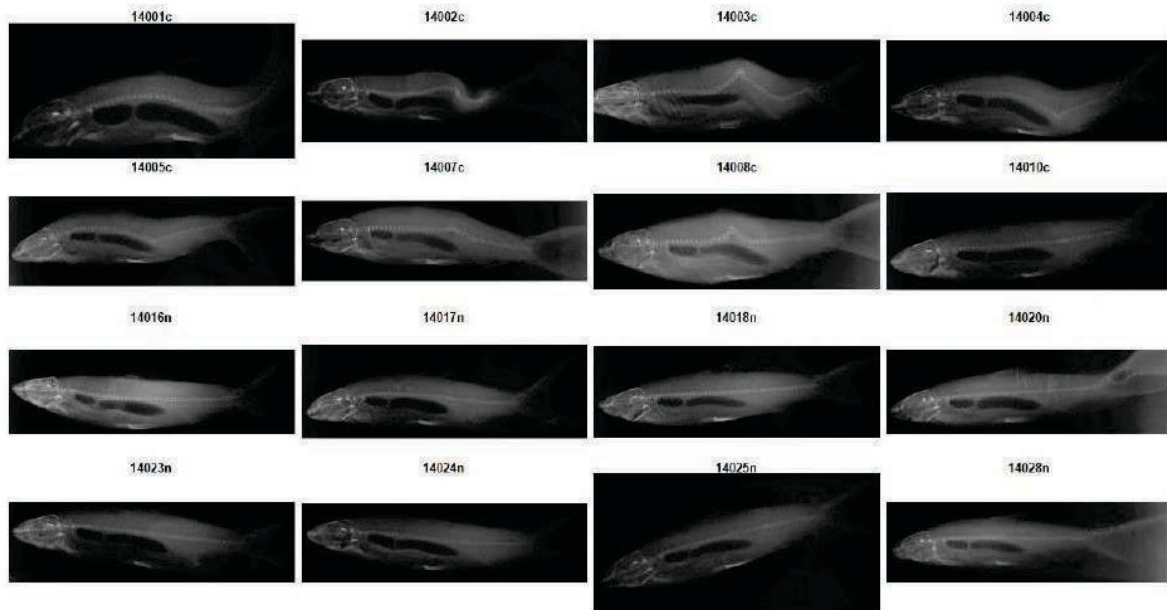


Fig. S2. Radiographs capturing vertebral condition of splittail. Individuals range in their severity of spinal deformities and scored by the number of impacted vertebrae 0, 1, > 2 and summarized in Table 1.

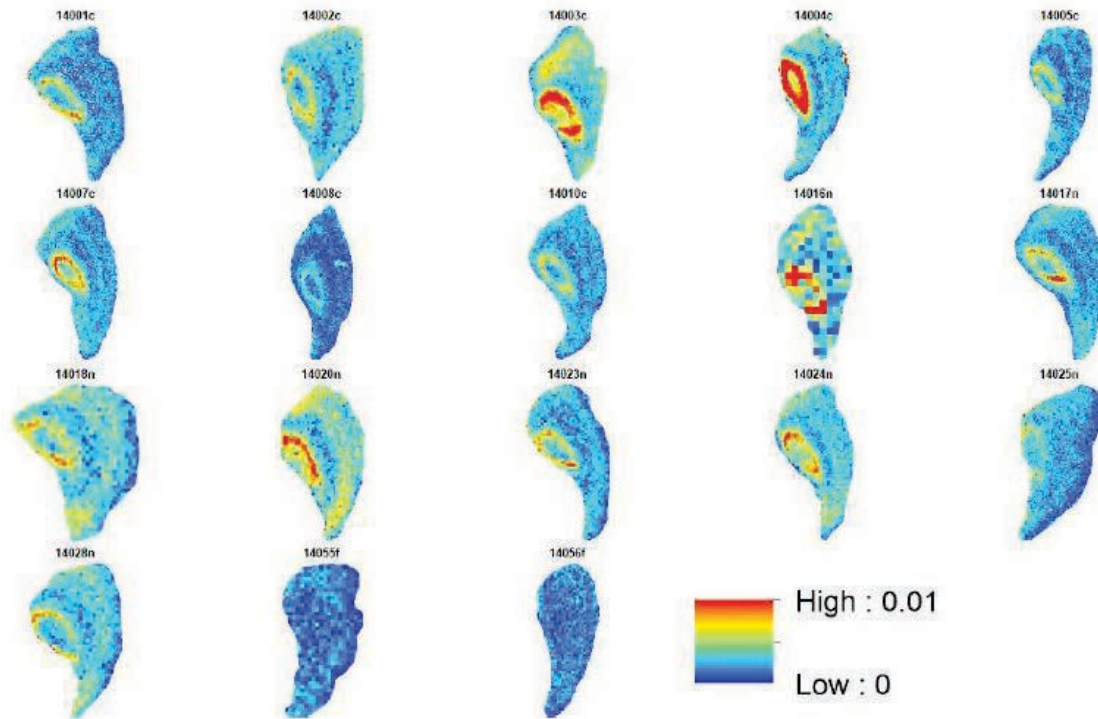


Fig. S3. Selenium to calcium distribution in the otoliths of all study individuals X-ray fluorescence microscopy (SXFM) of splittail collected at Cornell’s High Energy Synchrotron Source chronicling the spatio-temporal distribution of Se:Ca in otoliths. All juveniles independent of both morphological and vertebral evaluation showed evidence of selenium exposure with the exception of the two cultured fish (14055f, 14056f). Fish numbers with the suffix of ‘c’ were visibly deformed and those with ‘n’ were assessed as normal.

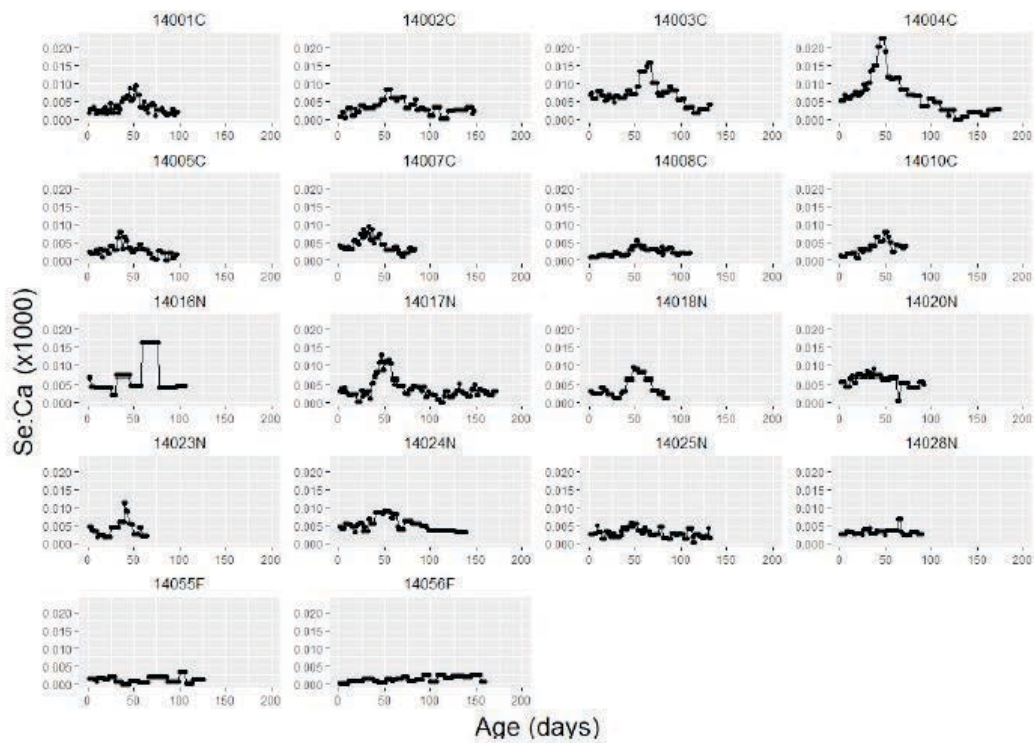


Fig. S4. Profiles of otolith selenium/calcium (*1000) along a transect originating from the primordium to the edge along the growth axis. Ratio values of selenium and calcium extracted from GIS from X-ray fluorescence microscopy image along a single transect corresponding to each visible daily increment in the otolith. All individuals show the same conclusion supported by the X-ray fluorescence images with elevated levels outside of maternal influence. Raw data values can be found in supplemental data. Note the different values within the core across individuals and the magnitude of Se:Ca in the elevated portions.

Fig. S5. Profiles of otolith strontium/calcium along a transect originating from the primordium to the edge along the growth axis. Ratio values of strontium and calcium extracted from GIS from X-ray fluorescence microscopy image along a single transect corresponding to each visible daily increment in the otolith. There is a correspondence between elevated selenium and strontium suggesting the water mass that have elevated selenium may also have elevated strontium. Raw data values can be found in supplemental data.

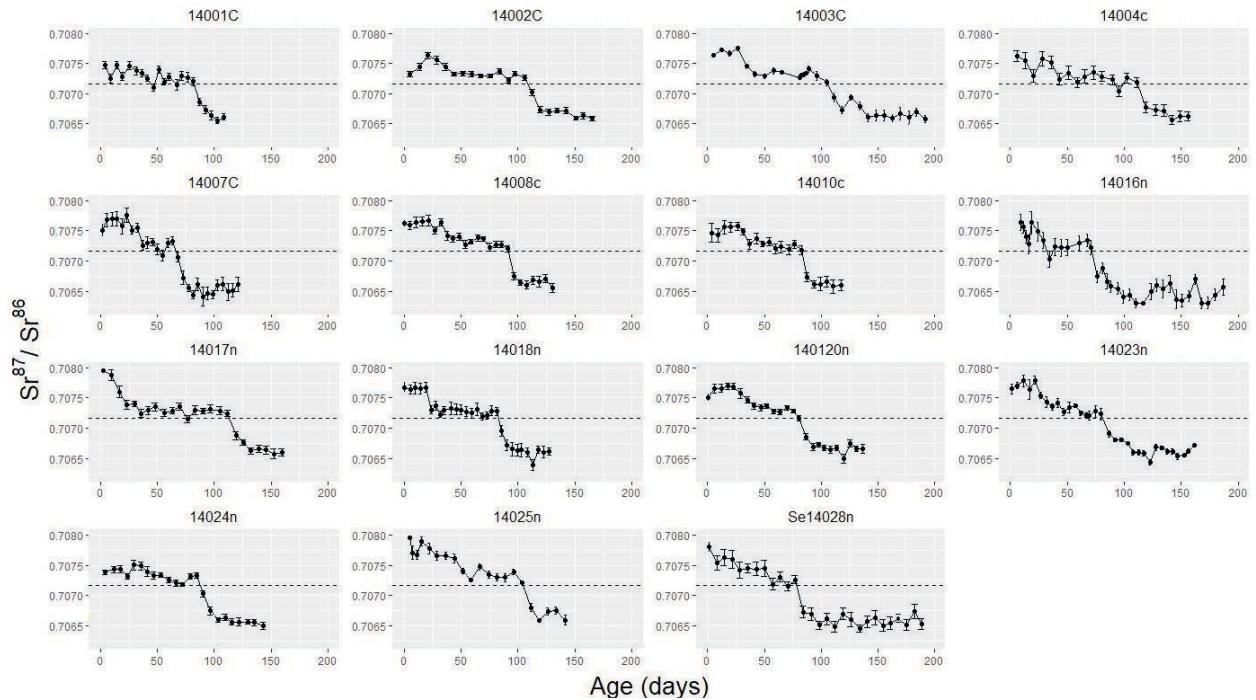


Fig. S6. Profiles of otolith strontium isotope ($^{87}\text{Sr}/^{86}\text{Sr}$) ratios along a transect originating from the primordium to the edge along the growth axis. Sr isotope ratios measured with laser ablation multi-collector inductively coupled plasma mass spectrometry at the University of California, Davis. The core shows elevated Sr isotope ratios indicative of vitellogenesis in female egg/yolk formation in the more saline estuary. As juveniles absorb maternal yolk, the Sr isotope ratio converges on the published value for the San Joaquin River coincident with Se:Ca enrichment around day 50 (dashed line; 0.70716 ± 0.00013 Sturrock et al. 2015).

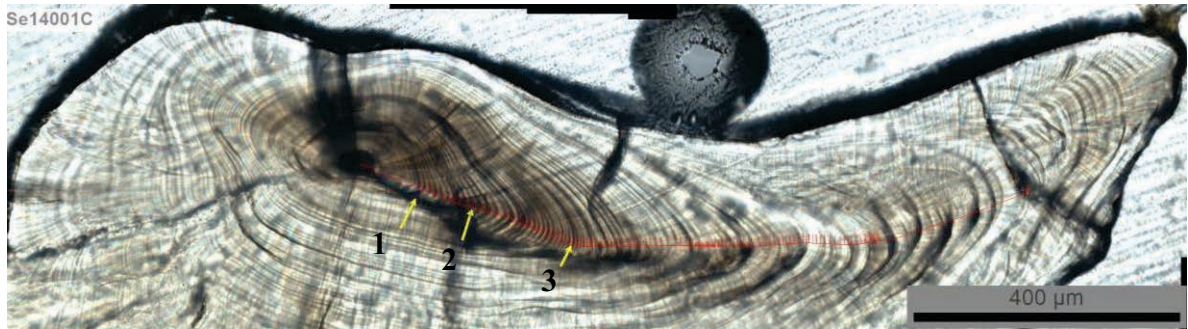


Fig. S7 Sectioned lapilli otolith from wild splittail showing daily growth increments and transect. The aging transect (red line) begins at the core of the otolith (dark circle) and each day is marked along the transect. Hatch check (arrow-1) and 10 days post hatch (arrow-2) delineate the maternal from environmental influence on otolith chemistry. The majority of individuals showed elevated Se:Ca around 25 days post hatch (arrow-3). These transects and increment data were later used in linking the chemical maps with daily ages.



April 10, 2021

Mr. David Vang
 Resources Engineer
 Westlands Water District
 3130 N. Fresno Street
 Fresno, California 93703-6056
 Email: dvang@wwd.ca.gov

Scoping Comments on the Notice of Preparation of an Environmental Impact Report for Westlands WD’s proposed Groundwater Pumping and Conveyance Project

Thank you for the opportunity to provide scoping comments on the Notice of Preparation of and Environmental Impact Report (EIR) for Westlands Water District’s (Westlands) Groundwater Pumping and Conveyance Project (“Project” or “pump-in project”). Westlands posted a request for scoping comments as part of the preparation of an EIR for a 30-day period beginning on March 12, 2021 and ending on April 10, 2021.¹ Westlands is requesting input from responsible and trustee agencies, other public agencies, and interested members of the public regarding the scope and content of the environmental information to be included in the EIR. There is substantial evidence that previous Westlands groundwater pump-in projects have caused and if permitted again, will continue to cause, water pollution, land subsidence, increased water supply costs to others, and damage to the California

¹ See: <https://wwd.ca.gov/wp-content/uploads/2021/03/notice-of-preparation.pdf>

Aqueduct, which serves millions of people. Because the Project is a substantial and complex, we are encouraged that Westlands has chosen to prepare an EIR for this Project.

In April 2020, and then again in September 2020, Westlands prepared and published a Draft initial study/negative declaration (IS/ND) for this Project (State Clearinghouse #2020050434). Our organizations provided comments on the April and September 2020 Draft IS/NDs for the pump-in project and we incorporate those comments by reference. In addition, several of the undersigned organizations have previously submitted comments on this project including: 1) Comments on the Draft Environmental Assessment (DEA) for Groundwater Pump-ins Enabled by the U.S. Bureau of Reclamation (Reclamation) Warren Act Contract for Westlands Water District (EA-20-008, CGB-EA-2020-032)² dated August 20, 2020,³ 2) Comments on Reclamation's DEA on the Westlands Water District Groundwater Warren Act Contract EA-15-001 & FONSI-15-001, dated March 26, 2015,⁴ and 3) Scoping Comments for Westlands Water District Proposed "Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct" dated March 2, 2010.⁵ Our previous comments are incorporated here by reference. We ask that Westlands consider our previous comments when preparing the EIR for this Project. We reiterate key recommendations and conclusions from our previous comments here, and include a copy of our September 30, 2020 comments on the draft IS/ND as an attachment to these comments.

Authorization of Discharge Points into the SLC should be for no more than 5 Years and should not include wells that exceeded previously established MCLs in the WQMP

As we will discuss below, 35 of the 88 discharge points identified in Table 1 of the September 2020 draft IS/ND under Westlands' previous pump-in projects had at least one well that exceeded maximum contaminant levels (MCLs) identified for the constituents Arsenic (As), Selenium (Se) or Total Dissolved Solids (TDS). This information is summarized in Appendix A to our September 30, 2020 comments. We note here that the use of the MCL terminology to the water quality standards applicable to this project leads to confusion because MCLs generally refer to federal drinking water standards, which these are not. Nevertheless, in our comments we will use Reclamation's definitions as defined in the 2020 Water Quality Monitoring Plan (WQMP).

Inclusion of these discharge points needs to be supported by water quality data from previous groundwater pump-ins for long-term analysis of potential future impacts. Moreover, it is a violation of Article 14(f) of the current Warren Act Contract between Reclamation and Westlands that states, "*At all times during the term of this Contract, the Contractor shall be in compliance with the requirements of the then-current Quality Assurance Project Plan (Plan) prepared by the Contracting Officer to monitor Non-*

² The DEA is available here: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=46185

³ https://calsport.org/news/wp-content/uploads/Env-Advocate-8_20_-2020-Cmts-Re-DEA-for-WWD-Pump-in-SLC_Cal-Aqueduct-EA-....pdf & https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-WWD-SLC-Pump-in-2020-IS_ND_6-10-2020-Cal-Aqueduct.pdf

⁴ <http://calsport.org/news/wp-content/uploads/Conservation-Gr-Cmt-Ltr-3-26-15-WWD-30-K-GroundwaterDischarge-Warren-Act-Contract-EA-15-001-CMTS-Dra....pdf>

⁵ <http://calsport.org/news/wp-content/uploads/Conservation-Gr-FinalScopingCmts-03-02-2010-100K-Pump-in-CalAqueduct.pdf>

Project Water introduced into and conveyed through the Project Facilities.”⁶ We therefore recommend that only those discharge points that have not exceeded MCLs for constituents identified in Table 4 of the 2020 WQMP be authorized for 5 years, and that NO discharge points be authorized for a longer period.

Changes in SLC water quality requirements in the 2020 WQMP must be Addressed and Environmental Impacts Analyzed and Disclosed.

We note that the 2015 WQMP⁷ for discharges into the SLC contained more restrictive requirements for salt loading between Checks 13 and 21 when compared with the 2020 WQMP as follows:

- A maximum allowable change caused by pumped GW at Check 21 (Kettleman) of not to exceed 600 µS/cm EC (the 2020 WQMP allows 700 µS/cm);
- Less than 50 µS/cm EC change between Check 13 and Check 21 (the 2020 WQMP allows no more than 100 µS/cm EC change);

The Project EIR should analyze the effects of this allowable EC increase and explain why these EC control requirements have been weakened in the 2020 WQMP. We further note that compliance with the 2015 EC requirements in the SLC were exceeded routinely in 2015 as documented in DWR’s report on non-project water pump-ins for 2015⁸, as depicted in Figure 3-5 from that report.

Note that Article 14(f) of the current Warren Act Contract between Reclamation and Westlands states, “*At all times during the term of this Contract, the Contractor shall be in compliance with the requirements of the then-current Quality Assurance Project Plan (Plan) prepared by the Contracting Officer to monitor Non-Project Water introduced into and conveyed through the Project Facilities.*”⁹ We see clear evidence from DWR reports of prior Westlands groundwater pump-ins that water quality requirements in the 2015 WQMP were routinely exceeded both at the wellhead and at Check 21 in the SLC.¹⁰ This record of noncompliance calls for greater enforcement of water quality standards, not less. The EIR should disclose these past exceedances, and consider alternatives along with mitigation measures to prevent impacts to downstream beneficial water uses. The cumulative impacts of the damage to water quality, potential increase in treatment costs, associated health impacts and loss of fish and wildlife along with migratory bird populations needs to be disclosed and addressed.

⁶ See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

⁷ See Appendix C, starting at pdf pg 4:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21986

⁸ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

⁹ See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

¹⁰ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

Effects to State Fish and Wildlife Designated Beneficial Uses Associated with the California Aqueduct need to be Addressed in the EIR.

The groundwater contributions from the pump-in project are conveyed south through the California Aqueduct and stored in four reservoirs (Pyramid Lake, Castiac Lake, Silverwood Lake, and Lake Perris). The aqueduct and these four reservoirs are regulated under four Regional Water Boards jurisdictions. Designated fish and wildlife beneficial uses of the Aqueduct and downstream reservoirs are listed in Table 1.

The Central Valley Regional Water Quality Control Board (CV Regional Board) does not include fish (WARM) as a beneficial use for the aqueduct. Yet, the Department of Water Resources promotes fishing along the aqueduct and identifies five locations within or near Westlands (Fairfax, Three Rocks, Huron, Avenal Cutoff, and Kettleman City sites).¹¹ Further, the CV Regional Board includes WARM beneficial use designation for the Delta Mendota Canal,¹² so we can only surmise that the omission of a WARM beneficial use designation for the California Aqueduct is an oversight. Nonetheless, the Project should be protective of downstream beneficial uses of the water from the California Aqueduct (including the reservoirs referenced in Table 1 below) and these impacts need to be addressed in the EIR. Due to the high percentage of discharge volumes represented by the Westlands' pump-ins during certain time periods, especially under drought conditions, humans who fish the California Aqueduct are likely to be periodically exposed to much higher contaminants than the long-term average. In addition, there will be higher contaminant levels in fish than reported in canal water due to accumulation in fish tissue. This exposure, warnings, and monitoring should be disclosed, especially to low-income communities in the surrounding areas. The EIR should include biological or fish tissue monitoring requirements so that these impacts can be identified, assessed and mitigated.

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¹¹ See: https://calsport.org/news/wp-content/uploads/DWR_Fishing-Along-the-SWP.pdf

¹² See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

Table 1. Fish and Wildlife Beneficial Uses Associated with CA Aqueduct south of Pump-in Project

Waterbody Name	WARM	COLD	SPWN	WILD	RARE
California Aqueduct ¹³				E	
Castiac Lake ¹⁴	E	I	E	E	E
Pyramid Lake ¹⁸	E	E		E	E
Silverwood Lake ¹⁵	E		E	E	
Lake Perris ¹⁶	E	E		E	E

E: Existing beneficial use.

I: Intermittent beneficial use.

WARM: Warm Freshwater Habitat - Uses of water that support warm water ecosystems including but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

COLD: Cold Freshwater Habitat - Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

SPWN: Spawning, Reproduction, and/or Early Development - Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

WILD: Wildlife Habitat - Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

RARE: Endangered Species - Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

Effects of the Project on Water Quality of Refuge Water Supplies needs to be Addressed in the EIR.

The September 2020 IS/ND concluded that the Project would have less than significant impact on biological resources, but acknowledged that groundwater from the Pump-in Project would come in contact with refuge water supplies: “*The Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the proposed Project, and this would occur partly during times of the year when*

¹³ Ibid.

¹⁴ See Beneficial Use Designations of Inland Surface Waters, Los Angeles Regional Water Board: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/2020/Chapter_2/Chapter_2_Table_2_1/Chapter_2_-_Table_2-1.pdf

¹⁵ See: https://www.waterboards.ca.gov/lahtontan/water_issues/programs/basin_plan/docs/ch2_bu.pdf

¹⁶ See: https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2019/New/Chapter_3_June_2019.pdf

these refuges would receive water supplies. However, the selenium levels are expected to remain well below the threshold for an adverse effect on wildlife, which is 2 parts per billion (0.002 mg/L) as measured in the water column (USBR and San Luis & Delta-Mendota Water Authority 2009 and references therein). Water introduced under the Project would be monitored and managed to ensure the quality of water does not exceed the requirements of the Water Quality Monitoring Plan, which establishes limits on the quality of water for selenium to 2 micrograms per liter..." The September 2020 IS/ND assumed the wellhead MCL of 2 µg/L selenium established in the 2020 WQMP will be adhered to, without providing any data on the water quality performance of prior Westlands pump-ins. We note that almost 40% of the discharge points identified in Table 1 of the September 2020 IS/ND had at least one well sample that exceeded MCLs identified in the WQMP for the constituents As, Se or TDS. This information is summarized in Appendix A to our September 30, 2020 comments on the IS/ND for this Project.

The EIR should provide information on past performance of the Project including volumes from each well, and which wells were shut down during prior groundwater pump-ins, as well as the DWR reports of water quality assessments of non-project turn-ins to the California Aqueduct. Elevated selenium concentrations at the wellheads occurred even though the 2015 WQMP¹⁷ for this project listed an MCL for selenium of 2 µg/L. A lack of surveillance and enforcement has been a critical flaw of previous pump-in projects. The environmental impacts of these past failures needs to be disclosed, analyzed and mitigated in the EIR for the Project.

The EIR should also disclose any past data on the percent of flow in the Aqueduct (POA) comprised of Westlands groundwater pump-ins. In 2014 and early 2015 there were days within the fall and winter months when the Dos Amigos Pumping Plant ceased pumping, resulting in Westlands pump-ins contributing 100% of the flow in the aqueduct on those days as depicted in the Figures 3-1 and 3-2 from DWR 2015¹⁸ and Figure 3-1 from DWR 2016¹⁹ reports. Some of these time periods overlap with refuge water deliveries to Kern NWR. The impacts from deliveries of degraded water to the refuge needs to be monitored, assessed and mitigated. The past performance of Westlands groundwater pump-ins into the SLC clearly does not support a less than significant impact on biological resources and warrants a full EIR analysis.

The California Department of Fish and Wildlife (CDFW) submitted comments on the September 2020 IS/ND for the Pump-in Project dated October 5, 2020.²⁰ We adopt these comments by reference and recommend that Westlands consider these comments when developing the EIR for this project. CDFW noted that Mendota Wildlife Area (WA) has been significantly affected by groundwater overdrafting and subsidence. The Project's potentially significant direct and cumulative contributions to land subsidence in the vicinity of Mendota WA should be analyzed in the Project EIR. In addition, CDFW in their comments recommended "...that an analysis with thresholds of significance for aquatic species be included in the IS/ND with measures proposed to reduce any potentially significant impacts."

¹⁷ See Appendix C, pdf pg 4: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21986

¹⁸ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

¹⁹ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

²⁰ See: <https://ceqanet.opr.ca.gov/2020090040/2/Attachment/JS3MC2>

The EIR should Include Water Quality Standards for Selenium that are Protective of Fish and Wildlife Beneficial Uses.

On July 13, 2016 the Environmental Protection Agency (EPA) released a Final Updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water.²¹ The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 criteria reflect the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. The federal register notice identified revised chronic selenium criteria in water for lentic waters (e.g., meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps) and lotic waters (e.g., rivers and streams). EPA's revised chronic selenium criterion for lentic waters of 1.5 µg /L on a monthly basis is the criterion that should be applied to water in the aqueduct to protect downstream fish and wildlife beneficial uses.

Further, the USEPA did not include an acute selenium criterion in their July 13, 2016 Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water under Item IV: “*The criterion document does not include an acute criterion (based on water-only exposure) because selenium is bioaccumulative and toxicity primarily occurs through dietary exposure.*”²² The CV Regional Board will have to update the selenium water quality objectives for waterbodies in their geographic area, including the California Aqueduct and receiving waters during the next triennial review in 2021.

As described in Reclamation's 2020 DEA for this Project, both Mendota Wildlife Area and Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the proposed pump-in project, as well as downstream State Water Project reservoirs. Rare species that could be impacted by selenium from Westlands' contaminated groundwater discharges from the Pump-in Project include the federally listed Buena Vista Lake shrew (endangered), federally listed giant garter snake (threatened), and federally protected bald eagle (USFWS 2017).

These complex issues related to impacts on fish and wildlife beneficial uses require a full analysis of the proposed project and its impacts along with potential alternatives. The level of impact and complexity of discharging contaminants that likely remain in the food chain for decades impacting not only threatened and endangered species but the entire Pacific Flyway, should be evaluated in the Project EIR. Consultation with the CDFW and the USFWS is essential to ensure that biological resources are protected.

Water Quality Data from Previous Pump-ins should be included in the EIR.

Data on groundwater quality from participating wells during previous years of groundwater pump-ins should be provided in the EIR. Data from previous pump-ins should include water quality data from each participating well, quantity of groundwater pumped by each well, depth to groundwater of each well prior

²¹ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambientwater-quality-criterion-for-selenium-in-freshwater>

²² Ibid.

to pumping, and contaminant mass balance in the SLC. It is important to estimate mass balance contaminant loading in the California Aqueduct from these groundwater inputs to ensure that these discharges do not harm downstream beneficial uses and to determine the impacts from continuing the Pump-in Program. These data are also important to inform decision makers and the public with regard to the cumulative impacts of the Pump-in Project.

Monthly Monitoring of Aqueduct Water Quality near Kettleman City is Insufficient to Assess Environmental Impacts of Pump-in Project.

The California Department of Water Resources (DWR) conducts monthly monitoring of the California Aqueduct and has documented occurrences of elevated levels of concern for selenium at Check 21 near Kettleman City (station number KA017226), especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct.²³ As denoted in **Figure 1** of our September 30, 2020 comments on the Project IS/ND, monthly water quality samples at Check 21 have exceeded the USEPA’s July 2016 Final Updated CWA section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water 12 times between January 2012 and January 2020. These proposed objectives include a lentic water quality objective of 1.5 µg/L,²⁴ which would be the applicable selenium objective for Kern National Wildlife Refuge and other wetlands and reservoirs that are fed by water from the California Aqueduct. Further, the once-a-month water quality sampling is insufficient to establish a monthly mean water quality calculation, to capture contaminant spikes that accumulate downstream, or to assess potential bioaccumulation in the food chain. Refuge water delivered to the Kern National Wildlife Refuge is diverted from the California Aqueduct in Kern County near Check 29, downstream of where groundwater from the Pump-in Project is pumped into the Aqueduct. Inexplicably, DWR stopped collecting water quality data from Check 29 after November 2016.²⁵ We recommend that the EIR include at least weekly water quality monitoring in the Aqueduct at Check 21 and Check 29.

Warren Act Contract and Agreement Between DWR and Westlands allowing the Pump-in Project Should be Included in the Project EIR.

The proposed Westlands 5-year Warren Act Contract (Contract) allowing the conveyance of non-CVP water (groundwater) to be conveyed in a federal facility (San Luis Canal/California Aqueduct) should be included with the EIR and made available for public review. A copy of the current Contract is available on Reclamation’s website and the term of this contract is through June 30, 2022.²⁶ The contract and any changes to the contract after 2022 need to be disclosed and time for public comment provided. Further, Exhibit D to this Warren Act Contract, which identifies the minimum water quality standards for monitoring the quality of Non-Project Water introduced by Westlands into the SLC is not included with

²³ Water quality data for the California Aqueduct near Kettleman City is available here by specifying Station Name Check 21: <https://wdl.water.ca.gov/waterdatalibrary/>

²⁴ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-lifeambient-water-quality-criterion-for-selenium-in-freshwater>

²⁵ Selenium & Arsenic concentrations in the California Aqueduct at Check 29, downstream of where groundwater has been pumped into the canal increased markedly in 2015 and in the case of Arsenic were approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L.
See: http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

²⁶ See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

the Contract on Reclamation's website. In order to accurately assess the impacts and cumulative impacts of this Project, a copy of the Warren Act Contract and all Exhibits for the time period being considered (2020-2025) should be disclosed in the EIR for this Project.

Additionally, the Agreement between DWR and Westlands for introduction and conveyance of local groundwater in the California Aqueduct should be included with the EIR for public review. We note that a copy of a 2008 Agreement between DWR and Westlands allowing the introduction and conveyance of groundwater into the Aqueduct between June and September 2008 was included in the 2015 Final EA for Westlands groundwater pump-ins (SWPAO #08052).²⁷

Subsidence Monitoring Requirements in 2020 WQMP are Insufficient.

The 2020 WQMP includes requirements for groundwater level management. As described therein, well owners participating in the Pump-in Project are required to measure the initial depth to groundwater in each well before pumping into the canal, monthly from April to August, and bi-monthly from September to March. Individual wells will be shut off if the depth to groundwater reaches 75 percent of the difference between the Fall/Winter median groundwater level and the maximum depth to groundwater.

It is encouraging to see that the 2020 WQMP includes groundwater level monitoring and shutoff triggers. But the WQMP fails to identify rates of pumping or quantities of water that could be safely pumped from the areas that have experienced high subsidence (including near MWA) while staying within these generous thresholds. And while the WQMP requires monitoring of the subsidence rate during the implementation of the Project, the EIR should also include a clear plan of action for what happens when monitoring reveals excessive subsidence. The impacts of this action are complex, broad and far reaching, and need to be considered in a full EIR analysis. Consistent with recommendations from CDFW on the Project, a full EIR should evaluate all areas that would be affected by increased subsidence, including the Mendota WA, and develop a plan to offset losses of wetland and riparian vegetation communities caused by changes in hydrology associated with subsidence caused by Project pumping. CDFW recommended that the plan address mitigation for impacted habitat value and function, to achieve a minimum no net loss of these habitats, consistent with California Fish and Game Commission policy on Wetlands Resources.²⁸

Compliance with Clean Water Act is Absent.

The U.S. EPA provided scoping comments to Westlands for a NOP to complete an EIR on groundwater pump-ins into the Aqueduct in 2010 and we incorporate those comments by reference.²⁹ EPA noted that the proposed discharge of contaminated groundwater from Westlands with potentially high salt, boron, chromium, arsenic, selenium and other metals would be subject to NPDES permitting requirements pursuant to the federal Clean Water Act (CWA). Further EPA stated, "*Permits will need to be designed to ensure the discharges do not cause or contribute to exceedances of applicable State water quality standards or degradation of designated beneficial uses.*"³⁰ Westlands should obtain the required CWA

²⁷ The 2008 Agreement between DWR and Westlands for the introduction and conveyance of groundwater into the Aqueduct was included in Appendix A of the 2015 Final EA for the Pump-in Project. See pdf pg 19: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21984

²⁸ See: <https://ceqanet.opr.ca.gov/2020090040/2/Attachment/JS3MC2>

²⁹ See: <http://calsport.org/news/wp-content/uploads/EPA-comments-Westlands-WD-EIR-NOP-3-4-10.pdf>

³⁰ Ibid.

permit(s) for this project and that permit should be included in the EIR. The public should be given the opportunity to analyze the NPDES permit and conditions to ensure protection and non-degradation of water supplies under the NPDES permit and potential mitigation measures.

The Clean Water Act prohibits the discharge of "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. Such a permit would contain limits on what can be discharged, monitoring and reporting requirements, and other provisions to ensure that the discharge does not harm water quality or human health. The term point source is also defined very broadly in the Clean Water Act. It means any discernible, confined and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure, or container.³¹

The EIR should Include a Comprehensive Cumulative Impacts Analysis.

When assessing whether a cumulative effect requires an EIR, the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (CEQA Guidelines § 15064(h).) The EIR for this Project should consider the cumulative impacts, including water quality, well drawdown and subsidence impacts, of past, current and future probable projects, whether they may be significant, or whether the Project's contribution would be cumulatively considerable.

Cumulative impacts from other water exchanges should be disclosed or analyzed. We adopt by reference our comments from previous exchanges and transfers and previous scoping comments.³² In addition to the continued extraction of water from already over-drafted groundwater basins, the impacts from discharging this groundwater on Westlands' toxic soils and exacerbating an existing subsurface agricultural drainage problem on the west-side of the San Joaquin Valley are not disclosed nor mitigated. Selenium found in groundwater and drainage water in Westlands is known to create life threatening

³¹ See: <https://www.epa.gov/npdes/npdes-permit-basics>

³² See: http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=14341 "Resnicks' Westside Mutual Water District member lands in Westlands Water District to the AEWSD service area and Westside Exchange Program are not disclosed nor analyzed. Nor are the impacts to Madera County from the potential groundwater transfers likely contemplated under the proposed action. The existing Exchange Program involves delivery of Arvin's supplies to Westside member lands as exchange water, based on a 1 for 1 or "bucket for bucket" basis, up to 50,000 acre feet (AF)."

See 30,000 acre feet of groundwater proposed to be transferred to Westlands et. al. from the Mendota Pool: <http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=49107>

See also North Valley Regional Recycled Water Program-- <http://www.nvrrecycledwater.org/description.asp> *The NVRRRWP could produce and deliver up to 32,900 acre-feet per year of tertiary-treated recycled water to the drought-impacted west side. This water can be used to irrigate food crops, public and privately owned landscaping, and for industrial uses. This basin transfer would alter San Joaquin River Flows and flows to refuges, and the South Delta Bay Estuary. The project would deliver up to 59,000 acre feet per year (AFY) of recycled water produced by the cities of Modesto and Turlock via the Delta-Mendota Canal (DMC), a feature of the Central Valley Project owned by Reclamation. Instead of discharging fresh treated water into the San Joaquin River, recycled water would be conveyed from Modesto and Turlock through pipelines from their wastewater treatment facilities, crossing the San Joaquin River, ending at the DMC.*

impacts to migratory birds, wildlife and fish, magnifying up the food chain as these pollutants accumulate. The impacts from previous pump-ins should be included in the EIR. Alternatives to the pump-ins should be considered. Finally, the Project EIR should include analysis of the cumulative impacts of discharging these contaminants into drinking water, wildlife refuge supplies, and its effects on downstream fish and wildlife beneficial uses.

Additionally, we refer to CDFW's recommendations on the May 2020 IS/ND³³ for this project with respect to cumulative effects, "...lowered water quality and increased salt loading could potentially impact sensitive aquatic species such as the giant garter snake, and affect habitats for sensitive status species, especially in the context of other existing and pending projects affecting water quality and ground subsidence of Mendota Pool, the MWA, and surrounding areas. CDFW recommends that the cumulative impacts analysis include the effects to special status species from this Project and other current and foreseeable projects." These and other cumulative impacts must be adequately studied in an EIR.

More Robust Monitoring Program & Enforcement Actions are Needed.

To protect downstream beneficial uses, we recommend the following be incorporated into a revised WQMP for the Project:

- Well water should not be conveyed into the Aqueduct until it has been confirmed that the well water does not exceed the selenium wellhead standard of 2 µg/L (from Table 4 of the WQMP);
- Weekly monitoring of wells (while pumps are running) that have had at least one water quality sample above 2 µg/L selenium during the 2015 and 2016 pump-ins;
- Weekly water quality sampling for selenium at Check 21 of the California Aqueduct while Westlands is pumping groundwater into the Aqueduct;
- The selenium objective for the California Aqueduct should be 1.5 µg/L to be protective of downstream beneficial uses associated with the Aqueduct and Mendota Pool;
- Well water pumped into the Mendota Pool should not exceed 600 mg/L TDS to protect Mendota Wildlife Area water quality;
- Weekly water monitoring of wells and the Aqueduct at Check 21 should require rapid turnaround so results are received within 7 days and can be responsive to current and changing conditions.
- Well water from Westlands should not be pumped into the Aqueduct if Dos Amigos Pumping Plant is not operating.
- There needs to be an established protocol dictating required actions and enforcement when water quality standards are exceeded at individual wells or in the aqueduct and related conveyance canals.

Conclusion

The Project EIR should adequately assess the potentially significant environmental impacts from the Pump-in Project and consider alternatives to the project. There are reasonably available alternatives that have not previously been considered and should be analyzed in order to reduce the potentially significant environmental impacts. The Project EIR should include an assessment of the cumulative impacts including third party impacts and impacts to fish, wildlife and water quality.

³³ See: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/5CSO8N>

The Project EIR needs to include, among other things, a revised WQMP to ensure waters of the State and Nation are not degraded, compilation and analysis of prior groundwater water quality data, flow rates and quantities pumped from participating wells from previous pump-ins, a mass-balance model for selenium in the Aqueduct, the Warren Act Contract and Exhibits, the Agreement between DWR and Westlands allowing groundwater inputs into the California Aqueduct, documentation of CWA permit compliance, the necessary consultations with Federal and State fish and wildlife agencies concerning potential endangered and threatened species impacts. and full analysis of alternatives and cumulative impacts. This information and analysis should be included in the EIR. Lastly, the conveyance period for the Pump-in Project in 2020 should not commence prior to the completion of the appropriate CEQA decision documents.

Thank you for the opportunity to comment. Please add our names to Westlands' electronic notification lists for environmental documents regarding water supplies or contracts or conveyance. Please also include Patricia Schifferle at pacificadvocates@hotmail.com. Please update your notification list a number of the undersigned were not noticed regarding the "virtual scoping" session and the notice of preparation with a Saturday at 5pm public review deadline.

Thank you for your consideration,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



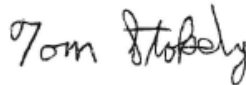
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



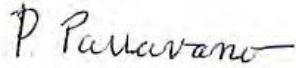
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](#)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



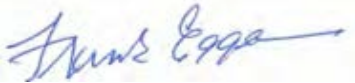
Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



Gerald Neuburger
Representative
Delta Fly Fishers
gneuburg@gmail.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org

Attachment: Environmental Advocates Comments on the 2020 Draft Initial Study



September 30, 2020

Mr. David Vang
 Resources Engineer
 Westlands Water District
 P.O. Box 6056,
 Fresno, California 93703-6056
 Email: dvang@wwd.ca.gov.

Comments on the September 2020 Draft Initial Study/Negative Declaration for Westlands Water District Warren Act Contract for Groundwater Pump-Ins and Conveyance in the San Luis Canal

Dear Mr. Vang:

Thank you for the opportunity to comment. We have reviewed the Draft Initial Study and Negative Declaration (IS/ND) and find that it is incomplete with regard to assessment of environmental impacts and is lacking sufficient data to determine compliance with the provisions of State of California water quality laws under Porter Cologne and the federal Clean Water Act (CWA), the California Endangered Species Act (CESA), the Central Valley Project Improvement Act (CVPIA) and the California Environmental Policy Act (CEQA). The groundwater pump-in project (“Project” or “Pump-In Project”) is a substantial and complex project that clearly requires a comprehensive Environmental Impact Report (EIR) to properly address potential impacts and alternatives to the proposed project.

CEQA was enacted to require public agencies and decision-makers to document and consider the environmental implications of their actions before formal decisions are made (Public Resources Code §21002), and to “[e]nsure that the long-term protection of the environment ... shall be the guiding criterion in public decisions” (Public Resources Code § 21001(d)). CEQA compels an informed process.

*It is a meticulous process designed to ensure that the environment is protected.*¹ An informed decision document under CEQA should include all relevant data and supporting information, including past monitoring data along with analysis of that data, and associated contracts and Agreements with State and Federal agencies to help inform the public and decision makers as to impacts and guide future implementation of the project. There are significant data gaps in the IS/ND that hinder the public and decision makers' from making an informed decision regarding the potential environmental consequences of allowing these discharges of contaminated groundwater into the San Luis Canal/California Aqueduct (SLC/Aqueduct). Also completely neglected are the impacts from discharging this contaminated water and substituting or exchanging it with water exported from the Delta Estuary or other exchanges that have the potential to impact the American River, Yuba River, Sacramento River and Shasta dam operations.

Westlands Water District (Westlands), an agency of the state with a singular focus of providing irrigation water, is not the appropriate lead agency for such a complex project impacting a broad geographical area. The inadequate IS and ND are the latest examples of the failure of Westlands to provide sufficient information to the public and impacted downstream beneficial water users. As stated in previous comments, the Department of Water Resources should be the lead agency for such a geographically complex project that impacts multiple counties and jurisdictions.

There is substantial evidence that previous Westlands groundwater pump-in projects have caused and if permitted again, will continue to cause, water pollution, land subsidence, increased water supply costs to others, and damage to the California Aqueduct, which serves millions of people. The IS/ND fails to provide a complete assessment of the impacts of this project, fails to include effects of these prior pump-ins on subsidence damages to the San Luis Canal (the federal/state portion of the California Aqueduct, SLC), and completely neglects to include any information and analysis of prior water quality data, quantity of groundwater pumped, percent of aqueduct flow comprised of Westlands' groundwater pump-ins, or contaminant mass balance in the SLC from previous groundwater pump-ins associated with this project. Further, the project as described in the IS/ND would violate terms under Article 16(b)(2) of Westlands WIIN Act repayment contracts which we discuss further in our comments below. The IS/ND, as presented, does not support a "fair argument" that this project does not have significant environmental impacts. The project as proposed does not support a "fair argument" that this project does not have significant environmental impacts. A full Environmental Impact Report (EIR) is required so that the environmental impacts, as well as costs and damage to downstream beneficial uses, can be adequately analyzed and described to the public and decision makers.

Further, the CEQA process must be completed before an agency makes a final decision on a proposed action. We note that the IS/ND in the Project Description on page 9 states the conveyance period for 2020 would be between August 1 and December 31. The conveyance period for this project in 2020 should commence when the CEQA and the associated NEPA documentation for this project have been finalized, not before it. Allowing discharge of this contaminated groundwater prior to completion of the CEQA and NEPA analyses precludes public input and analysis. It predetermines the action, contrary to CEQA and NEPA requirements to carefully weigh and consider public input.

¹ [Planning and Conservation League v. Department of Water Resources \(2000\) 83 Cal.App.4th 892, 911.](#)

In April 2020, Westlands prepared and published a Draft IS/ND for the Project (State Clearinghouse #2020050434). This previous Draft IS/ND was circulated for public review on April 5, 2020 for a period of 30 days. The Draft IS/ND was not adopted and has since been rescinded by Westlands. This new Draft IS/ND prepared by the Westlands incorporates new information and minor revisions to the text of the previous Draft IS/ND and was republished to align with timing of publication of the United States Bureau of Reclamation's (Reclamation) Draft Environmental Assessment (DEA) for the Westlands Water District Groundwater Warren Act Contract (published July 22, 2020). In accordance with the CEQA, Westlands, made this draft IS/ND available for a 30-day public comment period closing on October 1, 2020, State Clearinghouse Number 2020090040.² This new Draft IS/ND replaces the prior Draft IS/ND that was published in April 2020 and initiates a new public comment period on the adequacy of this new IS/ND. As noted on page 3 of the revised IS/ND, "...comment letters received on the previous Draft IS/ND will not be responded to unless resubmitted as formal comments on this new IS/ND."

Our organizations provide these comments on the Westlands Groundwater Pumping and Conveyance Project (Pump-in Project). We previously submitted comments on the April 2020 draft IS/ND for the Pump-in Project and we incorporate those comments by reference.³ In addition, several of the undersigned organizations have previously submitted comments on this project including: 1) Comments on the Draft Environmental Assessment (DEA) for Groundwater Pump-ins Enabled by the U.S. Bureau of Reclamation (Reclamation) Warren Act Contract for Westlands Water District (EA-20-008, CGB-EA-2020- 032)⁴ dated August 20, 2020,⁵ 2) Comments on Reclamation's DEA on the Westlands Water District Groundwater Warren Act Contract EA-15-001 & FONSI-15-001, dated March 26, 2015,⁶ and 3) Scoping Comments for Westlands Water District Proposed "Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct" dated March 2, 2010.⁷ Our previous comments are incorporated here by reference.

The following evaluation and comments supplement our previous comments with more detail on key issues. Comments are organized in two parts: (1) a summary of the project as described in the IS/ND as

² See: <https://ceqanet.opr.ca.gov/2020090040/2>

³ https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-WWD-SLC-Pump-in-2020-IS_ND_6-10-2020-Cal-Aqueduct.pdf

⁴ The DEA is available here: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=46185

⁵ https://calsport.org/news/wp-content/uploads/Env-Advocate-8_20_-2020-Cmts-Re-DEA-for-WWD-Pump-in-SLC_Cal-Aqueduct-EA-....pdf & https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-WWD-SLC-Pump-in-2020-IS_ND_6-10-2020-Cal-Aqueduct.pdf

⁶ <http://calsport.org/news/wp-content/uploads/Conservation-Gr-Cmt-Ltr-3-26-15-WWD-30-K-GroundwaterDischarge-Warren-Act-Contract-EA-15-001-CMTS-Dra....pdf>

⁷ <http://calsport.org/news/wp-content/uploads/Conservation-Gr-FinalScopingCmts-03-02-2010-100K-Pump-in-CalAqueduct.pdf>

background for our critique, and (2) a critique of the project, monitoring plans, and environmental impact analysis.

PROJECT SUMMARY

Under the Pump-in Project, Reclamation would enter into a five-year Warren Act Contract⁸ (for the years 2020-2025) to allow Westlands to pump in up to 30,000 acre-feet per year (AF/y) (and up to 150,000 AF over the five-year life of the project) of potentially highly contaminated non-Central Valley Project (CVP) groundwater into the California Aqueduct-San Luis Canal (SLC). Such pump-ins would occur in years in which Westland's CVP allocation is 20% or less. The period of introduction would be between April 1 and August 31 of a given year. However, as it is not possible to begin conveyance by April 1, 2020, the conveyance period for 2020 would be shifted by four months, to between August 1 and December 31. All subsequent years would use the April 1 to August 31 window. According to the IS/ND on page 9, the proposed Pump-in Project would involve four main components: groundwater pumping, water conveyance, ground subsidence monitoring, and water quality monitoring.

Non-CVP water introduced into the SLC would either be directly delivered to agricultural users or wildlife refuges located downstream of the points of introduction or operationally exchanged with Reclamation for a like amount, less conveyance losses, of Westlands' available water supplies in San Luis Reservoir. The delivery of non-CVP water to wildlife refuges is a critical aspect of the Pump-in Project to evaluate because of the sensitivity of the refuges to contamination (discussed in detail below). Exchanged water would either be delivered to agricultural users located upstream of the points of introduction in Westlands or could be exchanged for water stored in San Luis Reservoir as non-CVP water for later delivery to Westlands via the San Luis Canal. The impacts of these exchanges, the quantities, timing, and location from where the water is taken, like the Delta Estuary for example, are not disclosed or defined.

As noted on page 10 of the IS/ND the existing discharge facilities into the SLC have expired licenses and are expected to renew this year. Reclamation proposes to issue a combined 25-year license authorization for all discharge points involved in the proposed Project (identified in Table 1 of the IS/ND, on pages 11-13).

Proposed Design Constraints and Operating Criteria.

The Westlands Pump-in Project is supposed to be subject to water quality monitoring, groundwater monitoring, and reporting requirements as described in Reclamation's current San Luis Canal NonProject Water Pump-in Program 2020 Water Quality Monitoring Plan dated May 2020 (WQMP) and provided in Appendix A of Reclamation's DEA for this project. We note that the WQMP is part of a draft EA that has not yet been finalized by Reclamation.

Further, on page 53 of the IS/ND the following is states, "*USBR, in coordination with DWR and the State Water Contractors, may allow minor exceedances of certain Secondary Title 22 constituents if all*

⁸ The Warren Act (Act of February 21, 1911; Chapter 141, 36 Stat. 925) authorizes Reclamation to enter into contracts to impound, store, or convey non-CVP water in federal facilities, when excess capacity is available. Warren Act Contracts are issued by Reclamation to allow movement of non-federal water through federal facilities.

primary standards are met due to the less adverse risks to human health presented by those constituents at the secondary maximum contaminant levels.” There is no definition a minor exceedance is in the IS/ND nor the DEA.

There are numerous inconsistencies, as discussed in our detailed comments below. Further enforcement actions are absent and instead are left to vague assurances between Westlands and Reclamation. These vague assurances do not mitigate impacts nor is it clear how they will be enforced.

Water Quality Monitoring Requirements.

Baseline sampling and routine sampling of individual wells

The WQMP requires that all participating wells must have baseline sampling each year before pumping into the San Luis Canal begins for those constituents of concern used for screening-out non-compliant wells. Further, the WQMP requires that for all constituents in the Table 5 short list (except as specified in the footnotes), monitoring will continue to occur weekly for four consecutive weeks, and then monthly for the duration of pumping into the SLC.

In addition, each well is also required to be tested every three years for the full array of Title 22 constituents of concern. On page 7 of the IS/ND it states that, “*Reclamation will allow the introduction of water from two or more wells through one discharge point if the blended water meets the Title 22 standards. Special monitoring may be required for these situations.*” As we discuss in detail below, the Title 22 Drinking Water standard for selenium is not protective of fish and wildlife resources that use water from the aqueduct and this is inconsistent with the short list of water quality standards for selenium set forth in Table 5 in the WQMP. This inconsistency needs to be corrected. Further, the impacts of any such inconsistency, including the failure to monitor and enforce protective fish and wildlife water quality standards for selenium, have not been disclosed.

New in the SLC WQMP’s monitoring short list is 1,2,3-Trichloropropane (TCP). In 2017 the State Water Resources Control Board (SWRCB) added an MCL of 5 parts per trillion (ng/L) of TCP (the equivalent of five grains of sand in an Olympic-sized swimming pool) to the Title 22 list for primary drinking water chemicals.⁹ This chemical was included in a nematode fumigant made by Shell Oil and Dow Chemical companies and applied liberally to the Central Valley’s vast farmland from the 1950s through the 1980s. Water quality data reports from prior Westlands groundwater pump-ins into the SLC did not report TCP, so the concentrations of TCP of these proposed groundwater inputs is unknown. TCP contamination in groundwater has impacted groundwater pump-ins involving other districts in the Central Valley.¹⁰

⁹ See: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/SBDDW-17-001_123TCP_MCL.html

¹⁰ See: https://www.bakersfield.com/columnists/lois-henry-tainted-valley-groundwater-could-stymie-banking-deals/article_a7b50638-ee48-11ea-87be-535a106d4220.html

Table 5 from 2020 SLC WQMP

San Luis Canal
Non-Project Water Pump-in Program
Water Quality Monitoring Plan

Table 5. Water Quality Standards, Short List

Constituent	Units	Maximum Contaminant Level	Detection Limit for Reporting	CAS Registry Number	Recommended Analytical Method
Arsenic	mg/L	0.01 (1)	0.002 (2)	7440-38-2	EPA 200.8
Boron	mg/L	2.0 (13)		7440-42-8	EPA 200.7
Bromide	mg/L	(14)			
Chloride	mg/L	250 (7)		16887-00-6	EPA 300.1
Chromium, total	mg/L	0.05 (1)	0.01 (2)	7440-47-3	EPA 200.7
Hexavalent chromium	mg/L	0.010 (1)	0.001 (2)	18540-29-9	EPA 200.8
Manganese	mg/L	0.05 (7)		7439-96-5	EPA 200.7
Nitrate (as nitrogen)	mg/L	10 (1)	0.4 (2)	7727-37-9	EPA 300.1
Selenium	mg/L	0.002 (10)	0.001	7782-49-2	EPA 200.8
Sodium	mg/L	69 (12)		7440-23-5	EPA 200.7
Specific Conductance	µS/cm	1,600 (7)			SM 2510B
Sulfate	mg/L	500 (7)		14808-79-8	EPA 300.1
Total Dissolved Solids	mg/L	1,000 (7)			SM 2540C
Total Organic Carbon	mg/L	(14)			EPA 415.3
Gross alpha ⁴	pCi/L	15 (3)	3 (3)		SM 7110C
1,2,3-Trichloropropane	mg/L	0.000005 (4)	0.000005 (5)	96-18-4	SRL 524M
One-Time Screening					
Perfluorooctanoic acid (PFOA) ⁵	ng/L	N/A		0.82 (15)	EPA 537.1
Perfluorooctanesulfonic acid (PFOS) ⁵	ng/L	N/A		2.7 (15)	EPA 537.1

Short list to be measured before pumping occurs, then weekly for four consecutive weeks, and monthly for the duration of pumping into the San Luis Canal.
 (4) Monthly testing only
 (5) One-time screening conducted prior to pumping individual wells and from Lateral 7 at the Adams Avenue pump station. Although there are no MCLs developed yet, there are notification levels and response levels. The notification levels are 5.1 PPT (PFOA) and 6.5 PPT (PFOS). The response levels are 10 PPT (PFOA) and 40 PPT (PFOS) based on a running four quarter average. The lowest concentration minimum reporting levels (LCMRL) are 0.82 ng/L (PFOA) and 2.7 ng/L (PFOS).

Also included with the sampling of individual wells is one-time screening for the presence of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and, if detected, Reclamation and the California Department of Water Resources (DWR) will work with Westlands on conducting additional sampling.

Lateral 7 water quality monitoring

Under the proposed and as yet not adopted water quality monitoring program, non-project water is only allowed to enter Lateral 7 when water is being pumped into the SLC, not when flow is entering the Mendota Pool. Westlands is required to take weekly field measures for conductivity and turbidity at locations near Lateral 7 during these periods.

In addition to non-project well sampling, Westlands must collect samples from Lateral 7 at the Adams Avenue pump station. Lateral 7 water must be tested for the full suite of Title 22 (Table 6) every year. Table 5 constituents will be sampled weekly for the first four weeks, then monthly for the duration of pumping. There will be a one-time screening for the presence of Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) from Lateral 7 at Adams Avenue pump station and if detected, Reclamation and DWR will work with Westlands on conducting additional sampling.

Water Quality Monitoring of the Aqueduct

Mean daily salinity and turbidity will be measured with the DWR sensors that report real-time data to the California Data Exchange Center (CDEC). Westlands is required to download daily average data for SLC Checks 13 and 21 to measure changes in the canal between these checks that may be attributable to the addition of the non-project water.

The WQMP includes maximum allowable changes in the SLC caused by the addition of Westlands' groundwater pump-ins. These commitments are summarized in Table 4 on page 12 of the WQMP and are included below. If the addition of the non-project water is increasing the salinity (measured as electrical conductivity, or EC) of water in the SLC by more than 100 $\mu\text{S}/\text{cm}$ between Check 13 and Check 21, *Reclamation will work with Westlands and the well operators to turn off high salinity wells.* (Emphasis added) These are vague directives that lack enforcement. Without an absolute requirement that these high salinity wells are turned off, the impacts of such delay or failure to act are not disclosed nor considered.

The addition of non-project water must not raise the salinity in the SLC at Check 21 above 700 $\mu\text{S}/\text{cm}$, equivalent to 450 mg/L Total Dissolved Solids. If the salinity of water passing Check 13 is greater than 700 $\mu\text{S}/\text{cm}$, *Reclamation and Westlands will coordinate with DWR to modify or restrict non-project pumping.* Once again, these are vague directives that lack enforcement. Without an absolute requirement that these high salinity wells are turned off, such action cannot be ensured, but the potential impacts of such delay or failure to act are not disclosed.

Also, at Check 21 are requirements for TDS (NTE 450 mg/L) and selenium (NTE 2 $\mu\text{g}/\text{L}$).

Table 4. Maximum allowable changes in the San Luis Canal caused by the addition of non-project groundwater

Constituent	Monitoring Location	Maximum concentration in the San Luis Canal
Electrical conductivity	Between San Luis Canal Checks 13 and 21	Less than 100 uS/cm increase between the checks
Turbidity	Between the Lateral 7 upstream site and downstream site	Less than 10 NTU
Electrical conductivity	In the San Luis Canal at Check 21	Not to exceed 700 uS/cm
Total dissolved solids		Not to exceed 450 mg/L
Concentration of selenium		Not to exceed 2 ug/L
Concentration of any Title 22 constituent		Less than half of a Title 22 MCL

Depth to Groundwater Commitments.

The WQMP also includes requirements to measure groundwater levels and a shutoff trigger to reduce subsidence impacts. The shutoff trigger included in the WQMP requires pumping to stop at 25% above the maximum drawdown experienced by any of the wells participating in the Program, i.e., 75% Max

depth to groundwater (DTGW). The intent is to prevent further lowering of water levels beyond what has historically occurred in a given well, as illustrated in Figure 4 of the DEA and copied below.

Well owners are required to measure the initial depth to groundwater in each well before pumping into the SLC, and monthly from April through August and every other month outside of that range while the 2020 Pump-in Program is in effect. An individual well will be shutoff when its Depth to Groundwater reaches 75% of the difference between the Fall/Winter Median Groundwater Level and the Max DTGW using the following equation:

$$\text{Shutoff Trigger} = 0.75 * (\text{Max DTGW} - \text{Fall/Winter Median}) + \text{Fall/Winter Median}$$

If an individual well is shutoff due to groundwater levels reaching the shutoff trigger, it will not be allowed to resume pumping until it reaches 70% of the difference between the Fall/Winter Median

Groundwater Level and the Max DTGW using the following equation:

$$\text{Well Resumption} = 0.70 * (\text{Max DTGW} - \text{Fall/Winter Median}) + \text{Fall/Winter Median}$$

Groundwater level measurements are supposed to follow a strict schedule. If a well is shutoff it will not be measured again until the next scheduled measurement date. The participants must notify Reclamation in writing when a well is shutoff or resuming.

Figure 4 from 2020 DEA for this Project

As shown in Figure 4, Max DTGW (also referred to as Critical Head) is the greatest amount of drawdown (lowest depth to water) that has occurred within a particular well.

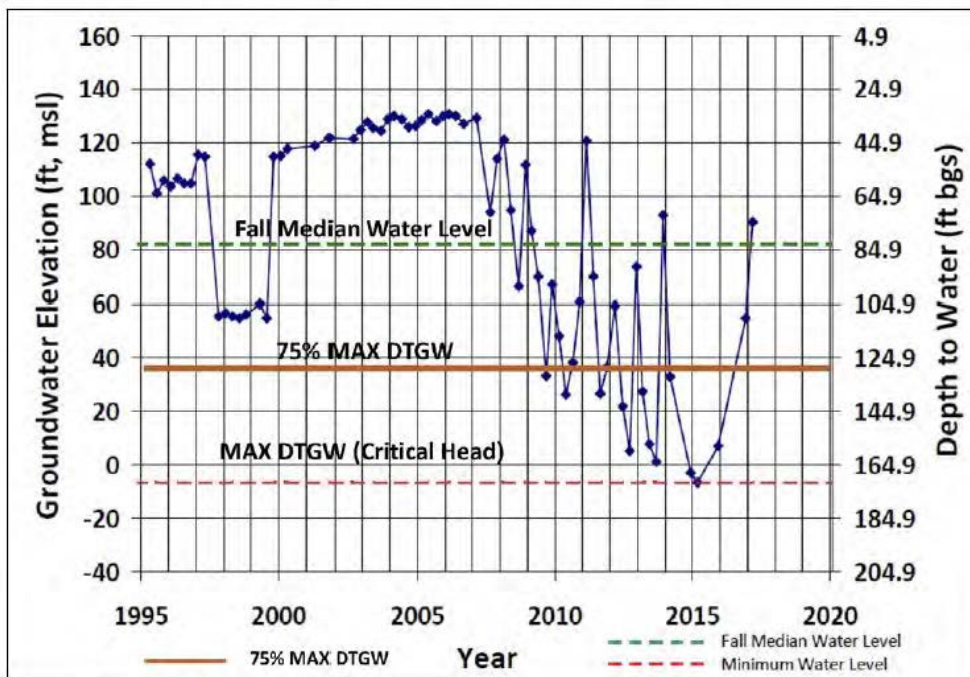


Figure 4. Example of Operation of the Shutoff Trigger

SPECIFIC COMMENTS AND RECOMMENDATIONS

Authorization of Discharge Points into the SLC should be for no more than 5 Years.

Reclamation proposes to issue a combined 25-year authorization for 88 discharge points (identified in Table 1 of the IS/ND, pages 11-13) involved in the Pump-in Project. The environmental impact of authorizing these discharges for 25 years has not been evaluated or disclosed. Further, sanctioning this groundwater discharge for a 25-year period for all discharge points in a document that covers only a 5-year Warren Act Contract for those discharges further fails to disclose the environmental impacts and fails to adopt mitigation measures. As we will discuss below, 35 of the 88 discharge points identified in Table 1 of the IS/ND under Westlands' previous pump-in projects had at least one well that exceeded maximum contaminant levels (MCLs) identified for the constituents Arsenic (As), Selenium (Se) or Total Dissolved Solids (TDS). This information is summarized in Appendix A to our comments. We note here that the use of the MCL terminology to the water quality standards applicable to this project leads to confusion because MCLs generally refer to federal drinking water standards, which these are not. Nevertheless, in our comments we will use Reclamation's definitions as defined in the, as yet, not finalized federal DEA and WQMP. This nomenclature is likely arbitrary and is used to promote confusion and obfuscation of impact and contamination.

Inclusion of these discharge points for 25-years is arbitrary and capricious and not supported by any water quality data from previous groundwater pump-ins or long-term analysis of potential future impacts. Moreover, it is a violation of Article 14(f) of the current Warren Act Contract between Reclamation and Westlands that states, "*At all times during the term of this Contract, the Contractor shall be in compliance with the requirements of the then-current Quality Assurance Project Plan (Plan) prepared by the Contracting Officer to monitor Non-Project Water introduced into and conveyed through the Project Facilities.*"¹¹ We therefore recommend that only those discharge points that do not exceed MCLs for constituents identified in Table 4 of the WQMP be authorized for 5 years, and that NO discharge points be authorized for a longer period. The public is left in the dark regarding the "*then-current Quality Assurance Project Plan.*" No such plan has been adopted under the proposed federal DEA for this project, nor is any such plan referenced in the IS/ND.

Changes in SLC water quality requirements in the 2020 WQMP must be Addressed and Environmental Impacts Analyzed and Disclosed.

We note that the 2015 WQMP¹² for discharges into the SLC restricted salt contamination between Checks 13 and 21 compared with the 2020 WQMP as follows:

¹¹ See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

¹² See Appendix C, starting at pdf pg 4:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21986

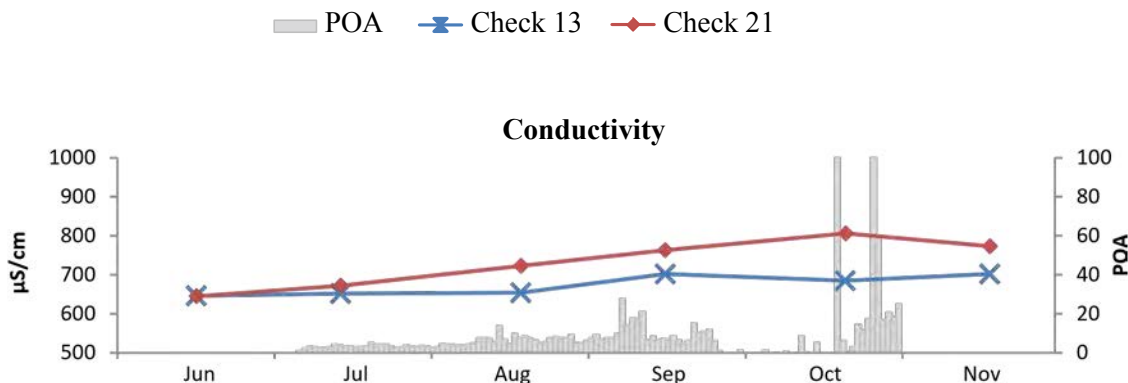
- A maximum allowable change caused by pumped GW at Check 21 (Kettleman) of not to exceed 600 $\mu\text{S}/\text{cm}$ EC (the 2020 WQMP allows 700 $\mu\text{S}/\text{cm}$);
- Less than 50 $\mu\text{S}/\text{cm}$ EC change between Check 13 and Check 21 (the 2020 WQMP allows no more than 100 $\mu\text{S}/\text{cm}$ EC change);

There is no mention of these changes in EC requirements in the SLC in the IS/ND, DEA or the 2020 WQMP, nor is there any analysis of the effects of this allowable EC increase or explanation as to why these EC control requirements have been weakened. We further note that compliance with the 2015 EC requirements in the SLC were exceeded routinely in 2015 as documented in DWR’s report on non-project water pump-ins for 2015¹³, as depicted in Figure 3-5 from that report:

CDEC continuous EC Data Checks 13 and 21 in 2015 From (DWR 2016)

Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015

Figure 3-5 Water Quality Constituents-of-Concern at Check 13 and Check 21 and Westlands Water District Percentage-of-Aqueduct Values



Note that Article 14(f) of the current Warren Act Contract between Reclamation and Westlands states, “At all times during the term of this Contract, the Contractor shall be in compliance with the requirements of the then-current Quality Assurance Project Plan (Plan) prepared by the Contracting Officer to monitor Non-Project Water introduced into and conveyed through the Project Facilities.”¹⁴ We see clear evidence from DWR reports of prior Westlands groundwater pump-ins that water quality requirements have been routinely exceeded both at the wellhead and at Check 21 in the SLC. This record of noncompliance calls for greater enforcement of water quality standards, not less. And further, the impact from these past discharges needs to be disclosed, alternatives considered along with mitigation measures adopted to prevent impacts to downstream beneficial water uses.

¹³ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

¹⁴ See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

Pump-In Project Likely to Harm State Fish and Wildlife Designated Beneficial Uses Associated with the California Aqueduct.

The groundwater contributions from the Pump-in Project are conveyed south through the California Aqueduct and stored in four reservoirs (Pyramid Lake, Castiac Lake, Silverwood Lake, and Lake Perris). The aqueduct and these four reservoirs are regulated under four Regional Water Boards jurisdictions. Designated fish and wildlife beneficial uses of the Aqueduct and downstream reservoirs are listed in Table 1.

The Central Valley Regional Water Quality Control Board (CV Regional Board) does not include fish (WARM) as a beneficial use for the aqueduct. Yet, the Department of Water Resources promotes fishing along the aqueduct and identifies five locations within or near Westlands (Fairfax, Three Rocks, Huron, Avenal Cutoff, and Kettleman City sites).¹⁵ Further, the CV Regional Board includes WARM beneficial use designation for the Delta Mendota Canal,¹⁶ so we can only surmise that the omission of a WARM beneficial use designation for the California Aqueduct is an oversight. Nonetheless, the Pump-in Project should be protective of downstream beneficial uses of the water in the California aqueduct and these impacts need to be addressed in the a full EIR that would replace this deficient IS/ND. Existing data simply does not support the adoption of a negative declaration for the environmental impacts from this project. Due to the high percentage of discharge volumes represented by the Westlands' pump-ins during certain time periods, especially drought conditions, humans who fish the California Aqueduct are likely to be periodically exposed to much higher contaminants than the long-term average. In addition, there will be higher contaminant levels in fish than monitored in canal water due to accumulation in fish tissue. This exposure, warnings, and monitoring are not disclosed, especially to low income communities in the surrounding areas, and there is no mention of fish tissue monitoring. Monitoring requirements in the WQMP do not include biological monitoring so that these impacts can be identified and assessed.

Table 1. Fish and Wildlife Beneficial Uses Associated with CA Aqueduct south of Pump-in Project

Waterbody Name	WARM	COLD	SPWN	WILD	RARE
California Aqueduct ¹⁷				E	
Castiac Lake ¹⁸	E	I	E	E	E
Pyramid Lake ¹⁸	E	E		E	E
Silverwood Lake ¹⁹	E		E	E	

¹⁵ See: https://calsport.org/news/wp-content/uploads/DWR_Fishing-Along-the-SWP.pdf

¹⁶ See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

¹⁷ Ibid.

¹⁸ See Beneficial Use Designations of Inland Surface Waters, Los Angeles Regional Water Board: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/2020/Chapter_2/Chapter_2_Table_2_1/Chapter_2_-_Table_2-1.pdf

¹⁹ See: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/ch2_bu.pdf

Lake Perris ²⁰	E	E		E	E
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E: Existing beneficial use.

I: Intermittent beneficial use.

WARM: Warm Freshwater Habitat - Uses of water that support warm water ecosystems including but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

COLD: Cold Freshwater Habitat - Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

SPWN: Spawning, Reproduction, and/or Early Development - Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

WILD: Wildlife Habitat - Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

RARE: Endangered Species - Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

Effects on Refuge Water Supplies – Percent of Aqueduct of Westlands' Pump-ins.

On page 34 under "item d" the IS/ND concludes that the proposed project would have less than significant impact on biological resources, but acknowledges that groundwater from the Pump-in Project will comingle with refuge water supplies: *“The Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the proposed Project, and this would occur partly during times of the year when these refuges would receive water supplies. However, the selenium levels are expected to remain well below the threshold for an adverse effect on wildlife, which is 2 parts per billion (0.002 mg/L) as measured in the water column (USBR and San Luis & Delta-Mendota Water Authority 2009 and references therein). Water introduced under the Project would be monitored and managed to ensure the quality of water does not exceed the requirements of the Water Quality Monitoring Plan, which establishes limits on the quality of water for selenium to 2 micrograms per liter...”* The IS/ND assumes the wellhead MCL of 2 µg/L selenium established in the 2020 WQMP will be adhered to, without providing any data on the water quality performance of prior Westlands pump-ins. We note that almost 40% of the discharge points identified in Table 1 of the IS/ND had at least one well sample that exceeded MCLs identified in the DEA for the constituents As, Se or TDS. This information is summarized in Appendix A to our comments. Information on volumes from each well, and which wells were shut down during prior groundwater pump-ins was not provided in the IS/ND nor the DWR reports of water quality assessments of non-project turn-ins to the California Aqueduct. Westlands also did not

²⁰ See:

https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2019/New/Chapter_3_June_2019.pdf

provide this information, as was requested under the California Public Records Act.²¹ These elevated selenium concentrations at the wellheads occurred even though the 2015 WQMP²² for this project listed an MCL for selenium of 2 µg/L, shown in Table 4 below. A lack of surveillance and enforcement has been a critical flaw of previous pump-in projects. The environmental impacts from this failure needs to be disclosed and analyzed.

San Luis Canal Non-Project Ground Water Pump-in Program 2015 Water Quality Monitoring Plan

Table 4. Water Quality Standards, Initial Test

Constituent	Maximum Contaminant Detection Limit for Analytical			Recommended CAS Registry	
	Units	Level	Reporting	Number	Method

Field Measurements

The IS/ND also fails to disclose any data on the percent of flow in the Aqueduct (POA) comprised of Westlands groundwater pump-ins. In 2014 and early 2015 there were days within the fall and winter months when the Dos Amigos Pumping Plant ceased pumping, resulting in Westlands pump-ins contributing 100% of the flow in the aqueduct on those days as depicted in the Figures 3-1 and 3-2 from DWR 2015²³ and Figure 3-1 from DWR 2016²⁴ reports and copied below. Some of these time periods overlap with refuge water deliveries to Kern NWR. The impacts from deliveries of degraded water to the refuge needs to be monitored and disclosed. The past performance of Westlands groundwater pump-ins into the SLC clearly does not support a less than significant impact on biological resources and warrants a full EIR analysis.

²¹ <https://calsport.org/news/wp-content/uploads/Canal-Integration-Program-Third-Response-Schifferle-071720.pdf>

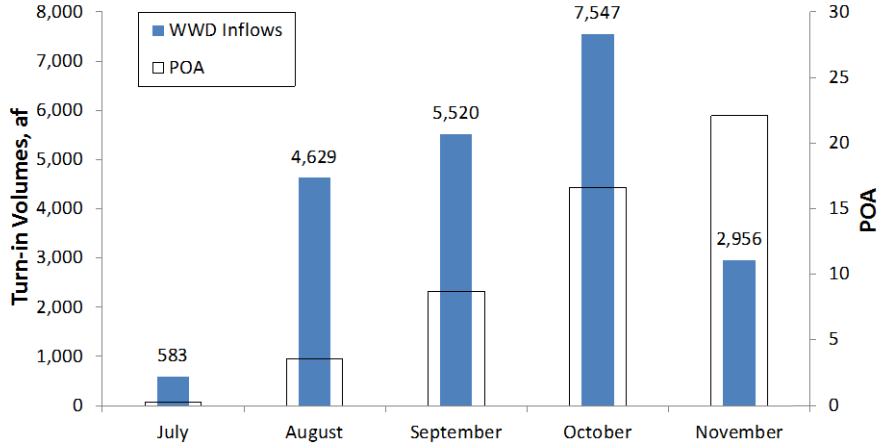
²² See Appendix C, pdf pg 4: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21986

²³ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

²⁴ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

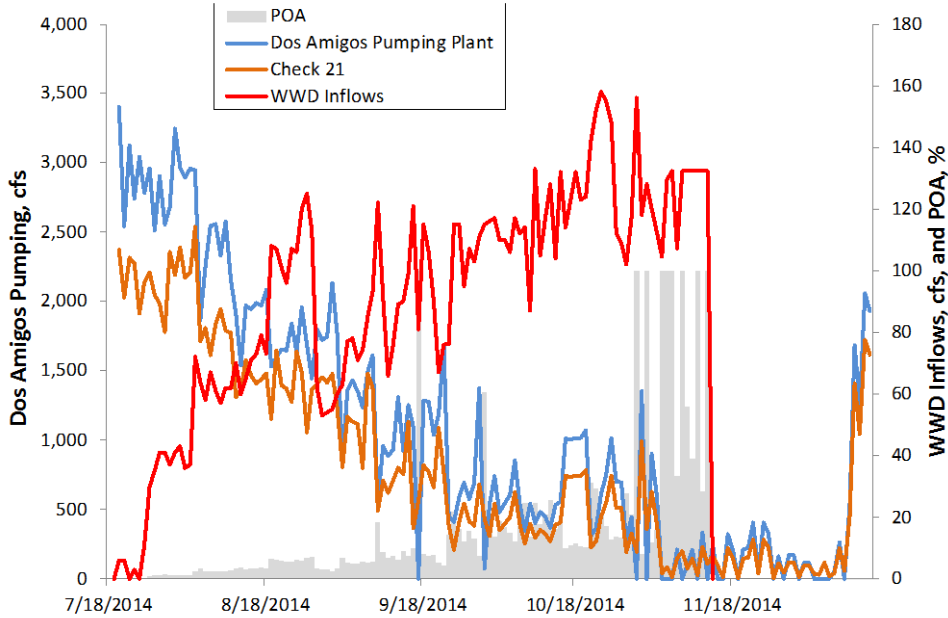
Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2014

Figure 3-1. Monthly Inflows to the Aqueduct from Westlands Water District and Calculated Percentage-of-Aqueduct Values



Notes: af = acre-feet, POA = percentage-of-Aqueduct, WWD = Westlands Water District

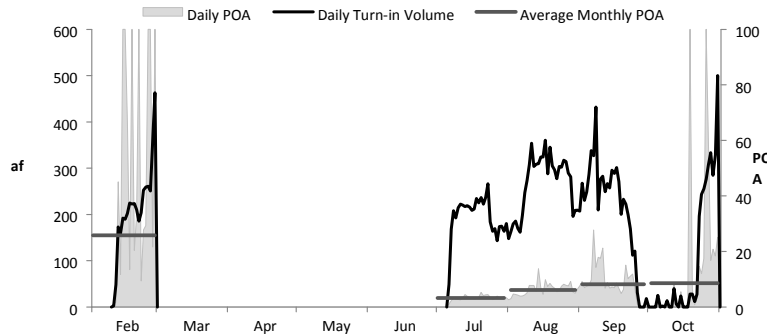
Figure 3-2. Daily Inflows to the Aqueduct from Westlands Water District, Pumping at Dos Amigos Pumping Plant, Check 21 Flows, and Calculated Percentage-of-Aqueduct Values



Notes: cfs = cubic feet per second, POA = percentage-of-Aqueduct, WWD = Westlands Water District

Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015

Figure 3-1 Daily Inflows to the Aqueduct from Westlands Water District and Calculated Percentage-of-Aqueduct Values



DAPP Pumping	18,297	66,621	110,738	150,896	70,871	131,353		
Total Turn-in Volume	4,297	-	-	-	-	5,014	6,341	2,932
Average Monthly POA	26 ^a	-	-	-	-	3.3 ^a	8.2	8.6

Notes:

af = acre-feet, DAPP = Dos Amigos Pumping Plant,
POA = percentage-of-Aqueduct

POAs of 100 percent during February and October represent days when Dos Amigos PP was inactive.

^aCalculations for monthly POAs begins on the first day of turn-in operations.

The California Department of Fish and Wildlife (CDFW) submitted comments on the previous IS/ND for the Pump-in Project dated June 22, 2020.²⁵ We adopt these comments by reference. CDFW wrote that, “Mendota Wildlife Area (MWA) is located directly adjacent to Westlands, and several groundwater wells are located either directly adjacent to the MWA or in the nearby vicinity. Some of these wells pump groundwater into the Inlet Canal, which runs along the southern boundary of the MWA and connects to the WWD via Lateral Canals 6 and 7. Although not identified as a subsidence prone area in the ND, MWA has been significantly affected by groundwater overdrafting and subsidence.” The Project’s potentially significant direct and cumulative contributions to land subsidence in the vicinity of Mendota WA requires a full EIR.

²⁵ See: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/5CSO8N>

The IS/ND states on page 33 under item “d” that “*Groundwater pumped from wells within the vicinity of the MWA under the Project would be conveyed directly to Lateral 7 and conveyed away from the MWA towards the SLC. Groundwater supplies conveyed through Lateral 7 would not mix with water supplies in the MWA to avoid introduction of any potential constituents of concern with regard to wildlife (e.g., selenium, TDS) into the MWA.*” Yet page 12 of Reclamation’s DEA for this project contradicts the IS/ND with respect to groundwater commingling with Mendota WA water supplies: “*Both Mendota Wildlife Area and Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the Proposed Action, and this would occur partly during times of the year when these refuges would receive water supplies.*” Further, on page 32 of the IS/ND it states, “*There are instances where the MWA receives non-Project water from Lateral 7; however, water introduced to Lateral 7 would not be conveyed to the MWA.*” It is unclear how MWA would not be affected by Project pump-ins into Lateral 7 if they can receive water from Lateral 7. These inconsistencies need to be addressed and corrected.

With respect to water quality requirements of pumped groundwater and associated refuge water quality impacts CDFW noted for Mendota Pool, “*The primary disqualifying factor would be high salinity levels, where any well with TDS exceeding 1,000 mg/L would be disqualified. This upper limit is 20% higher than the daily mean TDS water quality objective for the MWA of 800 mg/L or less (Reclamation Water Contract Number 14-OC-200 for Refuge Water Supplies to MWA). The addition of water with TDS higher than 800 mg/L would increase the salinity of the receiving waters in the MWA.*”

CDFW recommended “*...that an analysis with thresholds of significance for aquatic species be included in the IS/ND with measures proposed to reduce any potentially significant impacts.*” Again, the effects to Mendota WA do not a negative declaration of environmental impacts. Significant environmental impacts have been identified and thus, a full EIR analysis is required to adequately inform the public, downstream beneficial uses and other water contracts of the potential to degrade the waters of the state and nation from these discharges.

Water quality standards for Selenium in IS/ND are not Protective of Fish and Wildlife Beneficial Uses.

On page 32 under "item f" the IS/ND concludes that “*Because discharged water under the Project would be subject to rigorous monitoring and testing to meet Title 22 water quality standards and the requirements of the 2020 Water Quality Monitoring Plan, salinity levels of the Kern National Wildlife Refuge water supplies would also be protected. The proposed Project would not convey flows to the MWA. There are instances where the MWA receives non-Project water from Lateral 7; however, water introduced to Lateral 7 would not be conveyed to the MWA. Therefore, no impacts would occur.*” No data is provided to support this conclusion. In fact previous monitoring reports dispute such a blanket claim. Also, as previously noted, the IS/ND assumes the wellhead MCL of 2 µg/L selenium established in the 2020 WQMP will be adhered to with only vague enforcement assurances. Past data on the water quality performance of prior Westlands pump-ins draws this assumption into question. Biological data is absent. Furthermore, the monitoring provided in the IS/ND does not support such a conclusion.

Moreover, on page 7 of the IS/ND, it is stated that “*Reclamation will allow the introduction of water from two or more wells through one discharge point if the blended water meets the Title 22 standards.*” The Title 22 selenium objective of 50 µg /L and the 20 µg /L EPA drinking-water MCL for selenium, are

not protective of fish and wildlife resources that use water from the Aqueduct, which require levels less than 2 µg /L, specifically 1.5 µg /L. The blending of water from two or more wells to meet “Title 22 water quality standards” clearly is not protective of endangered species, migratory birds using the Pacific Flyway and other fish and wildlife that rely upon waters from the San Luis Canal/California Aqueduct.

On July 13, 2016 the Environmental Protection Agency (EPA) released a Final Updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water.²⁶ The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. The federal register notice identified revised chronic selenium criteria in water for lentic waters (e.g., meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps) and lotic waters (e.g., rivers and streams). EPA's revised chronic selenium criterion for lentic waters of 1.5 µg /L on a monthly basis is the criterion that should be applied to water in the aqueduct to protect downstream fish and wildlife beneficial uses.

As described in Reclamation's DEA for this project, both Mendota Wildlife Area and Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the proposed Pump-in Project, as well as, downstream State Water Project reservoirs. Rare species that could be impacted by selenium from Westlands' contaminated groundwater discharges from the Pump-in Project include the federally listed Buena Vista Lake shrew (endangered), federally listed giant garter snake (threatened), and federally protected bald eagle (USFWS 2017).

CDFW comments on the previous IS/ND for the Pump-in Project noted the likelihood for other species to be impacted: “*Special-status species in the Project vicinity include the State and federally threatened giant garter snake, the State threatened and federally endangered San Joaquin kit fox (Vulpes macrotis mutica), the State and federally endangered Tipton kangaroo rat (Dipodomys nitratoides nitratoides), the State and federally endangered and State fully protected blunt-nosed leopard lizard (Gambelia sila), the State threatened Swainson's hawk (Buteo swainsoni), the State threatened Nelson's antelope squirrel (Ammospermophilus nelsoni), the State threatened tricolored blackbird (Agelaius tricolor), the federally endangered and California Rare Plant Rank (CRPR) 1B.2 San Joaquin woollythreads (Monolopia congdonii), the CRPR 1B.2 Munz's tidy-tips (Layia munzii), the State candidate for listing crotch bumble bee (Bombus crotchii), and the State species of special concern American badger (Taxidea taxus), Tulare grasshopper mouse (Onychomys torridus tularensis), San Joaquin coachwhip (Masticophis flagellum ruddocki), and burrowing owl (Athene cunicularia).*”

These complex issues related to impacts on fish and wildlife beneficial uses require a full analysis of the proposed project and its impacts along with potential alternatives. The level of impact and complexity of

²⁶ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambientwater-quality-criterion-for-selenium-in-freshwater>

discharging contaminants that likely remain in the food chain for decades impacting not only threatened and endangered species but the entire Pacific Flyway, requires an EIR. Consultation with the CDFW and the USFWS is essential to ensure that biological resources are protected.

Water Quality Data from Previous Pump-ins is not Provided.

Data on groundwater quality from participating wells is not provided in the IS/ND. The only groundwater data from individual wells for a Westlands previous pump-in that was available on the web was collected by the California Department of Water Resources in 2008.²⁷ Some of the wells sampled in 2008 are included in Table 1 of the IS/ND for the current project. Further, we received DWR Technical Memoranda Reports on the Non-Project Turn-ins to the California Aqueduct for the years 2014,²⁸ 2015,²⁹ and 2016³⁰ from a Public Records Request to Westlands in July 2020.³¹ That data from 2008 and 2014-16 highlights the significant variability of selenium in well water from the Westlands pump-ins and many of the samples reported were well above the MCL for selenium in the 2015 WQMP (2 µg/L).

Reclamation's San Luis Canal Non-Project Water Pump-in Program Water Quality Monitoring Plan from 2015 required that:

“Westlands will provide the following information to Reclamation prior to pumping groundwater into the canal:

- the location of each well, pumping rate, and point of discharge into the San Luis Canal (Appendix B);*
- complete water quality analyses (Table 5) and Table 4 for new wells and each new year of pump-ins*
- the depth to groundwater in every well before pumping into the San Luis Canal commences...*

When the Project is operating, Westlands will provide DWR and Reclamation with periodic (daily and weekly, as necessary) schedules which identify the approved source wells flow rates, locations of pump-in by Aqueduct Mile Post, and deliveries by Reach.

²⁷ Select Project, then WWD 2008 Pump Ins at:
<https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>

²⁸ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

²⁹ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

³⁰ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2016.pdf>

³¹ <https://calsport.org/news/wp-content/uploads/Canal-Integration-Program-Third-Response-Schifferle-071720.pdf>

Westlands shall provide weekly updates identifying the current and anticipated water quality changes within the SLC by using the daily model. The goal is to provide Reclamation and the State Water Project Facilitation Group with a day-to-day prediction of downstream water quality using real-time pump-ins, real-time upstream background flows, and current background water quality data.”

Inexplicably, none of this data from previous pump-ins is presented in the IS/ND. The IS/ND fails to include any prior data from previous Westlands groundwater pump-ins on water quality, quantity of groundwater pumped by each well, depth to groundwater of each well prior to pumping, or contaminant mass balance in the SLC. Data on the previous performance of the Pump-in Project is essential information missing from the IS/ND. It is important to estimate mass balance contaminant loading in the California Aqueduct from these groundwater inputs to ensure that these discharges do not harm downstream beneficial uses and to determine the impacts from continuing the Pump-in Program. These data are also important to inform decision makers and the public with regard to the cumulative impacts of the Pump-in Project. As emphasized for other issues as well, the IS/ND should be withdrawn and replaced with a full EIR analysis that includes all of this and other critical information for public comment review.

Monthly Monitoring of Aqueduct Water Quality near Kettleman City is Insufficient to Assess Environmental Impacts of Pump-in Project.

The California Department of Water Resources (DWR) conducts monthly monitoring of the California Aqueduct and has documented occurrences of elevated levels of concern for selenium at Check 21 near Kettleman City (station number KA017226), especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct.³² As denoted in **Figure 1** below, monthly water quality samples at Check 21 have exceeded the US EPA’s July 2016 Final Updated CWA section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water 12 times between January 2012 and January 2020. These proposed objectives include a lentic water quality objective of 1.5 µg/L,³³ which would be the applicable selenium objective for Kern National Wildlife Refuge and other wetlands and reservoirs that are fed by water from the California Aqueduct. Further, the once-a-month water quality sampling is insufficient to establish a monthly mean water quality calculation, to capture contaminant spikes that accumulate downstream, or to assess potential bioaccumulation in the food chain. Refuge water delivered to the Kern National Wildlife Refuge is diverted from the California Aqueduct in Kern County near Check 29, downstream of where groundwater from the Pump-in Project is pumped into the Aqueduct. Inexplicably, DWR stopped collecting water quality data from Check 29 after November 2016.³⁴

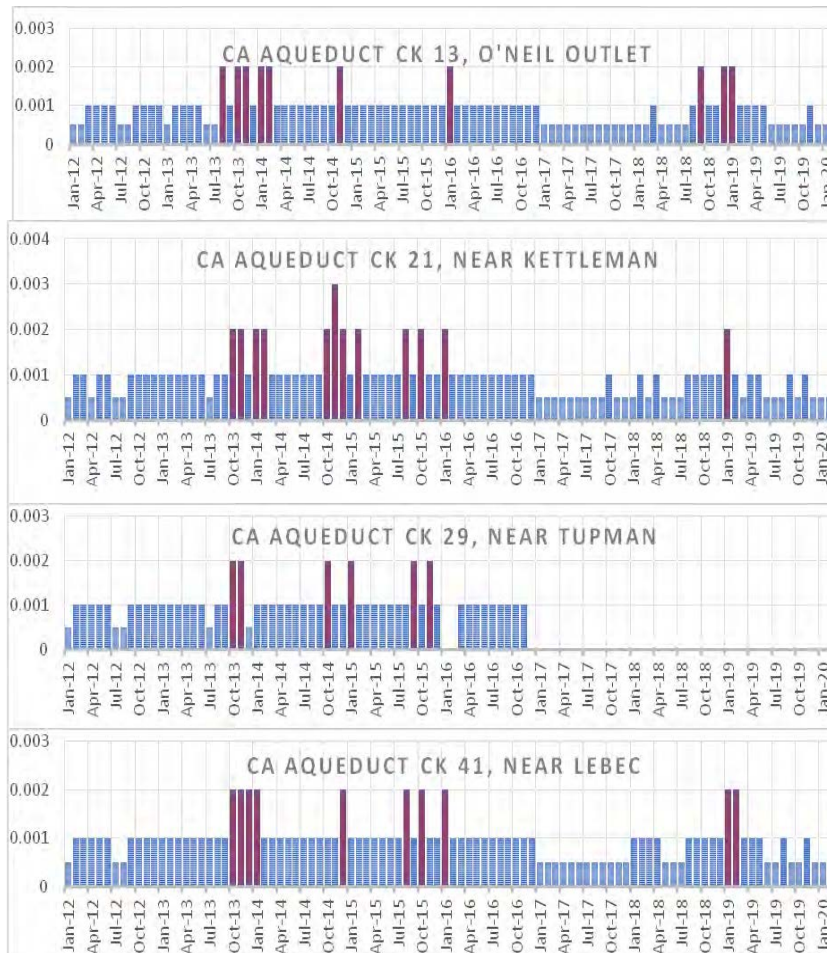
³² Water quality data for the California Aqueduct near Kettleman City is available here by specifying Station Name Check 21: <https://wdl.water.ca.gov/waterdatalibrary/>

³³ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-lifeambient-water-quality-criterion-for-selenium-in-freshwater>

³⁴ Selenium & Arsenic concentrations in the California Aqueduct at Check 29, downstream of where groundwater has been pumped into the canal increased markedly in 2015 and in the case of Arsenic were approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L. See: http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

Elevated selenium in the Aqueduct is typically associated with drier water years when a larger proportion of total volume in the Aqueduct is comprised of groundwater inputs. Groundwater inputs entering into the Aqueduct (from various sources including Westlands) were 46 percent of the total volume entering the aqueduct in 2014,³⁵ 44 percent in 2015,³⁶ and 8.3 percent in 2016.³⁷

Figure 1. Total selenium concentrations in water samples from the California Aqueduct at Checks 13, 21, 29, and 41. Light-shaded bars at 0.0005 mg/L are non-detections, dark blue bars are detections at 0.001 mg/L, and red bars are samples that equaled or exceeded 0.002 mg/L, and exceeded the lentic water quality objective for selenium of 0.0015 mg/L (1.5 µg/L). The Y axis is total Selenium in mg/L, the X axis is Mo-Yr of Sample Date:



³⁵ See page 86 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-15-r.pdf>

³⁶ See page 84 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-16-r.pdf>

³⁷ See page 94 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-17-r.pdf>

Project as Defined in IS/ND and WQMP Violates Article 16(b)(2) of Westlands WIIN Act Repayment Contracts.

Reclamation is in the process of completing and executing CVP repayment contracts for Westlands including contract #: 14-06-200-495A, 14-06-200-3365A, 14-06-200-8092, 7-07-20-W0055, 14-06-200-8018, 14-06-200-3365A, and 14-06-200-7823J. All of these contracts include language under Article 16(b) regarding use of Project facilities for conveyance and/or diversion of non-project water owned or acquired by Westlands.³⁸ Article 16(b)(2) of these contracts defines the following provisions for non-Project water: “*Delivery of such non-Project water in and through Project facilities shall only be allowed to the extent such deliveries do not:*

- (i) interfere with other Project purposes as determined by the Contracting Officer,*
- (ii) reduce the quantity or quality of water available to other Project Contractors;*
- (iii) interfere with the delivery of contractual water entitlements to any other Project Contractors; or*
- (iv) interfere with the physical maintenance of the Project facilities.”*

The IS/ND and WQMP allow degradation of water quality in the Aqueduct between Check 13 and Check 21 (a maximum allowable change in EC of 100 $\mu\text{S}/\text{cm}$). This would violate Article 16(b)(2)(ii) of the Westlands contracts. Further, the IS/ND and WQMP allows a selenium concentration of 2 $\mu\text{g}/\text{L}$ in the Aqueduct which exceeds the U.S.EPA’s revised chronic selenium criterion for lentic waters of 1.5 $\mu\text{g}/\text{L}$. As we have noted previously, EPA’s revised chronic selenium criterion for lentic waters is a monthly mean of 1.5 $\mu\text{g}/\text{L}$ and this is the criterion that should be applied to water in the California Aqueduct to protect fish and wildlife beneficial uses, including refuge water supplies at Kern NWR and Mendota WA. Allowing the degradation of water quality in the Aqueduct would interfere with Project obligations to provide water of suitable quality to refuges identified in CVPIA, a violation of Article 16(b)(2)(i) of the Westlands contracts. Lastly, as discussed below, previous Westland groundwater pump-ins have contributed to subsidence and resulted in significant operational impacts to the Aqueduct including reduced conveyance capacity, increase in power cost, and decrease in available freeboard. These impacts violate Article 16(b)(2)(iv) of the Westlands WIIN Act Repayment Contracts. And further these contracts do not comply with provisions of the CVPIA requiring the restoration and mitigation of fish, wildlife, migratory birds and waterfowl impacts.

Warren Act Contract and Agreement Between DWR and Westlands allowing the Pump-in Project are not Included in the in the IS/ND.

The proposed Westlands 5-year Warren Act Contract (Contract) is not included with the IS/ND and has not been made available for public review, thus an informed decision and analysis is precluded. A copy of the current Contract is available on Reclamation’s website and the term of this contract is through June 30, 2022.³⁹ Will there be changes to the contract after 2022? Further, Exhibit D to this Contract, which

³⁸ See: <https://www.usbr.gov/mp/wiin-act/docs/usbr-westlands-draft-wiin-act-contract-public-comment-period-10-22-19.pdf>

³⁹ See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

identifies the minimum water quality standards for monitoring the quality of Non-Project Water introduced by Westlands into the SLC is not included with the Contract. In order to accurately assess the impacts and cumulative impact of this Project, a copy of the Contract and all Exhibits for the time period being considered (2020-2025) should be disclosed and included in the IS/ND for this Project.

Additionally, adding to the incomplete project description and definition of the project, apparently there exists an Agreement between DWR and Westlands for introduction and conveyance of local groundwater in the California Aqueduct, and this Agreement is likewise not provided for public review. We note that a copy of a 2008 Agreement between DWR and Westlands allowing the introduction and conveyance of groundwater into the Aqueduct between June and September 2008 was included in the 2015 Final EA for Westlands groundwater pump-ins (SWPAO #08052).⁴⁰

Without these documents, the public is prevented from seeing key information regarding the contractual requirements of this action. Omitting these key documents keeps the public in the dark regarding the project definition, baseline and potential contractual remedies available to downstream beneficial uses that are harmed by the degradation of water quality in the SLC/California Aqueduct.

Subsidence Monitoring Requirements Are Insufficient.

Land subsidence is a major and growing consequence of groundwater pumping in the project area and threatens the California Aqueduct and other infrastructure. Increases in subsidence, impacts and costs to the California Aqueduct, and long-term cumulative impacts are significant. USGS recently reported, *“Extensive groundwater pumping from San Joaquin Valley aquifers is increasing the rate of land subsidence, or sinking. This large-scale and rapid subsidence has the potential to cause serious damage to the water delivery infrastructure that brings water from the north of the valley to the south where it helps feed thirsty cropland and cities. According to a new report by the U.S. Geological Survey the subsidence is occurring in such a way that there may be significant operational and structural challenges that need to be overcome to ensure reliable water delivery.”*⁴¹

Further, DWR has been funding and working with NASA’s Jet Propulsion Laboratory (JPL) to monitor subsidence in the San Joaquin Valley since July 2013. It uses interferometric synthetic aperture radar (InSAR) from satellites and aircraft to record the distance between the radar and the ground surface. This work has identified significant areas of subsidence in Westlands as shown in the figure below taken from DWR’s 2017 California Aqueduct Subsidence Study Report.⁴²

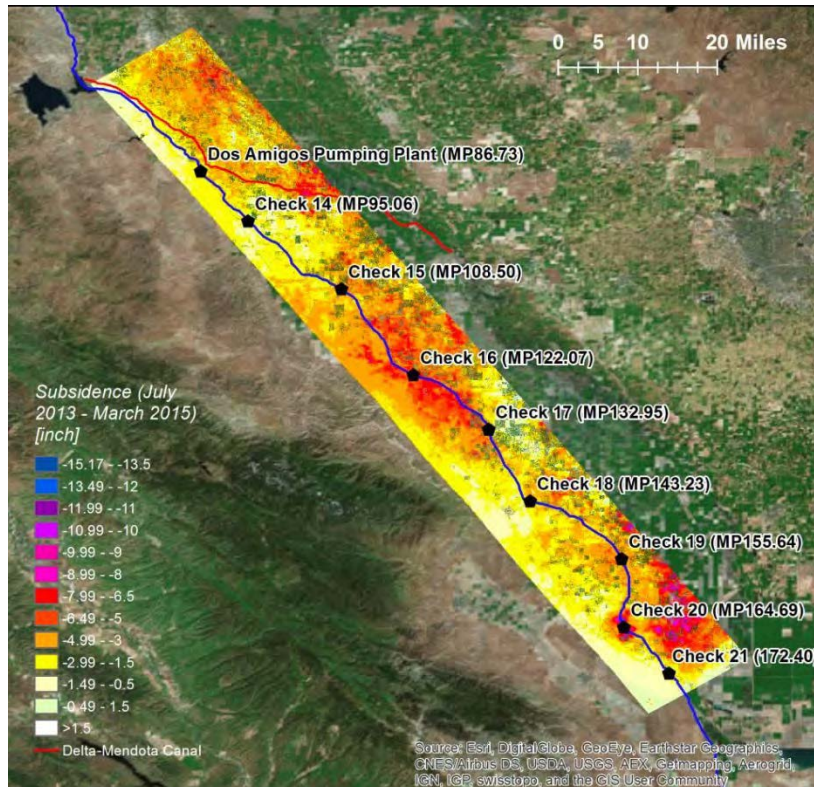
⁴⁰ The 2008 Agreement between DWR and Westlands for the introduction and conveyance of groundwater into the Aqueduct was included in Appendix A of the 2015 Final EA for the Pump-in Project. See pdf pg 19: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21984

⁴¹ See <https://pubs.er.usgs.gov/publication/sir20185144>

⁴² See: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Engineering-AndConstruction/Files/Subsidence/Aqueduct_Subsidence_Study-Accessibility_Compatibility.pdf

The Survey data in the DWR Subsidence Report show this section of the Aqueduct, the SLC (from Los Banos to Kettleman City), has subsided the most over the years.⁴³ The DWR report identifies a number of significant operational impacts of subsidence to the Aqueduct including: reduction in conveyance capacity, increase in power cost, decrease in available freeboard (the difference in elevation between the crest of the canal and the water level as fixed by design requirements). These effects are significant and costly to repair.

Figure taken from DWR’s 2017 California Aqueduct Subsidence Study Report



As denoted on page 16 of the IS/ND, there are “...two subsidence prone areas located within the District along the SLC...These two areas experienced increased rates of subsidence, which may threaten lands and infrastructure within their vicinity, namely the SLC.” The IS/ND proposes within these areas, to subject well pumping to “more restrictive minimum thresholds to protect critical head levels, and extraction from the Lower Aquifer (deep aquifer below the Corcoran Clay layer) would be limited in all years to minimize or avoid subsidence in susceptible lower aquifers.”

CDFW provided comments on the Westlands' previous IS/ND for this project on subsidence effects to MWA, “MWA is located within the Delta-Mendota Subbasin and borders the Westside Subbasin. Both the Westside and Delta-Mendota Subbasins are designated as critically overdrafted by the California Department of Water Resources, and such overdrafting is a serious issue within the Mendota Pool area

⁴³ [Ibid.](#)

due to ongoing subsidence. Over the years, the Mendota Dam has experienced subsidence, and the California Department of Water Resources, Division of Safety of Dams has required the water level to be lowered due to the subsequent compromised integrity of the dam. The lowered water level at the dam has resulted in lower water levels to the gravity flow and lift pump inlets at the MWA. The northernmost gravity flow inlet receives no water, causing loss of trees and habitat along the northern edge of the wildlife area. The lift stations no longer pump efficiently because the inlets are not fully covered with water, allowing air to be pulled into the pumps and decreasing water flows. Decreased water flow results in MWA operating its pumps for longer periods, increases the electricity cost and personnel cost to monitor and maintain the pumps, and increases wear and tear on the pumps.

Continued subsidence affects the ability of CDFW to operate the MWA according to its management objectives, and other areas where water is no longer delivered by gravity could increasingly lose associated wetland and riparian habitat features. Subsidence is irreversible and damage to surface water conveyance features caused by subsidence can only be mitigated by removal of damaged infrastructure and replacement, or re-engineering and reconstruction of infrastructure to allow surface water to flow at an acceptable level.⁴⁴

The effects of subsidence to Mendota WA are discussed in the IS/ND on page 33. The IS/ND concludes, “Two existing potential CIP wells that would be operated under the Project are located directly adjacent to the MWA, and are unlikely to contribute to ongoing subsidence because of the shutdown provision described in Section 15.10, Hydrology and Water Quality which protect the water level from achieving historic lows... The rate of groundwater pumping under the Project is not anticipated to result in an undesirable or adverse rate of subsidence which would impact CDFW operations or the quantity or quality of habitat within the MWA.”

The 2020 WQMP includes requirements for groundwater level management. As described therein, well owners participating in the Pump-in Project are required to measure the initial depth to groundwater in each well before pumping into the canal, monthly from April to August, and bi-monthly from September to March. Individual wells will be shut off if the depth to groundwater reaches 75 percent of the difference between the Fall/Winter median groundwater level and the maximum depth to groundwater.

It is encouraging to see that the IS/ND and the 2020 WQMP includes groundwater level monitoring and shutoff triggers. But neither the IS/ND nor the WQMP identify rates of pumping or quantities of water that could be safely pumped from the areas that have experienced high subsidence (including near MWA) while staying within these generous thresholds. And while the IS/ND indicates that the subsidence rate will be monitored during the implementation of the Pump-in Project, it provides no clear plan for what happens when monitoring reveals excessive subsidence. The impacts of this action are complex, broad and far reaching, and need to be considered in a full EIR analysis. Consistent with recommendations from CDFW on the Project, a full EIR should evaluate all areas that would be affected by increased subsidence, including the Mendota WA, and develop a plan to offset losses of wetland and riparian vegetation communities caused by changes in hydrology associated with subsidence caused by Project pumping. CDFW recommended that the plan address mitigation for impacted habitat value and function, to achieve a minimum no net loss of these habitats, consistent with California Fish and Game Commission policy on Wetlands Resources.

⁴⁴ See: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/5CSO8N>

Compliance with Clean Water Act is Absent.

As the U.S. EPA noted in scoping comments submitted for the Westlands pump-ins in 2010 the proposed discharge of contaminated groundwater from Westlands with potentially high salt, boron, chromium, arsenic, selenium and other metals would be subject to NPDES permitting requirements pursuant to the federal Clean Water Act (CWA). Further EPA noted, “*Permits will need to be designed to ensure the discharges do not cause or contribute to exceedences of applicable State water quality standards or degradation of designated beneficial uses.*”⁴⁵ Westlands has failed to obtain the required CWA permits.

The Clean Water Act prohibits the discharge of "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. Such a permit would contain limits on what can be discharged, monitoring and reporting requirements, and other provisions to ensure that the discharge does not harm water quality or human health. The term point source is also defined very broadly in the Clean Water Act. It means any discernible, confined and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure, or container.⁴⁶

No compliance with the federal CWA is provided in the IS/ND. Thus, the public is precluded from analyzing the permit and conditions to ensure protection and non-degradation of water supplies under the NPDES permit and potential mitigation measures. As we have noted above, 35 of the 88 discharge points included in Table 1 of the IS/ND under Westlands' previous pump-in projects had at least one well that exceeded maximum contaminant levels (MCLs) identified for the constituents As, Se or TDS. These elevated concentrations of constituents such as selenium can bioaccumulate in the food chain and have amplifying impacts in the environment.⁴⁷

A Final NEPA Document has Not Been Provided.

As described on page 10 of the IS/ND, footnote 5, USBR's approval of the Westlands' 2020-2025 Warren Act Contract authorizing the Pump-in Project is subject to environmental review under the National Environmental Protection Act (NEPA) pursuant to the Council on Environmental Quality regulations (40 Code of Federal Regulations Parts 1500- 1508). Review of Reclamation's approval of Westlands' 2020-2025 Warren Act Contract pursuant to the requirements of NEPA is being prepared under an Environmental Assessment (EA). A draft EA for the Pump-in Project was made available for public comment thru August 20, 2020. A Final EA has not yet been completed for this project. A Negative Declaration is not supported and especially not supported absent a Final EA for this project.

⁴⁵ See: <http://calsport.org/news/wp-content/uploads/EPA-comments-Westlands-WD-EIR-NOP-3-4-10.pdf>

⁴⁶ See: <https://www.epa.gov/npdes/npdes-permit-basics>

⁴⁷ DWR Groundwater Data from WWD 2008 Pump Ins at:
<https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>

And the following DWR Groundwater Data from previous WWD SLC Pump-ins:

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2016.pdf>

Inadequate Cumulative Impacts Analysis.

When assessing whether a cumulative effect requires an EIR, the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (CEQA Guidelines § 15064(h).) The IS/ND fails to follow these standards and fails to consider the cumulative impacts, including water quality, well drawdown and subsidence impacts, of past, current and future probable projects, whether they may be significant, or whether the Project's contribution would be cumulatively considerable.

Cumulative impacts from other water exchanges are not disclosed or analyzed. We adopt by reference our comments from previous exchanges and transfers and previous scoping comments.⁴⁸ In addition to the continued extraction of water from already over drafted groundwater basins, the impacts from discharging this groundwater on Westlands' toxic soils and exacerbating an existing subsurface agricultural drainage problem on the west-side of the San Joaquin Valley are not disclosed nor mitigated. Selenium found in groundwater and drainage water in Westlands is known to create life threatening impacts to migratory birds, wildlife and fish, magnifying up the food chain as these pollutants accumulate. These impacts are merely brushed aside. No data from previous pump-ins is provided to support Westland's conclusions of less than significant impact in the IS/ND. No alternatives are considered. Finally, there is insufficient analysis of the cumulative impact of discharging these contaminants into drinking water, wildlife refuge supplies, or downstream fish and wildlife beneficial uses.

Additionally, we refer to CDFW's recommendations on the previous IS/ND⁴⁹ for this project with respect to cumulative effects, "...lowered water quality and increased salt loading could potentially

⁴⁸ See: http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=14341 "Resnicks' Westside Mutual Water District member lands in Westlands Water District to the AEWSO service area and Westside Exchange Program are not disclosed nor analyzed. Nor are the impacts to Madera County from the potential groundwater transfers likely contemplated under the proposed action. The existing Exchange Program involves delivery of Arvin's supplies to Westside member lands as exchange water, based on a 1 for 1 or "bucket for bucket" basis, up to 50,000 acre feet (AF)."

See 30,000 acre feet of groundwater proposed to be transferred to Westlands et. al. from the Mendota Pool:

<http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=49107>

See also North Valley Regional Recycled Water Program-- <http://www.nvrrecycledwater.org/description.asp> The NVRWP could produce and deliver up to 32,900 acre-feet per year of tertiary-treated recycled water to the drought-impacted west side. This water can be used to irrigate food crops, public and privately owned landscaping, and for industrial uses. This basin transfer would alter San Joaquin River Flows and flows to refuges, and the South Delta Bay Estuary. The project would deliver up to 59,000 acre feet per year (AFY) of recycled water produced by the cities of Modesto and Turlock via the Delta-Mendota Canal (DMC), a feature of the Central Valley Project owned by Reclamation. Instead of discharging fresh treated water into the San Joaquin River, recycled water would be conveyed from Modesto and Turlock through pipelines from their wastewater treatment facilities, crossing the San Joaquin River, ending at the DMC.

⁴⁹ See: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/5CSO8N>

impact sensitive aquatic species such as the giant garter snake, and affect habitats for sensitive status species, especially in the context of other existing and pending projects affecting water quality and ground subsidence of Mendota Pool, the MWA, and surrounding areas. CDFW recommends that the cumulative impacts analysis include the effects to special status species from this Project and other current and foreseeable projects.” These and other cumulative impacts must be adequately studied in an EIR.

More Robust Monitoring Program & Enforcement Are Needed.

To protect downstream beneficial uses, we recommend the following be incorporated into a revised WQMP for the Pump-in Project:

- Well water should not be conveyed into the Aqueduct until it has been confirmed that the well water does not exceed the selenium wellhead standard of 2 µg/L (from Table 4 of the WQMP);
- Weekly monitoring of wells (while pumps are running) that have had at least one water quality sample above 2 µg/L selenium during the 2015 and 2016 pump-ins;
- Weekly water quality sampling for selenium at Check 21 of the California Aqueduct while Westlands is pumping groundwater into the Aqueduct;
- The selenium objective for the California Aqueduct should be 1.5 µg/L to be protective of downstream beneficial uses associated with the Aqueduct and Mendota Pool;
- Well water pumped into the Mendota Pool should not exceed 600 mg/L TDS to protect Mendota Wildlife Area water quality;
- Weekly water monitoring of wells and the Aqueduct at Check 21 should require rapid turnaround so results are received within 7 days and can be responsive to current and changing conditions.
- Well water from Westlands should not be pumped into the Aqueduct if Dos Amigos Pumping Plant is not operating.
- There needs to be an established protocol dictating required actions and enforcement when water quality standards are exceeded at individual wells or in the aqueduct and related conveyance canals.

Conclusion

CEQA requires that an Environmental Impact Report ("EIR") be prepared for any project that may have a significant impact on the environment. (Public Resources Code §§ 21000, 21151.) CEQA establishes mandatory findings of significance that require the preparation of an EIR when a project has the potential to substantially degrade the quality of the environment, to achieve short-term environmental goals to the disadvantage of long-term environmental goals, and when a project has possible environmental effects, which are cumulatively considerable (CEQA Guidelines § 15065). Moreover, whenever an agency is presented with a fair argument based upon substantial evidence that a project may have a significant effect on the environment, an EIR must be prepared, even though there may be evidence to the contrary in the record. (CEQA Guidelines § 15064(f)(1).

We find that the IS/ND fails CEQA's "most important" purpose, to fully inform the decision-makers and the public of the environmental impacts of the choices before them." (83 Cal.App.4th at p. 920.) The IS/ND does not adequately assess the potentially significant environmental impacts from the Pump-in Project or consider alternatives to the project. There are reasonably available alternatives that have not been considered and should be analyzed in order to reduce the potentially significant environmental impacts. Absent from the document is any assessment of the cumulative impacts including third party impacts and impacts to fish, wildlife and water quality. Required permits and compliance with the Clean Water Act that would govern the discharge of contaminants into the waters of the State and Nation have not been provided; nor have necessary consultations with Federal and State fish and wildlife agencies concerning potential endangered and threatened species impacts. The Project as described in the IS/ND would violate terms under Article 16(b)(2) of Westlands WIIN Act repayment contracts. The Warren Act Contract and associated Contract Exhibits and Agreement between Westlands and DWR governing the full discharge into the Aqueduct from 2020-2025 is absent and therefore, could not be reviewed.

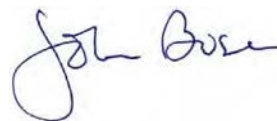
Prior to commencing with the proposed Project, which has in the past and likely will continue to harm downstream uses, a complete EIR is required. This document needs to include, among other things, a revised Water Quality Monitoring Plan to ensure waters of the State and Nation are not degraded, compilation and analysis of prior groundwater water quality data, flow rates and quantities pumped from participating wells from previous pump-ins, a mass-balance model for selenium in the Aqueduct, the Warren Act Contract and Exhibits, the Agreement between DWR and Westlands, documentation of Clean Water Act permit compliance, and full analysis of alternatives and cumulative impacts. This information should be included in the EIR that replaces the IS/ND. We object to the adoption of a Negative Declaration for this project, and the proposed 25-year authorization for all the discharge points in Table 1 of the IS/ND because they are not supported by data from past groundwater pump-ins into the Aqueduct from Westlands. Lastly, the conveyance period for the Pump-in Project in 2020 should not commence prior to the completion of the appropriate CEQA and NEPA decision documents.

Thank you for the opportunity to comment. Please add our names to Westlands' electronic notification lists for environmental documents regarding water supplies or contracts or conveyance.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



John Buse
Senior Counsel, Legal Director
Center for Biological Diversity
<mailto:jbuse@biologicaldiversity.org>



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



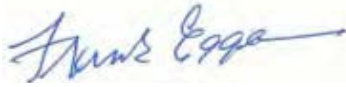
Barbara Vlamis
Executive Director
AquAlliance
barbarav@aqualliance.net



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



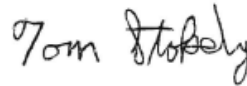
Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com

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Appendix A. Proposed Discharge and Well Locations from the DEA that have exceeded MCLs for As, Se or TDS in previous years of pump-ins.

Table 1. Proposed Discharge and Well Locations from the DEA that have exceeded MCLs for As, Se or TDS.⁵⁰

SLC Milepost Discharge Location	State Well ID(s)	# of samples exceeding MCL for As ⁵¹ and (range of As reported)	# of samples exceeding MCL for Se ⁵² and (range of Se reported)	# of samples exceeding MCL for TDS ⁵³ and (range of TDS reported)
105.20L	141202R02	0	1 (4 µg/L)	1 (1290 mg/L)
115.43L, Lateral 7	151509R03,151509R04 151509R05,151503A02 151504A03,151503H01	2 (10.2-11.8 µg/L)	0	8 (1010-1390 mg/L)
117.52L	151419F01	0	12 (3.4-5.8 µg/L)	1 (1300 mg/L)
127.40L	161521N03 ⁵⁴	0	2 (2.8-3.9 µg/L)	0
128.49R	171413A01 ⁵⁵	0	6 (8.4-22 µg/L)	0
128.50L	161533J01 ⁵⁶	0	12 (4.2-6 µg/L)	0
128.54L	161532A06	0	6 (3-6.5 µg/L)	1 (1400 mg/L)
130.81R	171510M01	0	3 (2.1-2.5 µg/L)	0
133.80L	171601N03	0	2 (2.1-2.2 µg/L)	0
137.31L	181606F01	0	1 (3 µg/L)	1 (1200 mg/L)
139.40L	181609R01	0	1 (3 µg/L)	0
140.55LA	181617R02	0	0	1 (1040 mg/L)
142.58R	181629N02	0	1 (12 µg/L)	1 (1230 mg/L)
143.00L	181627N01	0	1 (7 µg/L)	1 (1070 mg/L)
152.75L	191723R01	0	0	2 (1014-1100 mg/L)

⁵⁰ Data Sources: DWR 2008, 2016, 2017. Locations/wells identified in blue were marked as new facilities in DEA.

⁵¹ MCL for As is 10 µg/L from page 13 of 2020 WQMP, Table 5 Water Quality Standards Short List.

⁵² MCL for Se is 2 µg/L from page 13 of 2020 WQMP, Table 5 Water Quality Standards Short List.

⁵³ MCL for TDS is 1000 mg/L from page 13 of 2020 WQMP, Table 5 Water Quality Standards Short List.

⁵⁴ Samples from adjacent State Well ID 161521N02.

⁵⁵ Samples from adjacent State Well ID 171413A06.

⁵⁶ Samples from adjacent State Well ID 161533J02.

155.15L	191831N01	0	1 (2.1 µg/L)	0
156.36R	201714K01	0	8 (2.1-7.4 µg/L)	1 (1200 mg/L)
	201712H01	0	2 (2.5-2.9 µg/L)	0
156.37LA	201806Q01 ⁵⁷	3 (12-13 µg/L)	5 (2.8-4.7 µg/L)	0
157.98L	201817G01	0	9 (2.4-3.2 µg/L)	0
158.95L	201820E01	0	1 (2.6 µg/L)	0
159.98R	201831C01	0	5 (2.3-2.6 µg/L)	0
161.49L	201831Q01	0	8 (5.3-11 µg/L)	0
161.60L	211805C01	0	6 (2.3-5.4 µg/L)	0
	211809D02	0	1 (7 µg/L)	0
162.08L	211805C01	0	6 (2.3-5.4 µg/L)	0
	211805M01	0	8 (5.2-7.5 µg/L)	0
162.10R	211806G01	0	2 (17-18 µg/L)	0
162.64L	211809L01	0	1 (7 µg/L)	0
164.11R	211818G03	0	6 (14-19 µg/L)	0
164.55L-A	211817N03	0	7 (10-12 µg/L)	0
	211816N01	0	7 (2.9-5.1 µg/L)	0
164.63R	211818G03	0	6 (14-19 µg/L)	0
164.95R	211833G01	0	8 (3-12 µg/L)	0
166.70R	211828G06	0	4 (3.9-4.6 µg/L)	1 (1200 mg/L)
166.90R	211827K02	0	6 (3.7-5.6 µg/L)	0
167.04L, Lateral 37	211823D06	0	1 (3 µg/L)	0
167.86R	211833N02	2 (11 µg/L)	0	0
	211833G01	0	8 (3-12 µg/L)	0

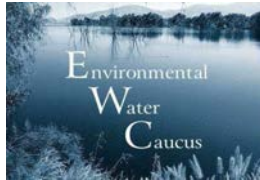
Data Sources:

⁵⁷ Samples from adjacent State Well ID 201806Q02.

(DWR) California Department of Water Resources. November 2017. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2016. Technical Memorandum Report, Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 146 pp.

(DWR) California Department of Water Resources. December 2016. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015. Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 172 pp.

(DWR) California Department of Water Resources. 2008. DWR Groundwater Data from WWD 2008 Pump Ins project at: <https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>



CA Save Our Streams Council



April 8, 2021

Mr. Cannon Michael, Board Chairman
Mr. Federico Barajas, Executive Director and Board Secretary
San Luis & Delta Mendota Water Authority
Los Banos Administration Office
P.O. Box 2157
Los Banos, CA 93635

Re: Opposition to the Proposed SLDMWA Board Resolution Authorizing a CEQA Exemption for the Execution of an Agreement with Panoche Water District for the Provision of Operation and Maintenance (O&M) Activities on the San Luis Drain for Purposes of the Grassland Bypass Project.

The San Luis & Delta Mendota Water Authority (Water Authority) has included in their April 8, 2021 Board Meeting Agenda a proposed Resolution (Resolution) to authorize a CEQA Exemption for the Execution of an Agreement (Agreement) with Panoche Water District for the Provision of Ongoing O&M Activities on the San Luis Drain for the Purposes of the Grassland Bypass Project (GBP). We obtained a copy of the proposed Resolution via email on April 2, 2021. We oppose the adoption of a CEQA exemption for O&M Activities on the San Luis Drain. The new use of this federal drain for the discharge of storm water and other toxic pollutants will have significant environmental impacts that have not been disclosed. We urge the Board of the SLDMWA to not approve this Resolution to authorize this CEQA

exemption. Instead, we recommend that a full EIR be completed on the use of the San Luis Drain to convey discharges of storm water, agricultural drainage, or contaminated groundwater from the GBP.

Background and Detailed Comments

The Water Authority previously entered into agreements with Panoche Drainage District (“PDD”), which authorized PDD to provide specified operation and maintenance (“O&M”) services for the conveyance facilities for the GBP, including on specific portions of San Luis Drain. The Water Authority Board first authorized execution of such an agreement in 1996, via Resolution No. 1996-138, and then execution of an addendum to the 1996 agreement in 2002, via Resolution No. 2002-200.

The Water Authority and PDD have both continued to perform certain portions of O&M activities on the federally owned San Luis Drain. They now desire to supersede the 1996 agreement and 2002 addendum, and modify the preexisting arrangement such that Panoche Water District will provide enumerated O&M activities for that portion of the San Luis Drain that is used for purposes of the Grassland Bypass Project including the new use under the Long-Term Storm Water Management Plan, while the Water Authority provides other administrative and O&M activities for the San Luis Drain.

Most recently, the Water Authority entered into an Agreement with the US Bureau of Reclamation (Reclamation) to Transfer the Operation, Maintenance and Replacement and Certain Financial and Administrative Activities (Contract No. 8-07-20-X0354-X), which requires the Authority to operate and maintain certain enumerated Project Works, including the San Luis Drain.

The undersigned organizations, have a long-standing interest in the GBP because contaminants in agricultural drainage discharges from the Grassland Drainage Area (agricultural lands served by the GBP) have proven and profound adverse effects on the environment, including effects to downstream waterways, aquatic life, and migratory birds. We include our previous comments on the 2020 Drainage Management Plan, 2019 Draft Environmental Assessment on a 10-Year Use Agreement of the San Luis Drain, the 2019 Tentative WDRs for the GBP, the GBP Stormwater Plan EIR Addendum, the USEPA’s proposed water quality criteria for selenium in California, and the 2009 GBP EIR/EIS and the Basin Plan Amendment by reference.¹

¹ Coalition comments to the Central Valley Regional Water Quality Control Board on the Grassland Bypass Project Drainage Management Plan, Including Components of the Westside Regional Drainage Plan and the Long-Term Stormwater Management Plan. February 1, 2021.

Coalition comments on USBR’s Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area. December 23, 2019. See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

Comments of Pacific Coast Federation of Fishermen’s Associations (PCFFA) and the Institute for Fisheries Resources (IFR), and the signatory organizations Re: Comments on Tentative Waste Discharge Requirements (WDRs) for Surface Water Discharges from the Grassland Bypass Project in Merced and Fresno Counties. November 5, 2019.

Coalition comments on Grassland Bypass Project Long-Term Storm Water Management Plan EIR Addendum and Initial Study--A Full EIR-EIS is Required. September 9, 2019.

Coalition comments of environmental, fishing and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. <http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf>

Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker, June 22, 2015.
https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf

Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR, September 8, 2014.
<http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbp-land-retirement.pdf>

Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project, June 30, 2014. <http://calsport.org/news/wp-content/uploads/Final-coalition-comments-on-Draft-GBP-WDR-6.30.14.pdf>

Coalition Comments: Grasslands Bypass Project -- Violations of the Endangered Species Act and Reduced Monitoring Threaten Endangered Species and Public Health, November 27, 2013.
<http://calsport.org/news/wpcontent/uploads/2013/12/Coalition-Letter-on-GBP-ESA-Violations-Monitoring-Reductions-LTR.Corrected-.pdf>

Coalition Comments: Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project. August 11, 2011. <http://calsport.org/news/wp-content/uploads/2011/09/Opposition-To-Grassland-Bypass-MonitoringReductions.pdf>

CSPA, CWIN and AquAlliance submit Comments to State Water Board Regarding Grassland Bypass Project and Basin Plan Amendment. September 22, 2010. <http://calsport.org/news/cspa-cwin-and-aqualliance-submit-commentsto-state-water-board-regarding-grassland-bypass-project-and-basin-plan-amendment/>

Sierra Club et. al. Comments: Grassland Bypass Project & San Joaquin River Selenium Basin Plan Amendments September 22, 2010.
https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/jim_metropulos.pdf

Comments of California Sportfishing Protection Alliance and California Water Impact Network on the draft environmental impact report for the Irrigated Lands Regulatory Program and related documents. Also attached are several comments prepared by three expert consultants September 27, 2010. <http://calsport.org/doclibrary/pdfs/207.pdf>

Environmental Coalition Comments on Draft Staff Report for Grasslands Bypass Project Basin Plan Selenium Amendments to The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, April 26, 2010 available at:
https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf

As denoted in our previous comments on the GBP’s 2019 Stormwater Management Plan and 2020 Drainage Management Plan, we recommended that a full Environmental Impact Report/Statement (EIR/EIS) be prepared for the continued use of the San Luis Drain for stormwater discharges into Mud Slough (north), the San Joaquin River and the Delta. In those comments we detailed our concerns in several areas and recommended what we believe is the only reliable and cost-effective solution—order the cessation of this polluted discharge.² We further noted that the Central Valley Regional Water Board (Regional Board) after receiving significant public comments and new information on adverse effects from selenium to Sacramento splittail in the Delta, issued the following periodic review of the WDRs for the GBP in ORDER R5-2019-0077 on page 16 item IV.5: the Regional Board “*will review this Order periodically and may revise this Order when necessary. No later than 31 December 2021, and every five years thereafter, Central Valley Water Board staff will present to the board an update on the Grassland Bypass Project, project compliance with Order requirements, and any additional information needed to determine whether the Order should be revised.*”³

Water Quality Objectives in the WDR for the GBP are Not Protective of Beneficial Uses

The new 2020 Drainage Management Plan for the GBP actions or methods currently being or to be implemented by Grassland Area Farmers (GAF) and individual Districts will not protect water quality. The new plan is to meet water quality objectives specified in the 2019 WDRs in Mud Slough (North) and the San Joaquin River and the WDR objectives do not protect downstream beneficial uses. The Numerical Water Quality Objectives for selenium are described in Table 5.2 on page 32 of Attachment A of the 2019 WDRs:⁴

Table 5.2: Selenium Numerical Objectives

4-day Average	Maximum	Location
5 µg/L	20 µg/L	Mud Slough (north) and the San Joaquin River from the Mud Slough confluence to the Merced River
5 µg/L	12 µg/L	San Joaquin River, mouth of the Merced River to Vernalis

² The San Joaquin Valley Drainage Program (SJVDP) *A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley*, also known as the “Rainbow Report” (September 1990); see also USGS *Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California* Open-File Report 2008-1210 By: Theresa S. Presser and Steven E. Schwarzbach <https://pubs.er.usgs.gov/publication/ofr20081210>; USBR Final Environmental Impact Statement for *San Luis Drainage Feature Re-evaluation* (May 2006 and Record of Decision (ROD) (March 2007) (selecting the “In-Valley/ Water Needs/ Land Retirement Alternative.”).

³ See: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

⁴ See: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

The 5 µg/L selenium water quality objective in the Basin Plan for Mud Slough (North) and the San Joaquin River from Sack Dam to Vernalis and referenced in Table 5.2 of Attachment A in the 2019 WDRs for the GBP is not protective of downstream beneficial uses including fish and wildlife resources that use those surface waterways. The 2019 WDRs for the GBP require compliance with the selenium water quality objectives specified in the 2010 Basin Plan Amendment (5 µg/L, 4-day average). However, the GBP WDRs are lax, allowing for acute spikes of selenium (as described in Table 5.2 above and ranging from 12 to 20 µg/L depending on location) that will bio-accumulate throughout the ecosystem. These water quality objectives will result in harm to fish and aquatic-dependent wildlife. Short term spikes of selenium in a waterway can have longer lasting effects in an ecosystem. Beckon (2016) noted that when a bioaccumulative substance such as selenium is introduced into or removed from the environment, the processes by which it is assimilated into upper trophic levels of the ecosystem may be complex and prolonged.⁵ These processes include several levels of trophic transfer, each entailing the time required to consume food, assimilate the substance of interest, and the time span during which the organism continues to survive before being eaten by a member of the next higher trophic level. Beckon noted that for some species of piscivorous fish the lag time for selenium exposure to bioaccumulate in the upper trophic level of fish is over 1 year from the initial exposure. Thus, short-term exceedances of the 5 µg/L selenium objective can continue to have deleterious effects to the upper trophic level species several months to over a year after the event.

The 2019 WDRs for the GBP effectively sanction continued excessive pollution, especially during stormwater events, of Mud Slough (North), the San Joaquin River, and ultimately the Sacramento-San Joaquin Delta and San Francisco Bay, by failing to enforce science-based protective water quality standards for selenium and allowing the continued contamination of these water bodies. Excess selenium in streams kills or deforms fish and other aquatic life and is a human health concern in drinking-water supplies. Under the 2019 WDRs, selenium (and other harmful drain water pollutants, such as salt, sulfates, boron, molybdenum, and mercury) will continue to be discharged from the federally owned San Luis Drain directly into the waters of California and the United States. The failure to enforce protective selenium water quality objectives transfers pollution from Grassland drainers, through the federal San Luis Drain, to the waters of the State, and thus harms beneficial uses of these waters for our members', domestic water supplies, public health, fishing, recreation and other public trust values.

Water Quality Objectives in the WDR for the GBP are Inconsistent with USEPA National Criteria Revision for Selenium

On July 13, 2016 the USEPA published a Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water. The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 recommended criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. Draft versions of the criterion underwent public review in 2014 and 2015 and external peer review in 2015. EPA considered all public comments and peer reviewer comments in the development of the 2016 final selenium criterion document. EPA's water quality criterion for selenium provides recommendations to states and tribes authorized to establish water quality standards under the CWA.⁶ The EPA's 2016 final revised Section 304(a) guidance for selenium makes clear that

⁵ See: <https://www.sciencedirect.com/science/article/abs/pii/S0166445X16301230>

⁶ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

retaining the current state standard of 5 µg/L will not protect aquatic life and wildlife designated uses and therefore would bring the state out of compliance with the requirements of Section 303(c)(2)(B) of the Clean Water Act (CWA).

Further, the USEPA did not include an acute selenium criterion in their July 13, 2016 Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water under Item IV: “*The criterion document does not include an acute criterion (based on water-only exposure) because selenium is bioaccumulative and toxicity primarily occurs through dietary exposure.*”⁷ So the 2019 GBP WDRs inclusion of acute selenium objectives (12 to 20 µg/L depending on location) is inconsistent with Final national criteria and will have to be updated during the next triennial review in 2021.

Comparison of Final 2016 Selenium Criterion to 1999 Criteria

Criterion version	Chronic					Short-term
	Egg-Ovary ¹ (mg/kg dw)	Whole Body ¹ (mg/kg dw)	Muscle ¹ (mg/kg dw)	Water, ¹ Lentic (µg/L)	Water, ¹ Lotic (µg/L)	Water (µg/L)
2016 Final Update	15.1	8.5	11.3	1.5 (30 d)	3.1 (30 d)	Intermittent exposure equation.
1999 Selenium Criteria	N/A	N/A	N/A	5 (4 d)	5 (4 d)	Acute Equation based on water column concentration.

¹ A note on hierarchy of table: when fish egg/ovary concentrations are measured, the values supersede any whole-body, muscle, or water column elements except in certain situations. Whole body or muscle measurements supersede any water column element when both fish tissue and water concentrations are measured, except in certain situations (see examples in text above). Water column values are derived from fish tissue concentrations.

The EPA's 2016 final revised Section 304(a) guidance for selenium makes clear that retaining the current state standard of 5 µg/L will not protect aquatic life and wildlife designated uses and therefore would bring the state out of compliance with the requirements of Section 303(c)(2)(B) of the Clean Water Act (CWA). As per the EPA's 2014 "Water Quality Standards Handbook, Chapter 6: Procedures for Review and Revision of Water Quality Standards", @ page 7:⁸ "It is important to note that, although a state or

⁷ Ibid.

⁸ See: <https://www.epa.gov/wqs-tech/water-quality-standards-handbook>

tribe may have fully complied with the requirements of Section 303(c)(2)(B) previously, states and tribes may be required to adopt new toxic criteria in the following situations:

- *The EPA publishes new Section 304(a) criteria recommendations for a priority pollutant.*
- *New information on existing water quality and pollution sources indicates that a toxic pollutant for which a state or tribe had not previously adopted criteria could now be reasonably expected to interfere with the designated uses adopted by the state or tribe.*

Species at Risk in the San Joaquin Valley and Bay Delta Estuary from Selenium Exposure

Supporting documentation for this USEPA docket for Selenium in California includes two reports by USFWS: (1) Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries, which gives a list of species considered most at risk for selenium exposure in CA;⁹ and (2) Species at Risk from Selenium Exposure in the San Francisco Estuary.¹⁰ The species identified at most risk for selenium exposure in the San Joaquin Valley and San Francisco Estuary were denoted as:

- Mammals: Buena Vista Lake Ornate Shrew;
- Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
- Reptiles: Giant Garter Snake;
- Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

Further, in a letter from National Marine Fisheries Service (NMFS) to the SWRCB regarding the San Joaquin River Selenium Control Plan Basin Plan Amendment (dated September 22, 2010), NMFS states that selenium contamination in the San Joaquin River is problematic in restoring spring and fall-run Chinook salmon to the upper reach of the San Joaquin River. The NMFS letter noted that selenium in the San Joaquin River could negatively affect Central Valley steelhead and the Southern distinct population segment of the North American green sturgeon.¹¹

Studies by the US Geological Survey have documented elevated levels of selenium in the food chain and in green sturgeon. Since these impacts are potentially significant, an EIS must be prepared¹² along with a complete CEQA analysis to accurately inform decision-makers before allowing these pollutants to spread downstream.

New information has been published in 2020 that identifies adverse effects from selenium to Sacramento splittail. Recent publications by the USGS and NMFS have documented elevated levels of selenium in the benthic clam food chain used by the Sacramento splittail and the federally listed green sturgeon in the San

⁹ Available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-00560144&contentType=pdf>.

¹⁰ Available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-00560265&contentType=pdf>.

¹¹ Available at https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/howard_brown.pdf

¹² See 40 C.F.R. § 1508.27(b)(9)

Francisco Bay Delta. In the spring of 2011, young-of-year splittail were found to have a high incidence (>80%) of spinal deformities characteristic of selenium toxicity at the site of a water diversion station in the San Joaquin Valley of the Delta (U.S. Department of the Interior, Bureau of Reclamation Tracy Fish Collection Facility) (Johnson et al 2020). This study identified various sources of selenium contamination and points to agricultural drainage as a significant source:

“These data suggest that individuals acquired Se toxicity while feeding in the freshwaters of the San Joaquin River but already started with significantly higher Se burdens from females maturing in the estuary (Figure 3, Table1 and Supporting Information).”¹³



A second publication (Stewart et al 2020) compared splittail tissue concentrations with those proposed by EPA in 2016 for the Bay Delta and found that “Despite the consistently low muscle Se concentrations across all regions and years and no exceedances, the frequency of exceedance in liver and ovary were high for Pacheco, ranging from 60 to 80% (range for both tissues and years), followed by Suisun in 2011 (33%) and the Confluence in 2010 (17%).” These findings are significant as they document harm in a fish foraging in a benthic clam food web in the Delta, which is also utilized by the federally listed green sturgeon.

Several endemic species are listed under the ESA as threatened or endangered, including green sturgeon, Chinook salmon, steelhead trout, delta smelt, and the California Ridgway’s rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters. The USEPA noted on page 46036 of the Federal Register Notice 81(36) that “[t]he analyses to develop the fish tissue and the avian egg tissue benchmarks used in the modeling, and the modeling results used to derive the proposed water column criteria, indicate the health of these species would be negatively impacted from exposure to selenium water column concentrations above 0.2 µg /L, which would be allowed to occur under the existing NTR selenium criterion of 5.0 µg /L. Accordingly, EPA finds that it is necessary to propose revised and more protective criteria for selenium in order to help ensure the continued protection of these vulnerable species and associated designated uses.” [The chart below presents in chart-form the USGS findings.¹⁴

¹³ See: <https://dx.doi.org/10.1021/acs.est.9b06419>

¹⁴ [See @pg 8 the graph https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_cwin.pdf prepared by CSPA & CWIN is directly based on the results from a U.S. Geological

Endangered Species Analysis for 10-Year Use Agreement of the San Luis Drain did not Consider Delta Impacts and New Splittail Data Warrants Reinitiation under the ESA

As was noted above, new information was published in early 2020 that identifies adverse effects from selenium to Sacramento splittail. Of particular note, Johnson et al. (2020)¹⁵ found that agricultural drainage was a significant source of selenium contamination in the food web of the splittail. Although the Sacramento splittail is not currently listed as threatened or endangered by the Federal or State government, they serve as an indicator species for species such as federally listed as threatened green sturgeon¹⁶ which feed on the same species of clam (Asian clam) as splittail. The NMFS in their 2019 ESA consultation on the effect of the 10-year extension of the Use Agreement for the San Luis Drain failed to consider impacts to the Green Sturgeon.¹⁷ Reclamation in their request for consultation with NMFS for this project arbitrarily limited the downstream end point of the action area to the San Joaquin River at Crows Landing. Therefore, impacts downstream of Crows Landing, including impacts to the federally listed green sturgeon, were not considered along with other impacts to threatened or endangered species in the Bay Delta Estuary. Given the new splittail data was published in early 2020 and after the NMFS ESA consultation had been completed, this new information warrants reinitiation of consultation under the ESA for effects to green sturgeon.

The CEQA Analysis completed in the 2009 GBP EIR/EIS and 2019 GBP Stormwater Addendum do not Support the Proposed Adoption of a CEQA Exemption by the SLDMWA Board.

Under CEQA a supplemental EIR is required if, as defined in CEQA Guidelines Section 15162(a)(1): (a) there have been substantial changes to the Project; (b) new significant environmental effects have been identified; or (c) there has been a substantial increase in the severity of previously identified significant effects. The 2009 EIR/EIS was based on the premise that all drainage discharges into the San Luis Drain

Survey (USGS) study. http://www.epa.gov/region9/water/ctr/selenium-modeling_admin-report.pdf. The USGS study evaluated a series of selenium exposure scenarios using a set of specific guidelines and modeling choices from the range of temporal hydrodynamic conditions, geographic locations, food webs, and allowable dissolved, particulate, and prey Se concentrations (which we have referred to as “safe levels”). According to the USGS, “[t]he specificity of these scenarios demonstrates that enough is known about the biotransfer of Se and the interconnectedness of habitats and species to set a range of limits and establish an understanding of the conditions, biological responses, and ecological risks critical to management of the Bay-Delta.” The following scenarios were evaluated by USGS for a range of hydrologic conditions and residence times (See Tables 17, 18 and 19 in the USGS report): (1) predicted allowed dissolved Se concentrations for Bay-Delta transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>C. amurensis>sturgeon food web; (2) predicted allowed dissolved Se concentrations for Bay-Delta transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>C. amurensis>clam-eating bird species food web; and (3) predicted allowed dissolved Se concentrations for landward transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>aquatic insect>juvenile salmon food web. The summary graphic of this data shows the results for critical Bay-Delta species, aggregated across all combinations of target tissues (e.g., Whole body, eggs, or diets) that have known levels of concerns, as summarized by the U.S. Fish and Wildlife Service. Results are also combined across all hydrologic conditions for each species. The ranges of “allowable” or safe levels of dissolved selenium clearly show that, although EPA will need to specify exact safety levels, flow conditions, and species, new standards for the Bay-Delta will need to be substantially less than 0.5 parts per billion dissolved selenium to be protective.

¹⁵ See: <https://pubs.acs.org/doi/10.1021/acs.est.9b06419>

¹⁶ <https://www.fisheries.noaa.gov/species/green-sturgeon>

¹⁷ See NMFS ESA consultation starting at pdf pg 243:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

would cease by the end of 2019. Thus, the 2019 GBP Stormwater Plan and associated WDRs include both a substantial change and environmental effects not included in the 2009 GBP EIR/EIS.

Under the current GBP WDRs, contaminated discharges would continue adding stormwater commingled with subsurface agricultural drainage into the San Luis Drain for an additional 25 years. This is a substantial change and should have been analyzed in a full EIR/EIS. There are numerous impacts from this extension of the use of the San Luis Drain that are significant and need to be disclosed, including: (1) cumulative impacts to downstream beneficial uses; (2) the failure to meet protective water quality standards; (3) impacts to endangered and listed species; and (4) migratory bird impacts. All of these impacts warrant a full EIR/EIS analysis to adequately inform decision makers of the risks posed by continuing these discharges without proper permits and compliance with the Clean Water Act, including state and federal non-degradation policies. The SLDMWA's action to execute the Agreement for ongoing O&M Activities on the San Luis Drain for Purposes of the GBP is likewise not supported by a CEQA exemption.

Documents Provided the Public Appear Incomplete Precluding Review: Is Exhibit D to the Proposed Agreement Complete?

One of the items provided to our organizations by email on April 2, 2021, BOD Item #9 referenced documents not included in the memo re: "Adoption of Resolution Authorizing Execution of Agreement with Panoche Water District for the Provision of O&M Activities on the San Luis Drain for Purposes of the Grassland Bypass Project." On April 2, 2021, the absent exhibits and agreements with regard to the BOD Item #9 Resolution were requested. A copy of the Proposed Agreement and Exhibit D, Baseline OM&R Activities for the San Luis Drain were provided via email April 5, 2021.¹⁸ The information provided, however, in Exhibit D abruptly ends on pdf page 15, and it appears some part of this section is missing. Before any action is taken by the Board a complete Exhibit D should accompany the Agreement and be provided to the public for review before the SLDMWA Board takes action on the resolution.

Conclusion

We urge that all polluted discharges of agricultural drainwater and stormwater into the San Luis Drain, Mud Slough (North) and the San Joaquin River cease as required under the prior GBP WDRs. We recommend land retirement and curtailing the importation of additional water supplies that mobilize these contaminants on the west side of the Southern San Joaquin Valley. Despite repeated promises, no viable treatment has been developed in the more than two decades. Before proceeding to load even more contaminants on downstream beneficial uses, we recommend that the Board of the SLDMWA not authorize a CEQA exemption for the proposed Agreement and instead complete a full EIR analysis under CEQA for the continued discharges of either stormwater, agricultural drainage, or contaminated groundwater from the GBP. The EIR should include:

- A National Pollutant Discharge System Permit prior to any additional use of the federal San Luis drain for discharge of contaminants from the west side into the San Joaquin River and Delta Estuary;
- A comprehensive cumulative effects analysis of stormwater and drainage disposal into Mud Slough and the San Joaquin River and Delta Estuary;
- A chronic, legally binding selenium objective of no greater than 2 µg/L (4-day average) for receiving waters of stormwater/drainage discharges;

¹⁸ See Cheri Worthy SLDMWA email 04-05-2021 @ 9:57 AM responding to an April 2, 2021 email from Patricia Schifferle, Pacific Advocates request for missing exhibits associated with the resolution.

- No exceedance of the 2 µg/L selenium water criterion in Mud Slough (north) and the San Joaquin River should be allowed. If it is exceeded, enforcement mechanisms should trigger all discharges to cease and require additional biological monitoring to determine if there are downstream effects to meeting tissue criteria for selenium proposed by USEPA in 2016 (for the Bay Delta);

Finally, Congress in its authorization of the San Luis Unit in 1960 never envisioned use of the San Luis Drain for stormwater discharge. Congress provided its authorization under specified conditions, including approval by the State of California¹⁹ for "...provision for constructing the San Luis interceptor drain to the Delta designed to meet the drainage requirements of the San Luis unit...." Senate Report No 154, page 2, San Luis Unit, Central Valley Project, California, April 8, 1959.²⁰ This brings into question whether the "Drain" can be legally used for storm water discharge without Congressional approval.

Thank you for your consideration,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://www.planningandconservationleague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://www.pacificcoastfishermen.org)
mike@ifrfish.org



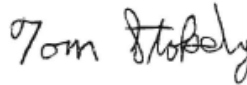
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



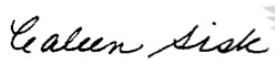
Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com

¹⁹ See PL86-488 San Luis Act June 3, 1960: Proviso: (2) received satisfactory assurance from the State of California that it will make provision for a master drainage outlet and disposal channel for the San Joaquin Valley,which will adequately serve, by connection therewith, the drainage system for the San Luis unit or has made provision for constructing the San Luis interceptor drain to the delta designed to meet the drainage requirements of the San Luis unit as generally outlined in the report of the Department of the Interior, entitled "San Luis Unit, Central Valley Project," dated December 17, 1956. The State of California has not made such a provision and Congress never considered the use of the drain for stormwater.

²⁰ See H. Rpt 399, available at <http://calsport.org/news/wp-content/uploads/Exhibit-3.pdf> S. Rpt 154...<http://calsport.org/news/wp-content/uploads/Exhibit-4.pdf>.



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



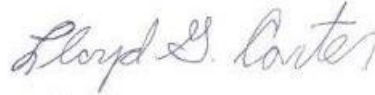
Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



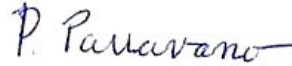
John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



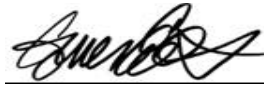
Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



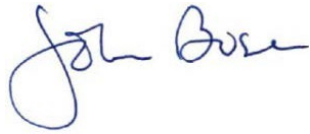
Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



February 1, 2021

Ashley Peters
 Susan Fregien
 Central Valley Regional Water Quality
 Control Board, 11020 Sun Center Drive #200,
 Rancho Cordova, CA 95670-6114.

Via Email: Ashley.Peters@waterboards.ca.gov, Susan.Fregien@waterboards.ca.gov

Re: Comments on Grassland Bypass Project Drainage Management Plan, Including Components of the Westside Regional Drainage Plan and the Long-Term Stormwater Management Plan.

The undersigned organizations respectfully submit comments to the Central Valley Regional Water Quality Control Board (Regional Board) on the Grasslands Bypass Project's (GBP) Drainage Management Plan (DMP) which is required by revised 2019 WDRs (ORDER R5-2019-0077).¹ We have also

¹ See Attachment B Item D @ pdf pg 90:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

included comments on the fifth Use Agreement for the San Luis Drain which was provided by the Regional Board after the Stakeholder Meeting on January 14, 2021. The revised GBP WDRs authorize continued discharges of stormwater commingled with selenium-laden agricultural drainage into the San Luis Drain and to Mud Slough (North) and the San Joaquin River from January 1, 2020 through December 31, 2045.

The GBP began in 1995 as a two-year program. Its federal use agreements have now been extended in five separate use agreements and numerous WDRs. All of the permits, environmental reviews, and findings that supported these use agreements and WDRs were predicated on zero discharge at the end of each agreement's term: first for 5 years, then 10 more years, and then 10 additional years. All that time—25 years in total—polluted discharge from the GBP was either entirely exempt from meeting protective water quality standards, or only required to meet relaxed, greatly reduced standards. Furthermore, over that 25-year-period the GBP steadily reduced both its monitoring of polluted discharges and its compliance with water quality standards. This pattern of repeated extensions and reduced monitoring, despite exceeding water quality standards, must stop if the Regional Board is to meet its responsibility to protect the waters of the State.

The water districts and other dischargers of the drainage provided by the GBP under its storm water plan are now covered by a fifth federal Use Agreement of the San Luis Drain starting July 1, 2020 and extending through December 31, 2029, an additional 10 years. This fifth agreement and the continuation of associated discharges are authorized by the 2019 WDRs. The 2019 WDRs allow the discharges of storm and agricultural drain water (contaminated with selenium and other toxic drain water constituents such as salt, sulfates, boron, molybdenum, and mercury) through December 31, 2045 with periodic reviews and potential revisions of the WDRs during this time period.

The undersigned organizations, have a long-standing interest in the GBP because contaminants in this agricultural drainage discharges have proven and profound adverse effects on the environment, including effects to downstream waterways, aquatic life, and migratory birds. We include our previous comments on the Draft EA on a 10-Year Use Agreement of the San Luis Drain, the 2019 Tentative WDRs for the GBP, the GBP Stormwater Plan EIR Addendum, the USEPA's proposed water quality criteria for selenium in California, and the 2009 GBP EIR/EIS and the Basin Plan Amendment by reference.²

² Coalition comments on USBR's Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area. December 23, 2019. See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

Comments of Pacific Coast Federation of Fishermen's Associations (PCFFA) and the Institute for Fisheries Resources (IFR), and the signatory organizations Re: Comments on Tentative Waste Discharge Requirements (WDRs) for Surface Water Discharges from the Grassland Bypass Project in Merced and Fresno Counties. November 5, 2019.

Coalition comments on Grassland Bypass Project Long-Term Storm Water Management Plan EIR Addendum and Initial Study--A Full EIR-EIS is Required. September 9, 2019.

Coalition comments of environmental, fishing and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019.

<http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf>

Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste

Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker, June 22, 2015.

https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf

Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR, September 8, 2014.

<http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbp-land-retirement.pdf>

Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project, June 30,

2014. <http://calsport.org/news/wp-content/uploads/Final-coalition-comments-on-Draft-GBP-WDR-6.30.14.pdf>

Coalition Comments: Grasslands Bypass Project -- Violations of the Endangered Species Act and Reduced Monitoring Threaten Endangered Species and Public Health, November 27, 2013.

<http://calsport.org/news/wpcontent/uploads/2013/12/Coalition-Letter-on-GBP-ESA-Violations-Monitoring-Reductions-LTR.Corrected-.pdf>

Coalition Comments: Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project. August 11, 2011. <http://calsport.org/news/wp-content/uploads/2011/09/Opposition-To-Grassland-Bypass-Monitoring-Reductions.pdf>

CSPA, CWIN and AquAlliance submit Comments to State Water Board Regarding Grassland Bypass Project and Basin Plan Amendment. September 22, 2010. <http://calsport.org/news/cspa-cwin-and-aqualliance-submit-commentsto-state-water-board-regarding-grassland-bypass-project-and-basin-plan-amendment/>

Sierra Club et. al. Comments: Grassland Bypass Project & San Joaquin River Selenium Basin Plan Amendments September 22, 2010.

In our previous comments on the GBP’s draft WDRs and draft EA, we recommended that the proposed 25-year extension to use the San Luis Drain to discharge stormwater into Mud Slough (North) and the San Joaquin River be denied, and that no permit or use agreement be granted. At a minimum, we recommended that a full Environmental Impact Report/Statement (EIR/EIS) be prepared. In those comments we detailed our concerns in several areas and recommended what we believe is the only reliable and cost-effective solution—order the cessation of this polluted discharge.³ The Regional Board after receiving significant public comments and new information on adverse effects from selenium to Sacramento splittail in the Delta, issued the following periodic review of the WDRs in ORDER R5-2019-0077 on page 16 item IV.5: the Regional Board “*will review this Order periodically and may revise this Order when necessary. No later than 31 December 2021, and every five years thereafter, Central Valley Water Board staff will present to the board an update on the Grassland Bypass Project, project compliance with Order requirements, and any additional information needed to determine whether the Order should be revised.*”⁴

https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/jim_metropulos.pdf

Comments of California Sportfishing Protection Alliance and California Water Impact Network on the draft environmental impact report for the Irrigated Lands Regulatory Program and related documents. Also attached are several comments prepared by three expert consultants September 27, 2010. <http://calsport.org/doclibrary/pdfs/207.pdf>

Environmental Coalition Comments on Draft Staff Report for Grasslands Bypass Project Basin Plan Selenium Amendments to The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, April 26, 2010 available at: https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf

³ The San Joaquin Valley Drainage Program (SJVDP) *A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley*, also known as the “Rainbow Report” (September 1990); see also USGS *Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California* Open-File Report 2008-1210 By: Theresa S. Presser and Steven E. Schwarzbach <https://pubs.er.usgs.gov/publication/ofr20081210>; USBR Final Environmental Impact Statement for *San Luis Drainage Feature Re-evaluation* (May 2006 and Record of Decision (ROD) (March 2007) (selecting the “In-Valley/ Water Needs/ Land Retirement Alternative.”).

⁴ See: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

2021 GBP Stakeholder Meeting

We note that the Regional Board hosted an online GBP Stakeholder Meeting on January 14, 2021 and that several of our members participated in this meeting. There was excellent attendance to this Stakeholder Meeting thanks largely to participation being available online. We encourage the Regional Board to continue to make these meetings available for public participation online even after the Covid-19 pandemic is behind us.

Further, we note that the Regional Board made available copies of key documents on their ftp site (<https://ftp.waterboards.ca.gov/>) including copies of the following:

- 2020 Annual Monitoring Report
- 2019 LTSWMP Final Addendum to EIR
- Drainage Management Plan Presentation from Joe McGahan
- GBP Stakeholder Presentation from Susan Fregien and Sue McConnell
- Selenium Goals presentation from Joe McGahan
- A 5th SLD Use Agreement (newest)
- Map showing new stormwater detention basins proposed location

We appreciate the Regional Board staff making available these important documents available to the public. We ask that the Board consider adding additional documents listed below at the ftp site as well:

- 1) Public comments received on ORDER R5-2019-0077 are not currently posted on the Regional Board's website. For previous WDRs on the GBP the Regional Board has posted public and agency comments at a wdrs development archive URL.⁵ We ask that public and agency comments received by the Regional Board for the 2019 WDRs for the GBP be made available either at the WDRs development archive URL or at the Regional Board's ftp site.
- 2) The GBP has been monitoring and reporting annual bird use from April thru June at the SJRIP drainage reuse area since 2008. Many of those reports are posted on the SFEI website up through 2015.⁶ We suggest that the wildlife monitoring reports from the San Joaquin River Improvement Project (SJRIP) also be included at this ftp site, or a link to those reports be included. In addition, it would be helpful to provide the public a copy of the SJRIP monitoring plan at this ftp site.

⁵ Public comments on previous GBP WDRs are available here: https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/

⁶ See: <https://www.sfei.org/gbp/san-joaquin-river-water-quality-improvement-project>

- 3) We also ask that the study proposals for the Executive Officer (EO) Technical Reports mentioned in slide 7 of the Regional Board's presentation at the Stakeholder meeting be made available to the public at the Regional Board's ftp site. And when available, we ask that the Technical Reports be made available to the public as well.

EO Technical Reports

During the Stakeholder Meeting, the Regional Board noted that the Executive Officer (EO) had issued an order for two Technical Reports to help the Board derive protective water column selenium values (see slide 7 of the Board's presentation on below). Have the proposals for the EO Technical Reports been peer reviewed? If not, we recommend that the proposals be reviewed by selenium toxicity experts from agencies including USGS, USFWS, NMFS and USEPA. Further, as was recommended at the Stakeholder Meeting by Dr. Joseph Skorupa of USFWS, the Technical Reports should consider downstream impacts in the Delta when deriving protective water column selenium values.

EO Order for Technical Reports

- Analysis of available fish tissue Se data
 - SJ River, Mud SI, Salt SI; compare to USEPA aquatic life criteria; human health criteria TBD
 - Due July 2021
- Derive estimated water column selenium values
 - Based on particulate and dissolved Se data
 - Model estimate of protective water column values for fishes; compare to USEPA #'s
 - Due July 2022

Comments on the Drainage Management Plan

Water Quality Objectives are Not Protective of Beneficial Uses

The DMP identifies actions and methods currently being or to be implemented by Grassland Area Farmers (GAF) and individual Districts by which the water quality objectives specified in the 2019 WDRs in Mud Slough (North) and the San Joaquin River will be met. The Numerical Water Quality Objectives for selenium are described in Table 5.2 on page 32 of Attachment A of the 2019 WDRs:⁷

Table 5.2: Selenium Numerical Objectives

4-day Average	Maximum	Location
5 µg/L	20 µg/L	Mud Slough (north) and the San Joaquin River from the Mud Slough confluence to the Merced River
5 µg/L	12 µg/L	San Joaquin River, mouth of the Merced River to Vernalis

The 5 µg/L selenium water quality objective in the Basin Plan for Mud Slough (North) and the San Joaquin River from Sack Dam to Vernalis and referenced in Table 5.2 of Attachment A in the 2019 WDRs is not protective of downstream beneficial uses including fish and wildlife resources that use those surface waterways. The USEPA in the 1990’s had proposed a 5 µg/L selenium water quality objective for California in the California Toxics Rule (CTR). Pursuant to the Endangered Species Act (ESA), and prior to the USEPA promulgating water quality objectives (including selenium) for the CTR, the USEPA was required to consult with the US Fish and Wildlife Service and the National Marine Fisheries Service (collectively, “Services”) and obtain the Services’ concurrence that none of the proposed criteria would jeopardize any ESA-listed species. *Upon that review, the Services found that the 5 µg/L chronic criterion for selenium proposed by USEPA in the CTR would likely jeopardize 15 ESA-listed species* (Emphasis added).⁸ To avoid a final “Jeopardy Opinion” from the Services, and the associated legal ramifications, the USEPA agreed to reevaluate their CWA criteria guidance for selenium by 2002 (FWS and NMFS 2000).⁹

⁷ See: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

⁸ Final Biological Opinion on the effects of the U.S. Environmental Protection Agency's "Final Rule for the Promulgation of Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California (March 24,2000), available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-00560144&contentType=pdf>.

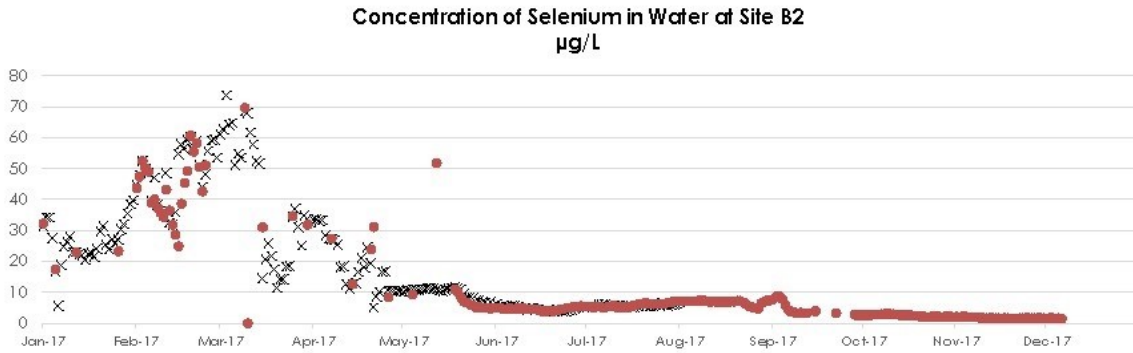
⁹ *Id.*

The 2019 WDRs require compliance with the selenium water quality objectives specified in the 2010 Basin Plan Amendment (5 µg/L, 4-day average). However, this water quality objective is lax, allowing for acute spikes of selenium (as described in Table 5.2 above and ranging from 12 to 20 µg/L depending on location) that will cause bio-accumulation throughout the ecosystem. These water quality objectives will result in harm to fish and aquatic-dependent wildlife as denoted in the Service's 2000 Biological Opinion on the CTR. We recommend that State and Federal fish and wildlife agencies be consulted on the effects of implementation of the 2019 WDRs, including water quality objectives that are not protective of migratory birds and endangered anadromous fish populations.

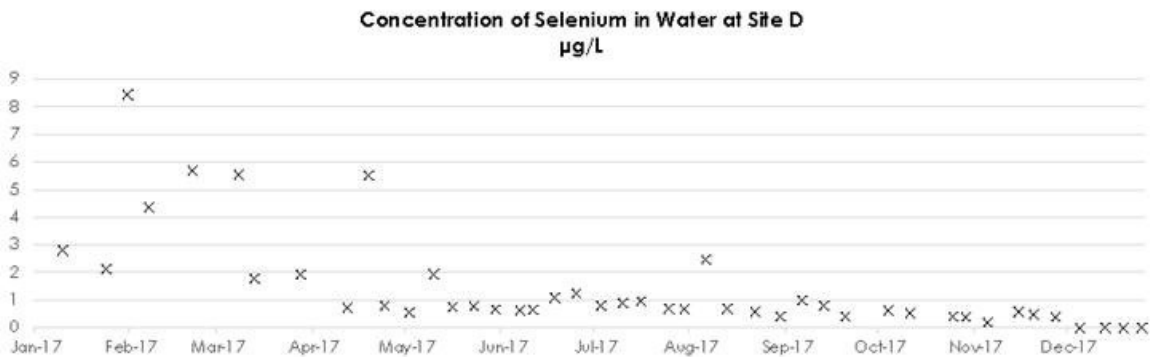
Short-term spikes of selenium in a waterway can have long lasting effects in an ecosystem. Beckon (2016) noted that when a bioaccumulative substance such as selenium is introduced into or removed from the environment, the processes by which it is assimilated into upper trophic levels of the ecosystem may be complex and prolonged. These processes include several levels of trophic transfer, each entailing the time required to consume food, assimilate the substance of interest, and the time span during which the organism continues to survive before being eaten by a member of the next higher trophic level. Beckon noted that for some species of piscivorous fish the lag time for selenium exposure to bioaccumulate in the upper trophic level of fish is over 1 year from the initial exposure. Thus, short-term exceedances of the 5 µg/L selenium objective can continue to have deleterious effects to the upper trophic level species several months to over a year after the event.

The 2019 WDRs effectively sanction continued excessive pollution of Mud Slough (North), the San Joaquin River, and ultimately the Sacramento-San Joaquin Delta and San Francisco Bay, especially during stormwater events. They fail to enforce science-based protective water quality standards for selenium and allow the continued contamination of these water bodies. Excess selenium in streams kills or deforms fish and other aquatic life and is a human-health concern in drinking-water supplies. Under the 2019 WDRs, selenium (and other harmful drain water pollutants, such as salt, sulfates, boron, molybdenum, and mercury) will continue to be discharged from the federally owned San Luis Drain directly into the waters of California and the United States. The failure to enforce protective selenium water quality objectives transfers pollution from Grassland drainers, through the federal San Luis Drain, to the waters of the State, and thus harms beneficial uses of these waters for domestic water supplies, public health, fishing, recreation and other public trust values.

There is significant ongoing discharge of selenium-laden drainage and contaminated groundwater from the GBP. For example, during the winter/spring of 2017, water quality monitoring data show high selenium concentrations (e.g., 20-40 µg/L) associated with high flow conditions in water entering the San Luis Drain from the GBP. The figure below shows selenium concentrations at Site B2 in the San Luis Drain during 2017.



Although the San Luis Drain adds a relatively small percentage of flow to Mud Slough, it nevertheless substantially increased the selenium concentrations in Mud Slough in 2017 to unacceptably high levels of 5-10 µg/L. Dilution is not the solution to pollution—especially in the case of selenium, which bioaccumulates in the food chain and magnifies impacts on fish, wildlife, migratory birds, and terrestrial species (Lemly and Skorupa, 2007; Skorupa 1998; USDI 1998). According to selenium expert Dr. Dennis Lemly, the 5 µg/L is an outdated number from the 80's and 90's, which has been shown repeatedly through field case study research to be under protective. In other words, 5 µg/L won't protect downstream fish and wildlife, including salmon.¹⁰



¹⁰ Dr. Dennis Lemly personal communication to Pacific Advocates, dated 10-26-19: "... refer to the peer reviewed published guidelines for selenium toxicity given in my book (Lemly, A.D. 2002. Selenium Assessment in Aquatic Ecosystems: A Guide for Hazard Evaluation and Water Quality Criteria. Springer-Verlag, New York), and the current national regulatory criteria issued by EPA in 2016 (https://www.epa.gov/sites/production/files/2016-06/documents/se_2016_fact_sheet_final.pdf). These information sources establish water limits for protection of fish and other aquatic life, at 1-2 ug/L (my book, <1 for organic selenium, 2 for inorganic selenium; EPA = 1.5)."

USEPA National Se Criteria revision

On July 13, 2016 the USEPA published a Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for selenium in fresh water. The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 recommended criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. Draft versions of the criterion underwent public review in 2014 and 2015 and external peer review in 2015. EPA considered all public comments and peer reviewer comments in the development of the 2016 final selenium criterion document. EPA's water quality criterion for selenium provides recommendations to states and tribes authorized to establish water quality standards under the CWA.¹¹

Further, the USEPA did not include an acute selenium criterion in their July 13, 2016 Notice of Availability announcing the release of a Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water under Item IV: “*The criterion document does not include an acute criterion (based on water-only exposure) because selenium is bioaccumulative and toxicity primarily occurs through dietary exposure.*”¹² So the 2019 WDRs inclusion of acute selenium objectives (12 to 20 µg/L depending on location) is inconsistent with Final national criteria and will have to be updated during the next triennial review.

¹¹ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

¹² Ibid.

Comparison of Final 2016 Selenium Criterion to 1999 Criteria

Criterion version	Chronic					Short-term
	Egg-Ovary ¹ (mg/kg dw)	Whole Body ¹ (mg/kg dw)	Muscle ¹ (mg/kg dw)	Water, ¹ Lentic (µg/L)	Water, ¹ Lotic (µg/L)	Water (µg/L)
2016 Final Update	15.1	8.5	11.3	1.5 (30 d)	3.1 (30 d)	Intermittent exposure equation.
1999 Selenium Criteria	N/A	N/A	N/A	5 (4 d)	5 (4 d)	Acute Equation based on water column concentration.

¹ A note on hierarchy of table: when fish egg/ovary concentrations are measured, the values supersede any whole-body, muscle, or water column elements except in certain situations. Whole body or muscle measurements supersede any water column element when both fish tissue and water concentrations are measured, except in certain situations (see examples in text above). Water column values are derived from fish tissue concentrations.

The EPA's 2016 final revised Section 304(a) guidance for selenium makes clear that retaining the current state standard of 5 µg/L will not protect aquatic life and wildlife designated uses and therefore would bring the state out of compliance with the requirements of Section 303(c)(2)(B) of the Clean Water Act (CWA). As per the EPA's 2014 "*Water Quality Standards Handbook, Chapter 6: Procedures for Review and Revision of Water Quality Standards*", @ page 7:¹³ "It is important to note that, although a state or tribe may have fully complied with the requirements of Section 303(c)(2)(B) previously, states and tribes may be required to adopt new toxic criteria in the following situations:

- The EPA publishes new Section 304(a) criteria recommendations for a priority pollutant.
- New information on existing water quality and pollution sources indicates that a toxic pollutant for which a state or tribe had not previously adopted criteria could now be reasonably expected to interfere with the designated uses adopted by the state or tribe.

¹³ See: <https://www.epa.gov/wqs-tech/water-quality-standards-handbook>

We strongly recommend that the Regional Board update the selenium water quality standards for aquatic life in their next triennial review. Further, given the Sacramento splittail data (discussed below), the standard should be revised to 1.5 µg/L. Standards must protect downstream designated uses. The downstream floodplain habitat that caused the splittail deformities in 2011 functions more like a lentic (stillwater) habitat than a lotic (flowing water) habitat and EPA's new national criterion for lentic waters is 1.5 µg/L.

USEPA Proposed CA Se water quality criteria applicable to SF Bay and Delta

On July 15, 2016 the USEPA published a Proposed Rule in the Federal Register to revise the current federal Clean Water Act selenium water quality criteria applicable to the San Francisco Bay and Delta to ensure that the criteria are set at levels that protect aquatic life and aquatic-dependent wildlife, including federally listed threatened and endangered species.¹⁴ The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium, and State and Federal actions are underway to restore the waterway. Scientific evidence indicates that elevated selenium levels can contribute to the decline of fish and aquatic-dependent birds. EPA promulgated the San Francisco Bay and Delta's existing selenium criteria in 1992 as part of the National Toxics Rule, using EPA's recommended aquatic life criteria values at the time. However, the latest science on selenium fate and bioaccumulation indicates that the existing criteria are not protective of aquatic life and aquatic-dependent wildlife in the San Francisco Bay and Delta. Therefore, EPA published a Proposed Rule to revise the existing selenium criteria, taking into account available science, legal requirements, and EPA policies and guidance. EPA's Determination of Necessity (page 46036 Item III B.) found that *"Because California's existing aquatic life criteria for selenium in the salt and estuarine waters of the San Francisco Bay, upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta, as promulgated by EPA in the NTR, are not protective of the applicable designated uses per the CWA and EPA's regulations at 40 CFR 131.11, EPA determines under CWA section 303(c)(4)(B) that new or revised WQS for the protection of aquatic life and aquatic-dependent wildlife are necessary to meet the requirements of the CWA for these California waters. EPA, therefore, proposes the revised selenium aquatic life and aquatic-dependent wildlife criteria in this rule in accordance with this 303(c)(4)(B) determination."*

¹⁴ See: <https://www.regulations.gov/document?D=EPA-HQ-OW-2015-0392-0001>

Table 2. Proposed Selenium Water Quality Criteria for the San Francisco Bay and Delta

Media Type	Tissue		Water Column ¹		
			Dissolved		Particulate
Criteria	Fish Whole Body or Muscle	Clam	Chronic	Intermittent Exposure ²	Chronic
Magnitude	8.5 µg/g dw whole body or 11.3 µg/g dw muscle	15 µg/g dw	0.2 µg/L	$WQC_{int} = \frac{0.2 \mu\text{g/L} - C_{bkgrnd}(1 - f_{int})}{f_{int}}$	1 µg/g dw
Duration	Instantaneous measurement	Instantaneous measurement	30 days	Number of days/month with an elevated concentration	30 days
Frequency	Not to be exceeded	Not to be exceeded	Not more than once in three years	Not more than once in three years	Not more than once in three years

¹ Dissolved and particulate water column values are based on total selenium (includes all oxidation states, i.e., selenite, selenate, organic selenium and any other forms) in water.

² Where C_{bkgrnd} is the average background selenium concentration in µg/L, and f_{int} is the fraction of any 30-day period during which elevated selenium concentrations occur, with f_{int} assigned a value ≥ 0.033 (corresponding to one day).

FWS provided technical support to EPA for this proposed rule in the document “Species at Risk from Selenium Exposure in the San Francisco Estuary” (Beckon and Maurer March 2008). The document includes a list of species most at risk of selenium exposure in the SF Bay Estuary. In addition to the species covered in the CTR Biological Opinion, the federally listed as threatened green sturgeon is listed as well as the federally protected bald eagle. Numerous additional species are listed at risk from selenium exposure including several species of diving ducks and white sturgeon.

In a comment letter from FWS on this proposed rule dated October 28, 2016,¹⁵ FWS identified a substantive error in the proposed criteria with respect to the percentage of white sturgeon diet that is clam-based. This percentage was used for the basis of deriving “protective” selenium criterion for the aquatic food chain (clam - Corbicula) and a dissolved chronic water criterion. As noted by FWS, the percentage of clams in white sturgeon’s diet in EPA’s Technical Support Document is inaccurate: “FWS estimated the diet of white sturgeon to be approximately 40 percent clam based...” FWS pointed out the error, and noted that more recent studies showed a much higher incidence of clam (Corbicula) in the diet of white sturgeon (>90 percent). If other calculations are unchanged, this correction brings the maximum allowable Corbula tissue concentration (to protect sturgeon) to about 8.6 µg/g dw which is much lower than the EPA proposed Corbula tissue criterion of 15 µg/g dw to protect all clam eating species such as green sturgeon. This will also impact the calculation of a protective dissolved

¹⁵ See: <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2015-0392-0251&attachmentNumber=1&contentType=pdf>

selenium water concentration resulting in a value closer to 0.1 µg/L (half of what EPA proposed as a chronic dissolved selenium water criteria – 0.2 µg /L). To date, USEPA has not issued a Final Rule for these site-specific selenium criteria as specified in the CTR Biological Opinion and has not addressed the errors in the proposed rule for selenium criteria in clam tissue and chronic dissolved water.

Our organizations submitted comments to USEPA on the proposed selenium water quality and tissue criteria for the Bay Delta supporting more protective water quality criteria and hereby incorporate those comments by reference.¹⁶ The selenium discharges being considered by the Regional Board from the GBP for the next 25 years will affect the Bay-Delta ecosystem and could affect compliance with EPA’s proposed water quality criteria for San Francisco Bay and Delta. The 5.0 µg /L Basin Plan selenium objective for Mud Slough and the San Joaquin River is not protective of downstream beneficial uses, will result in non-compliance with proposed water quality criteria and will cause deleterious effects to fish and wildlife in the Bay-Delta. Agricultural drainage from drainage-impaired lands in the Grasslands Drainage Area contribute to selenium impairment in the Bay-Delta.

Species at Risk in the San Joaquin Valley and Bay Delta Estuary from Selenium Exposure

Supporting documentation for this USEPA docket for Selenium in California includes two reports by USFWS: (1) Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries, which gives a list of species considered most at risk for selenium exposure in CA;¹⁷ and (2) Species at Risk from Selenium Exposure in the San Francisco Estuary.¹⁸ The species identified at most risk for selenium exposure in the San Joaquin Valley and San Francisco Estuary were denoted as:

- Mammals: Buena Vista Lake Ornate Shrew;
- Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
- Reptiles: Giant Garter Snake;
- Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

¹⁶ Coalition comments of environmental, fishing and environmental justice organizations on EPA’s Water Quality Standards for the Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta. October 28, 2016. Available at <https://www.regulations.gov/document?D=EPA-HQ-OW-20150392-0246>

¹⁷ Available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-00560144&contentType=pdf>.

¹⁸ Available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-00560265&contentType=pdf>.

Further, in a letter from National Marine Fisheries Service (NMFS) to the SWRCB regarding the San Joaquin River Selenium Control Plan Basin Plan Amendment (dated September 22, 2010), NMFS states that selenium contamination in the San Joaquin River is problematic in restoring spring and fall-run Chinook salmon to the upper reach of the San Joaquin River. The NMFS letter noted that selenium in the San Joaquin River could negatively affect Central Valley steelhead and the Southern distinct population segment of the North American green sturgeon.¹⁹

Studies by the US Geological Survey have documented elevated levels of selenium in the food chain and in green sturgeon. Since these impacts are potentially significant, an EIS must be prepared²⁰ along with a complete CEQA analysis to accurately inform decision-makers before allowing these pollutants to spread downstream.

New information has been published in 2020 that identifies adverse effects from selenium to Sacramento splittail. Recent publications by the USGS and NMFS have documented elevated levels of selenium in the benthic clam food chain used by the Sacramento splittail and the federally listed green sturgeon in the San Francisco Bay Delta. In the spring of 2011, young-of-year splittail were found to have a high incidence (>80%) of spinal deformities characteristic of selenium toxicity at the site of a water diversion station in the San Joaquin Valley (U.S. Department of the Interior, Bureau of Reclamation Tracy Fish Collection Facility) (Johnson et al 2020). This study identified various sources of selenium contamination and points to agricultural drainage as a significant source: *“These data suggest that individuals acquired Se toxicity while feeding in the freshwaters of the San Joaquin River but already started with significantly higher Se burdens from females maturing in the estuary ([Figure 3, Table 1 and Supporting Information](#)).”*²¹

¹⁹ Available at https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/howard_brown.pdf

²⁰ See 40 C.F.R. § 1508.27(b)(9).

²¹ See: <https://dx.doi.org/10.1021/acs.est.9b06419>



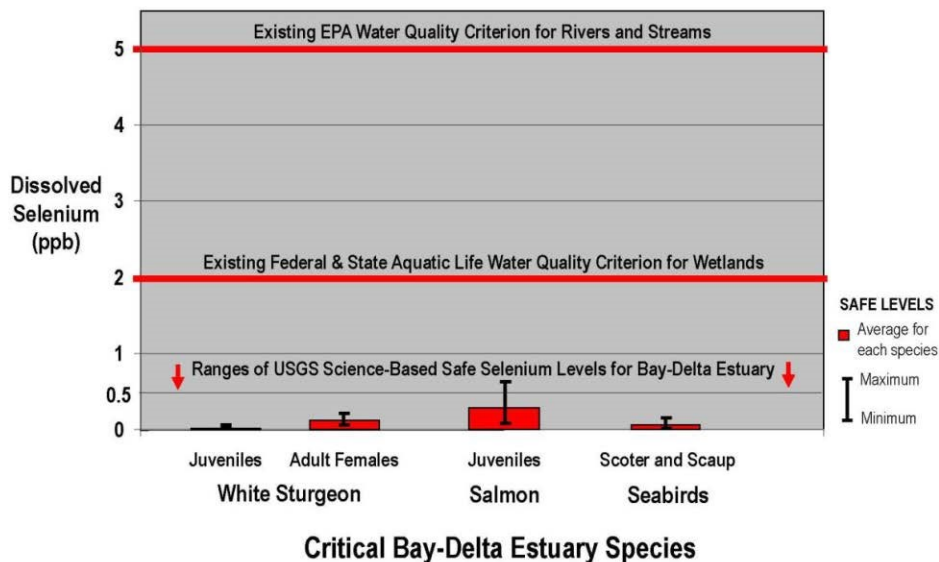
A second publication (Stewart et al 2020) compared splittail tissue concentrations with those proposed by EPA in 2016 for the Bay Delta and found that “Despite the consistently low muscle Se concentrations across all regions and years and no exceedances, the frequency of exceedance in liver and ovary were high for Pacheco, ranging from 60 to 80% (range for both tissues and years), followed by Suisun in 2011 (33%) and the Confluence in 2010 (17%).” These findings are significant as they document harm in a fish foraging in a benthic clam food web in the Delta, which is also utilized by the federally listed green sturgeon.

Several endemic species are listed under the ESA as threatened or endangered, including green sturgeon, Chinook salmon, steelhead trout, delta smelt, and the California Ridgway’s rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters. The USEPA noted on page 46036 of the Federal Register Notice 81(36) that “[t]he analyses to develop the fish tissue and the avian egg tissue benchmarks used in the modeling, and the modeling results used to derive the proposed water column criteria, indicate the health of these species would be negatively impacted from exposure to selenium water column concentrations above 0.2 $\mu\text{g}/\text{L}$, which would be allowed to occur under the existing NTR selenium criterion of 5.0 $\mu\text{g}/\text{L}$. Accordingly, EPA finds that it is necessary to propose revised and more protective criteria for selenium in order to help ensure the continued protection of these vulnerable species and associated designated uses.” [The chart below summarizes the USGS findings in relation to 2011 existing water-quality criteria.²²

²² The above graph prepared by CSPA & CWIN is directly based on the results from a U.S. Geological Survey (USGS) study September 9, 2011.

Existing Selenium Water-Quality Standards Do Not Protect Bay-Delta Species:

A new USGS study, which will be used by EPA to revise standards, shows that much lower levels of selenium will be required to protect critical species.



https://archive.epa.gov/region9/water/archive/web/pdf/selenium-modeling_admin-report.pdf The USGS study evaluated a series of selenium exposure scenarios using a set of specific guidelines and modeling choices from the range of temporal hydrodynamic conditions, geographic locations, food webs, and allowable dissolved, particulate, and prey Se concentrations (which we have referred to as “safe levels”). According to the USGS, “[t]he specificity of these scenarios demonstrates that enough is known about the biotransfer of Se and the interconnectedness of habitats and species to set a range of limits and establish an understanding of the conditions, biological responses, and ecological risks critical to management of the Bay-Delta.” The following scenarios were evaluated by USGS for a range of hydrologic conditions and residence times (See Tables 17, 18 and 19 in the USGS report): (1) predicted allowed dissolved Se concentrations for Bay-Delta transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material >C. amurensis>sturgeon food web; (2) predicted allowed dissolved Se concentrations for Bay-Delta transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material >C. amurensis>clam-eating bird species food web; and (3) predicted allowed dissolved Se concentrations for landward transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material >aquatic insect>juvenile salmon food web. The summary graphic of this data shows the results for critical Bay-Delta species, aggregated across all combinations of target tissues (e.g., Whole body, eggs, or diets) that have known levels of concerns, as summarized by the U.S. Fish and Wildlife Service. Results are also combined across all hydrologic conditions for each species. The ranges of “allowable” or safe levels of dissolved selenium clearly show that, although EPA will need to specify exact safety levels, flow conditions, and species, new standards for the Bay-Delta will need to be substantially less than 0.5 parts per billion dissolved selenium to be protective.

The Regional Board should consider how the selenium discharges allowed in the 2019 WDRs for the next 25 years from the GBP will affect the Bay-Delta ecosystem and could affect compliance with EPA's water quality criteria for San Francisco Bay and Delta. The 5.0 µg /L Basin Plan selenium objective for Mud Slough and the San Joaquin River will result in non-compliance with USEPA's Final updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for selenium.²³

San Joaquin River Improvement Project (SJRIP)

There are no WDRs that regulate management actions at the SJRIP.

The WDRs for the GBP should include biological monitoring and reporting requirements, performance standards, and enforcement and mitigation provisions for the discharge, disposal and management of agricultural drainage and stormwater at the SJRIP Reuse Area. Yet we could not find any WDR requirements that pertain to drainage and stormwater management at the SJRIP. We note that these issues were brought up in Coalition comments to the Regional Board's March 2010 draft staff report on the Amendments to the Selenium Control Program, Sacramento River and San Joaquin River Basin Plan (@ page 16, item 7).²⁴ Our comments referenced SJRIP monitoring data documenting deformed black necked stilt and abandoned stilt nests; the USFWS 2009 GBP Biological Opinion noting that egg-selenium concentrations in avocet and stilt eggs collected at the SJRIP's Drainage-Reuse Area in 2008 exceeded all geometric mean selenium concentrations in similar species' bird eggs collected at Kesterson Reservoir; and SJRIP monitoring data identifying several nesting Swainson's hawks (a State listed species) in the vicinity of the recently acquired lands for the SJRIP's Drainage Reuse Area. The Regional Board's response to these comments²⁵ (@ pg 15) noted, "*Operation of the drainage reuse area is outside the scope of the proposed Amendments, which address a time extension for compliance with the prohibition/objective in Mud Slough (north) and the SJR between the discharge and the Merced River. We will consider this information when the WDRs for the project area are revised.*" Yet when the WDRs were revised in 2015, and subsequently in 2019, they were not revised to include the SJRIP. In fact, in the 2015 GBP WDRs, the Regional Board @ page 2 item 4 concluded that the WDR "*generally does not regulate the discharge of drainage to land or surface water of treated tile drainage water.*" Therefore, the effects to wildlife of drainage management at the SJRIP and Stormwater Detention Basins have not been permitted in the WDRs. Nor are the waters of the state and nation

²³ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

²⁴ See: https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf

²⁵ See: https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/gbp_2010_bpa_52510_rtc.pdf

protected from these contaminants being discharged to land in this more than 6,000-7,550 acre disposal site (see the acreage discussion below).

California Water Code section 13263 requires the Regional Boards to prescribe WDRs, or waive WDRs, for proposed, existing, or material changes in discharges of waste that could affect water quality. The Regional Board's guidance on WDR permits notes that *"If your activities or discharges from your property or business could affect California's surface, coastal, or ground waters, you will need to apply for a permit from the appropriate Regional Water Quality Control Board (RWQCB)."*²⁶ We know that the management of drainage in the SJRIP does affect groundwater, is accumulating and adversely affecting migratory birds, and at times contaminates surface water when there is overflow. Yet the only WDR that pertains to groundwater impacts is the General Order for Growers in the Grassland Drainage Area R5-2015-0095-04,²⁷ and that WDR does not consider impacts from selenium. We see no valid reason why the Regional Board has neglected to include the discharges to and management of the SJRIP in their WDRs for the GBP. These WDRs need to include monitoring and reporting requirements, establish performance criteria, and specify mitigation prescriptions if performance criteria are exceeded.

Discrepancies in acreages of SJRIP

The Final GBP Stormwater Plan CEQA Addendum @ pg 2-5 (dated October 2019 and made available by the Regional Board on their ftp site) included expansion of the SJRIP: *"The proposed expansion of 1,450 acres will take the existing reuse facility from 6,100 acres analyzed in the 2009 Final EIS/EIR to 7,550 acres of usable reuse area. This is an additional 650 acres over the maximum size anticipated in the 2009 Final EIS/EIR of the existing drainage reuse area from 6,100 acres to 7,550 acres."* Yet, the DMP @ pg 9 notes *"Panoche Drainage District has been awarded a Proposition 84 grant to further expand the SJRIP by up to 1,850 acres of additional lands for reuse development..."* This would make the total acreage of the SJRIP 7,950 acres, 400 acres greater than what was considered in the Addendum.

Discrepancies with respect to proposed Stormwater Detention Basins

The DMP @ pg 9 describes the Stormwater Detention Basins as follows: *"Existing basins occupy approximately 90 acres and planned future work would add up to an additional 200 acres and have a storage capacity of up to 1,000 acre-feet."* Yet the DMP summary presentation given at the January 14, 2021 GBP Stakeholder Meeting that the new basins would have a capacity of 1,600 ac-ft, as depicted in slide 7 below:

²⁶ See: <https://www.waterboards.ca.gov/centralvalley/help/permit/>

²⁷ See: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2015-0095-04.pdf

Stormwater Management Activities (In Progress)

These activities affect the management of storm-induced drain water:

- **Tile-sump pump shut off:** This delays the discharge of subsurface drainwater by de-energizing the discharge pumps. This would likely reduce the concentration of selenium in storm-induced drainage flows. Automation of pump shutoff is in progress.
- **Short-term Storage Basins:** These divert and retain a portion of the storm-induced drainage flows to reduce the overall discharged volume. Historically the stored water is reused on the SJRIP as capacity becomes available. Current storage capacity is approximately 500 acre feet. New basins are in developed and are expected to have a capacity of up to 1,600 acre feet.

Biological Effects at the SJRIP

One significant environmental impact at the SJRIP is ponding of seleniferous drainage water within the fields of the reuse area. Bird use, already showing impact under the current acreage, would increase in the vicinity of the SJRIP with the addition of stormwater/drainwater detention basins. The GBP SJRIP reuse area already poses exposure risks to wildlife from use and additional selenium exposure. The use of regulating ponds to help control flow as a part of the engineered reuse system and ponding during stormwater events in the GBP SJRIP area also creates a potential wildlife exposure risk similar to those originally realized at Kesterson National Wildlife Refuge.²⁸ These adverse effects would violate the California Migratory Bird Protection Act which amended and added Section 3513 of the Fish and Game Code, relating to migratory birds.²⁹ Yet, the 2019 WDRs do not include any requirements for monitoring, reporting or mitigation of effects at the SJRIP upon migratory birds or fish and wildlife.

The GBP has been monitoring and reporting annual bird use from April thru June at the SJRIP drainage reuse area since 2008. Many of those reports are posted on the SFEI website.³⁰ However, no reports have been posted on the SFEI site since

²⁸ Presser and Ohlendorf, 1987 as referenced in: <https://pubs.usgs.gov/of/2008/1210/> *Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California* By Theresa S. Presser and Steven E. Schwarzbach U.S. Geological Survey Open-File Report 2008-1210 version 1.0.

²⁹ See: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB454

³⁰ See: <https://www.sfei.org/gbp/san-joaquin-river-water-quality-improvement-project>

the 2015 report. We note that additional reports are available at a third-party website.³¹ It would be helpful if these reports were made available at one URL location, such as the Regional Board's ftp site.

The 2017 wildlife monitoring report for the GBP drainage reuse area (SJRIP) documented that 50 avian species were observed at the drainage reuse area between April 13 and June 21, 2017. Eighteen species either were observed nesting or were suspected of nesting, including Swainson's hawk, a species listed by the State of California as a threatened. Twelve of the species observed—spotted sandpiper, least sandpiper, whimbrel, western wood-peewee, willow flycatcher, American pipit, savannah sparrow, White-crowned sparrow, common yellowthroat, yellow warbler, Wilson's warbler, and western tanager—were present only as spring migrants.³²

In 1993, to evaluate the risks of the proposed GBP on biotic resources, a set of Ecological Risk Guidelines based on selenium in water, sediment, and residues in several biotic tissues were developed by a subcommittee of the San Luis Drain Re-Use Technical Advisory Committee (CAST 1994; Engberg, et al. 1998). These guidelines are based on a large number of laboratory and field studies, most of which are summarized in USDO (1998), Lemly (1993) and Presser and Luoma (2006). These guidelines are listed in Table 1 below and are from the 2009 GBP Annual Report @ pg 144.³³ These selenium risk guidelines should be used to trigger appropriate actions by resource managers, regulatory agencies, and dischargers (Beckon et al. 2008; USBR 2009).

In the 2019 SJRIP wildlife monitoring report,³⁴ most of the killdeer eggs and a black-necked stilt egg collected from the SJRIP reuse area exceeded the toxicity threshold for avian eggs of 10 µg/L (drywt) identified in the GBP Ecological Risk Guidelines. It is clear that unpermitted take of migratory birds under the California Migratory Bird Protection Act is occurring at the SJRIP.

³¹ See: <http://www.summerseng.com/grasslandbypassproject.htm>

³² See: <https://drive.google.com/open?id=1mudCtShFmoQ-RW0YJaVF2-oia2TIXqn5>

³³ See: https://www.sfei.org/sites/default/files/general_content/GBP_0809_Full_lores.pdf

³⁴ See: <http://www.summerseng.com/docs/2019%20San%20Joaquin%20River%20Water%20Quality%20Improvement%20Project%20Monitoring%20Report.pdf>

Table 1. Recommended Ecological Risk Guidelines for Selenium Concentrations

Medium	Effects on	Units	No Effect	Concern	Toxicity
Water (total recoverable selenium)	fish and bird reproduction	µg/L	< 2	2 – 5	> 5
Sediment	fish and bird reproduction	µg/g (dry weight)	< 2	2 – 4	> 4
Invertebrates (as diet)	bird reproduction	µg/g (dry weight)	< 3	3 – 7	> 7
Warmwater Fish (whole body)	fish growth/condition/survival	µg/g (dry weight)	< 4	4 – 9	> 9
Avian egg	egg hatchability (via foodchain)	µg/g (dry weight)	< 6	6 – 10	> 10
Vegetation (as diet)	bird reproduction	µg/g (dry weight)	< 3	3 – 7	> 7

Notes:

1/ These guidelines, except those for avian eggs, are intended to be population based. Thus, trends in means over time should be evaluated. Guidelines for avian eggs are based on individual level response thresholds (e.g., Heinz, 1996; Skorupa, 1998)

2/ A tiered approach is suggested with whole body fish being the most meaningful in assessment of ecological risk in a flowing system.

3/ The warmwater fish (whole body) concern threshold is based on adverse effects on the survival of juvenile bluegill sunfish experimentally fed selenium enriched diets for 90 days (Cleveland et al., 1993). It is the geometric mean of the "no observable effect level" and the "lowest observable effect level."

4/ The toxicity threshold for warmwater fish (whole body) is the concentration at which 10% of juvenile fish are killed (DeForest et al., 1999).

5/ The guidelines for vegetation and invertebrates are based on dietary effects on reproduction in chickens, quail and ducks (Wilber, 1980; Martin, 1988; Heinz, 1996).

6/ If invertebrate selenium concentrations exceed 6 mg/kg then avian eggs should be monitored (Heinz et al., 1989; Stanley et al., 1996).

Table 4. Selenium Concentrations in Killdeer Eggs from the Project Site in 2019

ID Number	Field Number ¹	Date	Embryo ²		Embryo Age (days)	Selenium (ppm, dry wt) ³	Log Base 10	Anti-Log
			Condition	Status				
01		April 19	U	U	1	18.35	1.2636	
02		April 27	U	U	1	63.95	1.8058	
03		April 30	U	U	1	10.20	1.0086	
04		May 3	U	U	2	38.56	1.5861	
05		May14	L	U	6-9	38.16	1.5816	
06		May 17	L	N	9	28.70	1.4579	
07		May 22	L	U	3-5	17.44	1.2415	
08		May 31	U	U	1	30.78	1.4883	
09		May 31	L	U	3-4	11.65	1.0663	
10		June 4	L	N	15	9.35	0.9708	
11		June 4	U	U	1	10.18	1.0077	
12		June 11	L	U	3-6	14.11	1.1495	
13		June 14	L	U	3-4	22.68	1.3556	
14		June 21	L	N	20+	22.42	1.3506	
15		June 24	L	U	6-9	19.85	1.2978	
Arithmetic/geometric mean						23.8	1.3088	20.4
Standard deviation						14.7	0.2453	1.8
Standard error							0.1097	1.3
Lower limit of 95% confidence interval							1.0938	12.4
Upper limit of 95% confidence interval							1.5238	33.4

¹ See Appendix H.

² L = live; N = normal; U = unknown.

³ ppm, dry wt = parts per million dry weight.

Table 5. Selenium Concentration in a Black-necked Stilt Egg from the Project Site in 2019

ID Number	Field Number ¹	Date	Embryo ²		Embryo Age (days)	Selenium (ppm, dry wt) ³	Log Base 10	Anti-Log
			Condition	Status				
01	PR-01	May 31	L	N	20	12.83	1.1082	

¹ See Appendix H.

² L = live; N = normal; U = unknown.

³ ppm, dry wt = parts per million dry weight.

Further, the 2017³⁵ and 2019³⁶ SJRIP Wildlife Monitoring Reports noted that the mitigation site for the SJRIP, which was supposed to provide compensation for avian exposure to pollutants at the SJRIP, documented extremely elevated selenium concentrations in some bird eggs collected there. For example, the maximum selenium egg concentration from the GBP mitigation site in 2017 was 51.1 µg/L in an American avocet egg, and in 2019 was 21.07 µg/L in a black-necked stilt egg. This suggests that the mitigation site is not providing compensation benefit for the SJRIP and also highlights the breadth of selenium contamination and wildlife exposure in this area. And again, there is likely unpermitted take of migratory birds under the California Migratory Bird Protection Act is occurring at the SJRIP mitigation site.

Table 5. Selenium Concentrations in Recurvirostrid Eggs from the Mitigation Site in 2017

ID Number	Field Number ¹	Date	Embryo ²		Embryo Age (days)	Selenium (ppm, dry wt) ³	Log Base 10	Anti-Log
			Condition	Status				
Black-Necked Stilt								
PM-01	MS-01	June 9	U	U	1	3.74	0.5729	
PM-02	MS-02	June 9	L	N	13	4.52	0.6551	
PM-03	MS-03	June 9	U	U	1	5.54	0.7435	
American Avocet								
PM-04	MA-01	June 9	L	N	9	51.1	1.7081	
PM-05	MA-02	June 9	U	U	1	8.7	0.9395	
Arithmetic/geometric mean						14.7	0.9238	8.4
Standard deviation						20.4	0.4591	2.9
Standard error							0.2053	1.6
Lower limit of 95% confidence interval							0.5214	3.3
Upper limit of 95% confidence interval							1.3263	21.2

¹ See Appendix H.

² L = live; N = normal; U = unknown.

³ ppm, dry wt = parts per million dry weight.

³⁵ See page 20: <https://drive.google.com/open?id=1mudCtShFmoQ-RW0YJaVF2-oia2TIXqn5>.

³⁶ See page 19: <http://www.summerseng.com/docs/2019%20San%20Joaquin%20River%20Water%20Quality%20Improvement%20Project%20Monitoring%20Report.pdf>

Table 7. Selenium Concentrations in Recurvirostrid Eggs from the Mitigation Site in 2019

ID Number	Field Number ¹	Date	Embryo ²		Embryo Age (days)	Selenium (ppm, dry wt) ³	Log	
			Condition	Status			Base 10	Anti-Log
Black-Necked Stilt								
PM-01		June 4	L	U	3-6	4.67	0.6693	
PM-02		June 4	L	N	9	21.07	1.3237	
PM-03		June 4	L	U	1	10.07	1.0030	
American Avocet								
PM-04		June 4	L	U	3-6	4.76	0.6776	
PM-05		June 4	L	U	3-6	4.28	0.6314	
Arithmetic/geometric mean						9.0	0.8610	7.3
Standard deviation						7.2	0.2989	2.0
Standard error							0.1337	1.4
Lower limit of 95% confidence interval							0.5990	4.0
Upper limit of 95% confidence interval							1.1230	13.3

¹ See Appendix H.

² L = live; N = normal; U = unknown.

³ ppm, dry wt = parts per million dry weight.

Stormwater Detention Basins at the SJRIP

As denoted in the DMP, the short-term storage basins are intended to capture a portion of the storm runoff during peak flows or during periods where the discharge of stormwater to Mud Slough is likely to cause an exceedance of water quality objectives, and hold that water until it can either be discharged without causing an exceedance or reused on the SJRIP. The 2019 GBP Addendum noted that the filling of these stormwater detention basins will begin with the first significant storm (typically December), and basins will be emptied by May. Therefore, stormwater commingled with drainage water could be stored in these basins for up to 6 months. If these basins hold water longer than 30 days, a state water permit is required (CCR, Title 23, Sec. 657658).

The DMP describes 90 acres of existing ponds and the addition of up to 200 acres of stormwater detention basins (regulating reservoirs) to store and regulate disposal or distribution of stormwater. Such features are practically indistinguishable from evaporation ponds. Proposed use of such “regulating ponds” to help control flow as a part of the engineered reuse system and ponding during flood events in the GBP area also creates an additional wildlife exposure risk similar to those originally realized at Kesterson National Wildlife Refuge (Presser and Ohlendorf, 1987). As described in Skorupa et al (2004), low winter temperatures substantively increase the toxicity of dietary selenium to birds, fish, and mammals. And the SJRIP wildlife monitoring reports do document use of the drainage reuse area by a large number of avian species (50 distinct species in 2017), including twelve species that are spring migrants.

Because the stormwater stored in these detention basins will be commingled with agricultural drainage, biological and groundwater monitoring is needed to determine the fate of these massive impoundments that will likely be magnets for

wildlife. Yet the GBP's 2020 DMP proposes no new monitoring and only includes "aggressive bird hazing" to prevent nesting within the basins (DMP @ pg 13).

The issue of monitoring at the GBP stormwater detention basins was discussed during the January 14, 2021 GBP Stakeholder Meeting. Dr. Joseph Skorupa (from USFWS) noted that ponding of stormwater and agricultural drainage will support an aquatic food chain and be attractive to birds within 5-7 days. Further, Dr. Skorupa recommended that a monitoring program at the stormwater detention basins should include bird censuses, and monitoring of effectiveness of hazing, and he recommended that this monitoring should occur for at least the first few years of operation. Joe McGahan of Summer's Engineering said on behalf of the Grassland Drainers, this monitoring could be added to the SJRIP monitoring effort. However, we have been unable to locate the monitoring plan for the SJRIP. At a minimum, the SJRIP monitoring plan should be updated to include monitoring at the detention basins and hazing monitoring and that plan should be made available to the public.

WDRs for Drainage Evaporation Ponds

The Regional Board mandated monitoring requirements and mitigation for drainage evaporation ponds in the Tulare Basin as part of a lengthy process. First a Cumulative Impacts Report on drainage evaporation ponds was completed in November 1992. The Cumulative Impacts Report concluded that site-specific EIRs were needed to clarify the extent of avian impacts due to individual pond operations. Consultants hired by the evaporation pond operators began preparation of site-specific EIRs that were termed "Site-Specific Biological Impact Analysis" or "Technical Reports." The site-specific Technical Reports, in general, indicated that pond operations place avian species at risk from four general types of impacts; avian disease, salinity, physical hazards, and selenium. Following public review of the documents, the Technical Reports, in combination with the cumulative impact report, were used by the Regional Board to prepare tentative WDRs. In August and September of 1993, the WDRs were the subject of petitions to the State Water Board (State Board) by the United States Fish and Wildlife Service (USFWS), Patrick Porgans and Lloyd Carter, and The Bay Institute of San Francisco. In March 1996, the State Board adopted Order No. WQ 96-07, which remanded a portion of the waste discharge requirements and the EIRs, including the Tulare Lake Drainage District's, to the Central Valley Water Board for reconsideration and directed the Central Valley Water Board to "consider any relevant information in its CEQA compliance documents."

The Regional Board should include biological monitoring requirements, performance standards, and enforcement and mitigation provisions in the GBP WDRs for disposal of agricultural drainage at the SJRIP reuse area and stormwater detention basins as was done for Tulare Basin evaporation ponds. Such requirements should include measures to ensure that the stormwater detention basins are not an attractive nuisance resulting in harm to migratory

birds. We strongly recommend that the Regional Board consult with selenium experts in the US Fish and Wildlife Service and California Department of Fish and Wildlife to help develop monitoring requirements, performance criteria, and mitigation protocols to protect migratory birds.

No Feasible Treatment Methods

The 2009 EIR/EIS for the GBP included treatment as a significant component of the plan to reduce selenium in discharges to the San Luis Drain. Yet, the treatment plant at the SJRIP has yet to become operational.³⁷ The 2009 GBP EIR/EIS included a bio-treatment plant to reduce the selenium load being discharged, and to achieve the zero discharge of subsurface agricultural drainage after 2019. The DMP notes @ page 19, “...*no feasible treatment method has yet been developed.*” More than thirty million dollars has been invested in a demonstration treatment plant that still is not functioning and about which a federal audit found questionable expenditures.³⁸

Long Term Viability and Legality of GBP Drainers’ Proposed Actions.

The proposed 15-year program authorized by the 2019 WDRs raises significant questions regarding the long-term viability of the actions proposed in the GBP Stormwater Plan. The 2009 EIR/EIS relied on unproven treatment technologies to treat and reduce the volume of drainage from the GBP that would need to be disposed. These treatment technologies have yet to prove reliable or cost effective. Without treatment, what is the long-term viability of the SJRIP? It is unclear how drainage volumes, salt and selenium loads will be managed long-term at the SJRIP.

There is no current monitoring data that shows that the SJRIP remains viable now. Nor will future monitoring data or performance standards show, after 15 additional years of irrigation with selenium and salt-laden drainage, such viability. Without accurate data, the reuse area remains a mystery along with how long the facility can be used before too much salt accumulation prevents future agricultural drainage use. There is no analysis of where the selenium and salt that is accumulated in the SJRIP will ultimately be disposed. All of these contamination and discharge issues need to be evaluated in a full EIR/EIS. Dubbed a treatment area, the SJRIP is looking more and more like an unpermitted selenium and salt disposal facility.

The issue of salt balance was discussed during the January 14, 2021 GBP Stakeholder Meeting. Dr. Joseph Skorupa asked how will salt balance be achieved without treatment? Joe McGahan, representing the Grassland Drainers, responded

³⁷ [Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.](#)

³⁸ [Available at https://www.doioig.gov/reports/bureau-reclamation%E2%80%99s-cooperative-agreementno-r16ac00087panoche-drainage-district](https://www.doioig.gov/reports/bureau-reclamation%E2%80%99s-cooperative-agreementno-r16ac00087panoche-drainage-district)

that although treatment is not economically feasible now, that could change over time as freshwater supplies (from the treatment effluent) become more valuable. David Cory responded that the salt issue was being dealt with through the CV Salts planning effort. We note that CV Salts has promoted the concept of a Central Valley Brine Line, an out of valley disposal pipeline for brine concentrated from agricultural drainage. The concept of a Brine Line was included in the Regional Board's Resolution R5-2020-0057 (Resolution), Revisions to the Amendments to the Water Quality Control Plans for the Sacramento River and San Joaquin River Basins and the Tulare Lake Basin to Incorporate a Central Valley-Wide Salt and Nitrate Control Program.³⁹ In this Resolution the Regional Board identified a brine line for Phase I – Prioritization and Optimization Study (P&O Study) @ pg 10: *Identify and prioritize preferred physical projects for long-term salt management(e.g. regulated brine line(s), salt sinks, regional/sub-regional de-salters, recharge areas, deep well injection, etc.);* and for Phase III – Project Implementation @ pg 13: Phase III – Project Implementation: *“During Phase III, construction of preferred physical projects will be completed, unless already completed during Phase II. For large-scale capital projects, such as construction of a regulated brine line, construction may occur over multiple phases and additional time may be required to complete full build-out of the projects.”*

The Strategic Salt Accumulation Land and Transportation Study (SSALTS) (as a part of CV Salts) released a number of reports evaluating salt disposal in the valley. The SSALTS Phase 2⁴⁰ and Phase 3⁴¹ Reports assume that out of valley discharges (into the San Francisco Bay) of drainage brine via a Brine Line would meet water quality objectives for selenium and other constituents and protect beneficial uses. This assumption is predicated on treatment technologies being technically and economically feasible at removing selenium. As denoted in the DMP, to date treatment technologies for selenium in drainage water brine have not worked reliably or to needed cost or technological specifications.

Reuse of polluted drainage in the GBP's SJRIP drainage reuse area does not eliminate the loading of wastes. It simply stockpiles wastes on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into salted up wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to permanent fallowing of more and more land. These impacts, along with impacts to the river and estuary, have not been

³⁹ See:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/resolutions/r5-2020-0057_res.pdf

⁴⁰ See: <https://www.cvsalinity.org/docs/committee-document/technical-advisory-docs/implementation-planning/ssalt/3177-ssalts-phase2-report-20141001/file.html>

⁴¹ See: <https://www.cvsalinity.org/docs/committee-document/technical-advisory-docs/implementation-planning/ssalt/3633-final-phase-3-report-120616.html>

analyzed and comprehensive data concerning these impacts has not been disclosed. No analysis is provided regarding the cumulative impacts to downstream beneficial uses of the 2019 WDRs that continue to sanction polluted discharges or of the potential spread of these contaminants throughout the Delta Estuary.

Land Retirement Should be Considered as a Viable Alternative.

Our organizations have previously submitted comments to the Regional Board about the success of land retirement in relation to the GBP’s drainage volume load reductions.⁴² The USBR’s 2004 Broadview Water Contract Assignment Draft Environmental Assessment cites Summer’s Engineering as predicting a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year from the cessation of irrigation on 9,200 acres of agricultural land in Broadview Water District as per Table 4-1 below (USBR 2004). This amounts to a per acre reduction of 0.28 AF of drainage, 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of boron.

**TABLE 4-1
DRAINAGE AND WATER QUALITY EFFECTS OF PROPOSED ACTION ON THE
SAN JOAQUIN RIVER**

	Existing Conditions	Under Proposed Action Conditions	Estimated Reduction Attributable to Proposed Action
BWD Drainage to San Joaquin River (afy)	3,700	1,100	2,600
BWD Estimated Salt Production (tons/yr)	24,300	7,300	17,000
BWD Estimated Selenium Production (lbs/yr)	2,140	640	1,500
BWD Estimated Boron Production (lbs/yr)	74,000	22,000	52,000

Source: Summers Engineering, 2003

Land retirement likely accounted for most of the reductions in selenium, and the majority of reductions in drainage volume, boron, and salt claimed by the Grasslands Bypass Project in the 2009 EIR/EIS.

The USEPA, in a letter regarding the Bay Delta Conservation Plan,⁴³ strongly recommended the USBR’s Land Retirement Program be revived to save water

⁴² See Coalition letter to CVRWQCB on Selenium Basin Plan Amendment, April 26, 2010, p 15-16; available at http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf, and Coalition letter to Karl Longley on Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements: available at <http://calsport.org/news/wp-content/uploads/Coalitionresponse-letter-to-Longley-re-gbpland-retirement.pdf>.

⁴³ Available at <http://calsport.org/news/wp-content/uploads/bay-delta-conservation-plan-deis.pdf>.

and prevent further selenium contamination and impacts to endangered species (page 13):

Recommendations: *To mitigate for the project's impacts to selenium levels in the estuary as a result of the BDCP operations, consider reviving and funding the Bureau of Reclamation's Land Retirement Program¹⁷ to remove from cultivation and irrigation large areas of selenium laden lands on the West side of the San Joaquin Valley. This would save irrigation water, reduce discharges of selenium into the San Joaquin River basin, and advance attainment of selenium reduction targets¹⁸ set by EPA and the Central Valley Regional Water Quality Control Board. Evaluate the extent to which restoration of these "retired" lands to the native plant community could also contribute to the recovery of threatened and endangered plants and animals listed by FWS. Consider analyzing the cost/benefit of implementing treatment technologies vs. land retirement. Although cost/benefit analyses are not required under NEPA, such an analysis may be useful to decision makers and the public in this case."*

Further, the USBR's San Luis Drainage Feature Re-Evaluation (SLDFRE) Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit. Three land alternatives were evaluated in the SLDFRE EIS, 306,000 acres, 194,000 acres and 100,000 acres, respectively. The Final EIS found that the only environmentally and economically preferred alternative was to retire 306,000 acres (In-Valley/Drainage Impaired Area Land Retirement).⁴⁴ It's clear from the NED findings in Table N-10 below that additional land retirement would provide increased net economic benefits.

**Table N-10
Benefit/Cost Summary
Changes Relative to the No Action Alternative (\$/year in 2050)**

Subarea	In-Valley Disposal	Out-of-Valley Disposal	In-Valley/ Groundwater Quality Land Retirement	In-Valley/ Water Needs Land Retirement	In-Valley/ Drainage-Impaired Area Land Retirement
Total NED Benefit	\$37,962,000	\$38,430,000	\$31,164,000	\$20,629,000	\$9,931,000
Total NED Cost	51,225,000	51,370,000	46,767,000	30,778,000	6,288,000
Net NED Benefit	-\$13,263,000	-\$12,940,000	-\$15,603,000	-\$10,149,000	\$3,643,000

Notes:

Values represent net NED benefits relative to No Action.

Values rounded to nearest \$1,000. Totals may not add due to rounding.

Moreover, the US Fish and Wildlife Service, in their Fish and Wildlife Coordination Act Report (FWCAR) for SLDFRE, recommended that all of the northerly area within the San Luis Unit

⁴⁴ SLDFRE Final EIS, Appendix N, Table N-10, page N-17, accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2240

(GBP Drainage Area) be retired as well,⁴⁵ though USBR did not consider that alternative. The Service concluded on page 67 of the FWCAR that, “[t]o avoid and minimize risks and effects to fish and wildlife resources in the San Joaquin Valley and Pacific Flyway, the Service recommends land retirement on all drainage impaired lands in the SLU. This approach would maximize the elimination of drainage at its source, and therefore avoidance of adverse fish and wildlife effects.”

The DMP does not include any discussion of land retirement or land fallowing as a tool to reduce drainage volumes. By ignoring land retirement and the associated benefits of reducing water exports to these toxic soils, the GBP Stormwater Plan Addendum, the 2019 WDRs, and the DMP will continue to kick the can down the road and concentrate and store salt, selenium, boron and other toxic substances in the shallow aquifers of the Grasslands area. This creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River, and the Bay-Delta estuary, especially in wetter years.

Comments on the 5th Use Agreement for the San Luis Drain

The 5th Use Agreement for the San Luis Drain was provided to the public through the Regional Board’s ftp site (<https://ftp.waterboards.ca.gov/>). As this was the first public release of this Use Agreement, we provide our comments on this document here.

Aspirational Goals for Selenium

The Use Agreement includes aspiration goals for selenium in Mud Slough (North). This was discussed at the January 14, 2021 GBP Stakeholder Meeting and the slide describing those goals is provided below. While the intent of an aspirational goal is good, these goals are not legally binding. These goals should be incorporated into a revised WDR that mandates compliance.

⁴⁵ SLDFRE Final EIS, Appendix M, USFWS FWCAR, accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236

Use Agreement – Selenium Aspirational Goals

- Selenium goal of 2 µg/L as a monthly mean in Mud Slough (Site D) and in the San Joaquin River.
- Second Selenium goal of 2 µg/L as a 7-day average in Mud Slough (Site D) and in the San Joaquin River.

The San Luis Drain was not Authorized to convey Stormwater

Congress in its authorization of the San Luis Unit in 1960, never envisioned use of the San Luis Drain for stormwater discharge. As stated in the San Luis Act, Congress specified conditions for the San Luis Drain including approval by the State of California⁴⁶ for “...*provision for constructing the San Luis interceptor drain to the Delta designed to meet the drainage requirements of the San Luis unit...*”, *Senate Report No 154, page 2, San Luis Unit, Central Valley Project, California, April 8, 1959.*⁴⁷ This brings into question whether the "Drain" can be legally used for storm water discharge without Congressional and State approval.

The use of the federal San Luis Drain for stormwater also raises consistency questions with existing State Board orders. The California State Water Resources

⁴⁶ See: PL86-488 San Luis Act June 3, 1960: Proviso: (2) *received satisfactory assurance from the State of California that it will make provision for a master drainage outlet and disposal channel for the San Joaquin Valley,which will adequately serve, by connection therewith, the drainage system for the San Luis unit or has made provision for constructing the San Luis interceptor drain to the delta designed to meet the drainage requirements of the San Luis unit as generally outlined in the report of the Department of the Interior, entitled "San Luis Unit, Central Valley Project," dated December 17, 1956.* The State of California has not made such a provision and Congress never consider the use of the drain for stormwater.

⁴⁷ See: H. Rpt 399...<http://calsport.org/news/wp-content/uploads/Exhibit-3.pdf> S. Rpt 154...<http://calsport.org/news/wp-content/uploads/Exhibit-4.pdf>

Control Board (SWRCB 1985), following the Kesterson debacle, issued its Order WQ 85-1 in February 1985. The SWRCB found that agricultural drainage and wastewater reaching Kesterson Reservoir “is creating and threatening to create conditions of pollution and nuisance” (Emphasis added). The Order then warned “If the Bureau closes Kesterson Reservoir and continues to supply irrigation water to Westlands Water District without implementing an adequate disposal option, continued irrigation in the affected area of Westlands Water District could constitute an unreasonable use of water” (emphasis added).

Conclusion

- The 2019 WDRs for the GBP should be amended to include water quality objectives that are protective of downstream beneficial uses. The existing water quality objectives are designed to be achievable by the Grassland Drainers (permittee) rather than to be protective of water quality based on the best available science.
- The Regional Board should include management of drainage and discharges at the SJRIP and stormwater detention basins in a WDR permit that includes monitoring and reporting requirements, performance standards, and mitigation prescriptions.
- The SJRIP monitoring plan should be amended to include monitoring of bird use and effectiveness of hazing at the Stormwater Detention Basins.
- The DMP should be modified to include land retirement or land fallowing as a tool to reduce drainage volumes.
- The Regional Board make these documents available on their ftp site:
 - Public and agency comments received by the Regional Board for the 2019 WDRs for the GBP
 - Wildlife monitoring reports from the SJRIP as well as the SJRIP monitoring plan
 - Study proposals for the Executive Officer (EO) Technical Reports mentioned in slide 7 of the Regional Board’s presentation at the Stakeholder meeting as well as the Technical Reports when available.

Thank you for the opportunity to comment on the DMP.



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League
jminton@pcl.org



Mike Conroy
Executive Director
Pacific Coast Federation of Fishermen’s Asso.
mike@ifrfish.org




Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



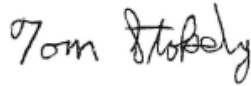
Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com




John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



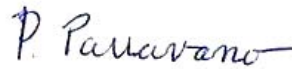
Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net




Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Conner Everts Kathryn Phillips
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.com)
connere@gmail.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org

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September 30, 2020

Mr. David Vang
 Resources Engineer
 Westlands Water District
 P.O. Box 6056,
 Fresno, California 93703-6056
 Email: dvang@wwd.ca.gov.

Comments on the September 2020 Draft Initial Study/Negative Declaration for Westlands Water District Warren Act Contract for Groundwater Pump-Ins and Conveyance in the San Luis Canal

Dear Mr. Vang:

Thank you for the opportunity to comment. We have reviewed the Draft Initial Study and Negative Declaration (IS/ND) and find that it is incomplete with regard to assessment of environmental impacts and is lacking sufficient data to determine compliance with the provisions of State of California water quality laws under Porter Cologne and the federal Clean Water Act (CWA), the California Endangered Species Act (CESA), the Central Valley Project Improvement Act (CVPIA) and the California Environmental Policy Act (CEQA). The groundwater pump-in project (“Project” or “Pump-In Project”) is a substantial and complex project that clearly requires a comprehensive Environmental Impact Report (EIR) to properly address potential impacts and alternatives to the proposed project.

CEQA was enacted to require public agencies and decision-makers to document and consider the environmental implications of their actions before formal decisions are made (Public Resources Code §21002), and to “[e]nsure that the long-term protection of the environment ... shall be the guiding criterion in public decisions” (Public Resources Code § 21001(d)). CEQA compels an informed process.

*It is a meticulous process designed to ensure that the environment is protected.*¹ An informed decision document under CEQA should include all relevant data and supporting information, including past monitoring data along with analysis of that data, and associated contracts and Agreements with State and Federal agencies to help inform the public and decision makers as to impacts and guide future implementation of the project. There are significant data gaps in the IS/ND that hinder the public and decision makers' from making an informed decision regarding the potential environmental consequences of allowing these discharges of contaminated groundwater into the San Luis Canal/California Aqueduct (SLC/Aqueduct). Also completely neglected are the impacts from discharging this contaminated water and substituting or exchanging it with water exported from the Delta Estuary or other exchanges that have the potential to impact the American River, Yuba River, Sacramento River and Shasta dam operations.

Westlands Water District (Westlands), an agency of the state with a singular focus of providing irrigation water, is not the appropriate lead agency for such a complex project impacting a broad geographical area. The inadequate IS and ND are the latest examples of the failure of Westlands to provide sufficient information to the public and impacted downstream beneficial water users. As stated in previous comments, the Department of Water Resources should be the lead agency for such a geographically complex project that impacts multiple counties and jurisdictions.

There is substantial evidence that previous Westlands groundwater pump-in projects have caused and if permitted again, will continue to cause, water pollution, land subsidence, increased water supply costs to others, and damage to the California Aqueduct, which serves millions of people. The IS/ND fails to provide a complete assessment of the impacts of this project, fails to include effects of these prior pump-ins on subsidence damages to the San Luis Canal (the federal/state portion of the California Aqueduct, SLC), and completely neglects to include any information and analysis of prior water quality data, quantity of groundwater pumped, percent of aqueduct flow comprised of Westlands' groundwater pump-ins, or contaminant mass balance in the SLC from previous groundwater pump-ins associated with this project. Further, the project as described in the IS/ND would violate terms under Article 16(b)(2) of Westlands WIIN Act repayment contracts which we discuss further in our comments below. The IS/ND, as presented, does not support a "fair argument" that this project does not have significant environmental impacts. The project as proposed does not support a "fair argument" that this project does not have significant environmental impacts. A full Environmental Impact Report (EIR) is required so that the environmental impacts, as well as costs and damage to downstream beneficial uses, can be adequately analyzed and described to the public and decision makers.

Further, the CEQA process must be completed before an agency makes a final decision on a proposed action. We note that the IS/ND in the Project Description on page 9 states the conveyance period for 2020 would be between August 1 and December 31. The conveyance period for this project in 2020 should commence when the CEQA and the associated NEPA documentation for this project have been finalized, not before it. Allowing discharge of this contaminated groundwater prior to completion of the CEQA and NEPA analyses precludes public input and analysis. It predetermines the action, contrary to CEQA and NEPA requirements to carefully weigh and consider public input.

¹ [Planning and Conservation League v. Department of Water Resources \(2000\) 83 Cal.App.4th 892, 911.](#)

In April 2020, Westlands prepared and published a Draft IS/ND for the Project (State Clearinghouse #2020050434). This previous Draft IS/ND was circulated for public review on April 5, 2020 for a period of 30 days. The Draft IS/ND was not adopted and has since been rescinded by Westlands. This new Draft IS/ND prepared by the Westlands incorporates new information and minor revisions to the text of the previous Draft IS/ND and was republished to align with timing of publication of the United States Bureau of Reclamation's (Reclamation) Draft Environmental Assessment (DEA) for the Westlands Water District Groundwater Warren Act Contract (published July 22, 2020). In accordance with the CEQA, Westlands, made this draft IS/ND available for a 30-day public comment period closing on October 1, 2020, State Clearinghouse Number 2020090040.² This new Draft IS/ND replaces the prior Draft IS/ND that was published in April 2020 and initiates a new public comment period on the adequacy of this new IS/ND. As noted on page 3 of the revised IS/ND, "...comment letters received on the previous Draft IS/ND will not be responded to unless resubmitted as formal comments on this new IS/ND."

Our organizations provide these comments on the Westlands Groundwater Pumping and Conveyance Project (Pump-in Project). We previously submitted comments on the April 2020 draft IS/ND for the Pump-in Project and we incorporate those comments by reference.³ In addition, several of the undersigned organizations have previously submitted comments on this project including: 1) Comments on the Draft Environmental Assessment (DEA) for Groundwater Pump-ins Enabled by the U.S. Bureau of Reclamation (Reclamation) Warren Act Contract for Westlands Water District (EA-20-008, CGB-EA-2020- 032)⁴ dated August 20, 2020,⁵ 2) Comments on Reclamation's DEA on the Westlands Water District Groundwater Warren Act Contract EA-15-001 & FONSI-15-001, dated March 26, 2015,⁶ and 3) Scoping Comments for Westlands Water District Proposed "Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct" dated March 2, 2010.⁷ Our previous comments are incorporated here by reference.

The following evaluation and comments supplement our previous comments with more detail on key issues. Comments are organized in two parts: (1) a summary of the project as described in the IS/ND as

² See: <https://ceqanet.opr.ca.gov/2020090040/2>

³ https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-WWD-SLC-Pump-in-2020-IS_ND_6-10-2020-Cal-Aqueduct.pdf

⁴ The DEA is available here: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=46185

⁵ https://calsport.org/news/wp-content/uploads/Env-Advocate-8_20_-2020-Cmts-Re-DEA-for-WWD-Pump-in-SLC_Cal-Aqueduct-EA-....pdf & https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-WWD-SLC-Pump-in-2020-IS_ND_6-10-2020-Cal-Aqueduct.pdf

⁶ <http://calsport.org/news/wp-content/uploads/Conservation-Gr-Cmt-Ltr-3-26-15-WWD-30-K-GroundwaterDischarge-Warren-Act-Contract-EA-15-001-CMTS-Dra....pdf>

⁷ <http://calsport.org/news/wp-content/uploads/Conservation-Gr-FinalScopingCmts-03-02-2010-100K-Pump-in-CalAqueduct.pdf>

background for our critique, and (2) a critique of the project, monitoring plans, and environmental impact analysis.

PROJECT SUMMARY

Under the Pump-in Project, Reclamation would enter into a five-year Warren Act Contract⁸ (for the years 2020-2025) to allow Westlands to pump in up to 30,000 acre-feet per year (AF/y) (and up to 150,000 AF over the five-year life of the project) of potentially highly contaminated non-Central Valley Project (CVP) groundwater into the California Aqueduct-San Luis Canal (SLC). Such pump-ins would occur in years in which Westland's CVP allocation is 20% or less. The period of introduction would be between April 1 and August 31 of a given year. However, as it is not possible to begin conveyance by April 1, 2020, the conveyance period for 2020 would be shifted by four months, to between August 1 and December 31. All subsequent years would use the April 1 to August 31 window. According to the IS/ND on page 9, the proposed Pump-in Project would involve four main components: groundwater pumping, water conveyance, ground subsidence monitoring, and water quality monitoring.

Non-CVP water introduced into the SLC would either be directly delivered to agricultural users or wildlife refuges located downstream of the points of introduction or operationally exchanged with Reclamation for a like amount, less conveyance losses, of Westlands' available water supplies in San Luis Reservoir. The delivery of non-CVP water to wildlife refuges is a critical aspect of the Pump-in Project to evaluate because of the sensitivity of the refuges to contamination (discussed in detail below). Exchanged water would either be delivered to agricultural users located upstream of the points of introduction in Westlands or could be exchanged for water stored in San Luis Reservoir as non-CVP water for later delivery to Westlands via the San Luis Canal. The impacts of these exchanges, the quantities, timing, and location from where the water is taken, like the Delta Estuary for example, are not disclosed or defined.

As noted on page 10 of the IS/ND the existing discharge facilities into the SLC have expired licenses and are expected to renew this year. Reclamation proposes to issue a combined 25-year license authorization for all discharge points involved in the proposed Project (identified in Table 1 of the IS/ND, on pages 11-13).

Proposed Design Constraints and Operating Criteria.

The Westlands Pump-in Project is supposed to be subject to water quality monitoring, groundwater monitoring, and reporting requirements as described in Reclamation's current San Luis Canal NonProject Water Pump-in Program 2020 Water Quality Monitoring Plan dated May 2020 (WQMP) and provided in Appendix A of Reclamation's DEA for this project. We note that the WQMP is part of a draft EA that has not yet been finalized by Reclamation.

Further, on page 53 of the IS/ND the following is states, "*USBR, in coordination with DWR and the State Water Contractors, may allow minor exceedances of certain Secondary Title 22 constituents if all*

⁸ The Warren Act (Act of February 21, 1911; Chapter 141, 36 Stat. 925) authorizes Reclamation to enter into contracts to impound, store, or convey non-CVP water in federal facilities, when excess capacity is available. Warren Act Contracts are issued by Reclamation to allow movement of non-federal water through federal facilities.

primary standards are met due to the less adverse risks to human health presented by those constituents at the secondary maximum contaminant levels.” There is no definition a minor exceedance is in the IS/ND nor the DEA.

There are numerous inconsistencies, as discussed in our detailed comments below. Further enforcement actions are absent and instead are left to vague assurances between Westlands and Reclamation. These vague assurances do not mitigate impacts nor is it clear how they will be enforced.

Water Quality Monitoring Requirements.

Baseline sampling and routine sampling of individual wells

The WQMP requires that all participating wells must have baseline sampling each year before pumping into the San Luis Canal begins for those constituents of concern used for screening-out non-compliant wells. Further, the WQMP requires that for all constituents in the Table 5 short list (except as specified in the footnotes), monitoring will continue to occur weekly for four consecutive weeks, and then monthly for the duration of pumping into the SLC.

In addition, each well is also required to be tested every three years for the full array of Title 22 constituents of concern. On page 7 of the IS/ND it states that, *“Reclamation will allow the introduction of water from two or more wells through one discharge point if the blended water meets the Title 22 standards. Special monitoring may be required for these situations.”* As we discuss in detail below, the Title 22 Drinking Water standard for selenium is not protective of fish and wildlife resources that use water from the aqueduct and this is inconsistent with the short list of water quality standards for selenium set forth in Table 5 in the WQMP. This inconsistency needs to be corrected. Further, the impacts of any such inconsistency, including the failure to monitor and enforce protective fish and wildlife water quality standards for selenium, have not been disclosed.

New in the SLC WQMP’s monitoring short list is 1,2,3-Trichloropropane (TCP). In 2017 the State Water Resources Control Board (SWRCB) added an MCL of 5 parts per trillion (ng/L) of TCP (the equivalent of five grains of sand in an Olympic-sized swimming pool) to the Title 22 list for primary drinking water chemicals.⁹ This chemical was included in a nematode fumigant made by Shell Oil and Dow Chemical companies and applied liberally to the Central Valley’s vast farmland from the 1950s through the 1980s. Water quality data reports from prior Westlands groundwater pump-ins into the SLC did not report TCP, so the concentrations of TCP of these proposed groundwater inputs is unknown. TCP contamination in groundwater has impacted groundwater pump-ins involving other districts in the Central Valley.¹⁰

⁹ See: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/SBDDW-17-001_123TCP_MCL.html

¹⁰ See: https://www.bakersfield.com/columnists/lois-henry-tainted-valley-groundwater-could-stymie-banking-deals/article_a7b50638-ee48-11ea-87be-535a106d4220.html

Table 5 from 2020 SLC WQMP

San Luis Canal
 Non-Project Water Pump-in Program
 Water Quality Monitoring Plan

Table 5. Water Quality Standards, Short List

Constituent	Units	Maximum Contaminant Level	Detection Limit for Reporting	CAS Registry Number	Recommended Analytical Method
Arsenic	mg/L	0.01 (1)	0.002 (2)	7440-38-2	EPA 200.8
Boron	mg/L	2.0 (13)		7440-42-8	EPA 200.7
Bromide	mg/L	(14)			
Chloride	mg/L	250 (7)		16887-00-6	EPA 300.1
Chromium, total	mg/L	0.05 (1)	0.01 (2)	7440-47-3	EPA 200.7
Hexavalent chromium	mg/L	0.010 (1)	0.001 (2)	18540-29-9	EPA 200.8
Manganese	mg/L	0.05 (7)		7439-96-5	EPA 200.7
Nitrate (as nitrogen)	mg/L	10 (1)	0.4 (2)	7727-37-9	EPA 300.1
Selenium	mg/L	0.002 (10)	0.001	7782-49-2	EPA 200.8
Sodium	mg/L	69 (12)		7440-23-5	EPA 200.7
Specific Conductance	µS/cm	1,600 (7)			SM 2510B
Sulfate	mg/L	500 (7)		14808-79-8	EPA 300.1
Total Dissolved Solids	mg/L	1,000 (7)			SM 2540C
Total Organic Carbon	mg/L	(14)			EPA 415.3
Gross alpha ⁴	pCi/L	15 (3)	3 (3)		SM 7110C
1,2,3-Trichloropropane	mg/L	0.000005 (4)	0.000005 (5)	96-18-4	SRL 524M
One-Time Screening					
Perfluorooctanoic acid (PFOA) ⁵	ng/L	N/A		0.82 (15)	EPA 537.1
Perfluorooctanesulfonic acid (PFOS) ⁵	ng/L	N/A		2.7 (15)	EPA 537.1

Short list to be measured before pumping occurs, then weekly for four consecutive weeks, and monthly for the duration of pumping into the San Luis Canal.
 (4) Monthly testing only
 (5) One-time screening conducted prior to pumping individual wells and from Lateral 7 at the Adams Avenue pump station. Although there are no MCLs developed yet, there are notification levels and response levels. The notification levels are 5.1 PPT (PFOA) and 6.5 PPT (PFOS). The response levels are 10 PPT (PFOA) and 40 PPT (PFOS) based on a running four quarter average. The lowest concentration minimum reporting levels (LCMRL) are 0.82 ng/L (PFOA) and 2.7 ng/L (PFOS).

Also included with the sampling of individual wells is one-time screening for the presence of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and, if detected, Reclamation and the California Department of Water Resources (DWR) will work with Westlands on conducting additional sampling.

Lateral 7 water quality monitoring

Under the proposed and as yet not adopted water quality monitoring program, non-project water is only allowed to enter Lateral 7 when water is being pumped into the SLC, not when flow is entering the Mendota Pool. Westlands is required to take weekly field measures for conductivity and turbidity at locations near Lateral 7 during these periods.

In addition to non-project well sampling, Westlands must collect samples from Lateral 7 at the Adams Avenue pump station. Lateral 7 water must be tested for the full suite of Title 22 (Table 6) every year. Table 5 constituents will be sampled weekly for the first four weeks, then monthly for the duration of pumping. There will be a one-time screening for the presence of Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) from Lateral 7 at Adams Avenue pump station and if detected, Reclamation and DWR will work with Westlands on conducting additional sampling.

Water Quality Monitoring of the Aqueduct

Mean daily salinity and turbidity will be measured with the DWR sensors that report real-time data to the California Data Exchange Center (CDEC). Westlands is required to download daily average data for SLC Checks 13 and 21 to measure changes in the canal between these checks that may be attributable to the addition of the non-project water.

The WQMP includes maximum allowable changes in the SLC caused by the addition of Westlands’ groundwater pump-ins. These commitments are summarized in Table 4 on page 12 of the WQMP and are included below. If the addition of the non-project water is increasing the salinity (measured as electrical conductivity, or EC) of water in the SLC by more than 100 µS/cm between Check 13 and Check 21, *Reclamation will work with Westlands and the well operators to turn off high salinity wells.* (Emphasis added) These are vague directives that lack enforcement. Without an absolute requirement that these high salinity wells are turned off, the impacts of such delay or failure to act are not disclosed nor considered.

The addition of non-project water must not raise the salinity in the SLC at Check 21 above 700 µS/cm, equivalent to 450 mg/L Total Dissolved Solids. If the salinity of water passing Check 13 is greater than 700 µS/cm, *Reclamation and Westlands will coordinate with DWR to modify or restrict non-project pumping.* Once again, these are vague directives that lack enforcement. Without an absolute requirement that these high salinity wells are turned off, such action cannot be ensured, but the potential impacts of such delay or failure to act are not disclosed.

Also, at Check 21 are requirements for TDS (NTE 450 mg/L) and selenium (NTE 2 µg/L).

Table 4. Maximum allowable changes in the San Luis Canal caused by the addition of non-project groundwater

Constituent	Monitoring Location	Maximum concentration in the San Luis Canal
Electrical conductivity	Between San Luis Canal Checks 13 and 21	Less than 100 uS/cm increase between the checks
Turbidity	Between the Lateral 7 upstream site and downstream site	Less than 10 NTU
Electrical conductivity	In the San Luis Canal at Check 21	Not to exceed 700 uS/cm
Total dissolved solids		Not to exceed 450 mg/L
Concentration of selenium		Not to exceed 2 ug/L
Concentration of any Title 22 constituent		Less than half of a Title 22 MCL

Depth to Groundwater Commitments.

The WQMP also includes requirements to measure groundwater levels and a shutoff trigger to reduce subsidence impacts. The shutoff trigger included in the WQMP requires pumping to stop at 25% above the maximum drawdown experienced by any of the wells participating in the Program, i.e., 75% Max

depth to groundwater (DTGW). The intent is to prevent further lowering of water levels beyond what has historically occurred in a given well, as illustrated in Figure 4 of the DEA and copied below.

Well owners are required to measure the initial depth to groundwater in each well before pumping into the SLC, and monthly from April through August and every other month outside of that range while the 2020 Pump-in Program is in effect. An individual well will be shutoff when its Depth to Groundwater reaches 75% of the difference between the Fall/Winter Median Groundwater Level and the Max DTGW using the following equation:

$$\text{Shutoff Trigger} = 0.75 * (\text{Max DTGW} - \text{Fall/Winter Median}) + \text{Fall/Winter Median}$$

If an individual well is shutoff due to groundwater levels reaching the shutoff trigger, it will not be allowed to resume pumping until it reaches 70% of the difference between the Fall/Winter Median

Groundwater Level and the Max DTGW using the following equation:

$$\text{Well Resumption} = 0.70 * (\text{Max DTGW} - \text{Fall/Winter Median}) + \text{Fall/Winter Median}$$

Groundwater level measurements are supposed to follow a strict schedule. If a well is shutoff it will not be measured again until the next scheduled measurement date. The participants must notify Reclamation in writing when a well is shutoff or resuming.

Figure 4 from 2020 DEA for this Project

As shown in Figure 4, Max DTGW (also referred to as Critical Head) is the greatest amount of drawdown (lowest depth to water) that has occurred within a particular well.

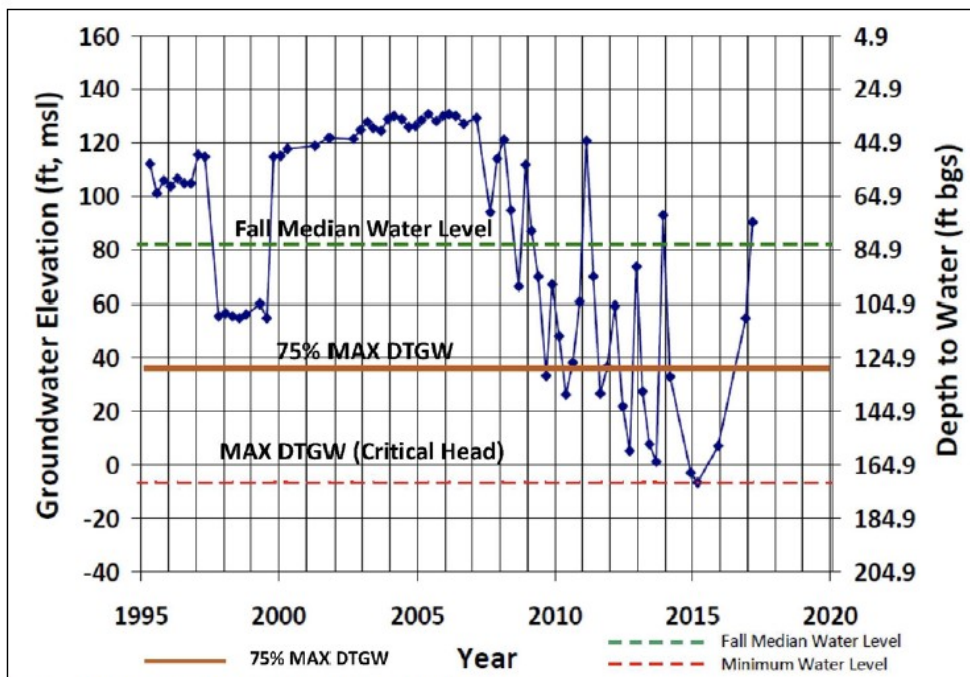


Figure 4. Example of Operation of the Shutoff Trigger

SPECIFIC COMMENTS AND RECOMMENDATIONS

Authorization of Discharge Points into the SLC should be for no more than 5 Years.

Reclamation proposes to issue a combined 25-year authorization for 88 discharge points (identified in Table 1 of the IS/ND, pages 11-13) involved in the Pump-in Project. The environmental impact of authorizing these discharges for 25 years has not been evaluated or disclosed. Further, sanctioning this groundwater discharge for a 25-year period for all discharge points in a document that covers only a 5-year Warren Act Contract for those discharges further fails to disclose the environmental impacts and fails to adopt mitigation measures. As we will discuss below, 35 of the 88 discharge points identified in Table 1 of the IS/ND under Westlands' previous pump-in projects had at least one well that exceeded maximum contaminant levels (MCLs) identified for the constituents Arsenic (As), Selenium (Se) or Total Dissolved Solids (TDS). This information is summarized in Appendix A to our comments. We note here that the use of the MCL terminology to the water quality standards applicable to this project leads to confusion because MCLs generally refer to federal drinking water standards, which these are not. Nevertheless, in our comments we will use Reclamation's definitions as defined in the, as yet, not finalized federal DEA and WQMP. This nomenclature is likely arbitrary and is used to promote confusion and obfuscation of impact and contamination.

Inclusion of these discharge points for 25-years is arbitrary and capricious and not supported by any water quality data from previous groundwater pump-ins or long-term analysis of potential future impacts. Moreover, it is a violation of Article 14(f) of the current Warren Act Contract between Reclamation and Westlands that states, "*At all times during the term of this Contract, the Contractor shall be in compliance with the requirements of the then-current Quality Assurance Project Plan (Plan) prepared by the Contracting Officer to monitor Non-Project Water introduced into and conveyed through the Project Facilities.*"¹¹ We therefore recommend that only those discharge points that do not exceed MCLs for constituents identified in Table 4 of the WQMP be authorized for 5 years, and that NO discharge points be authorized for a longer period. The public is left in the dark regarding the "*then-current Quality Assurance Project Plan.*" No such plan has been adopted under the proposed federal DEA for this project, nor is any such plan referenced in the IS/ND.

Changes in SLC water quality requirements in the 2020 WQMP must be Addressed and Environmental Impacts Analyzed and Disclosed.

We note that the 2015 WQMP¹² for discharges into the SLC restricted salt contamination between Checks 13 and 21 compared with the 2020 WQMP as follows:

¹¹ See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

¹² See Appendix C, starting at pdf pg 4:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21986

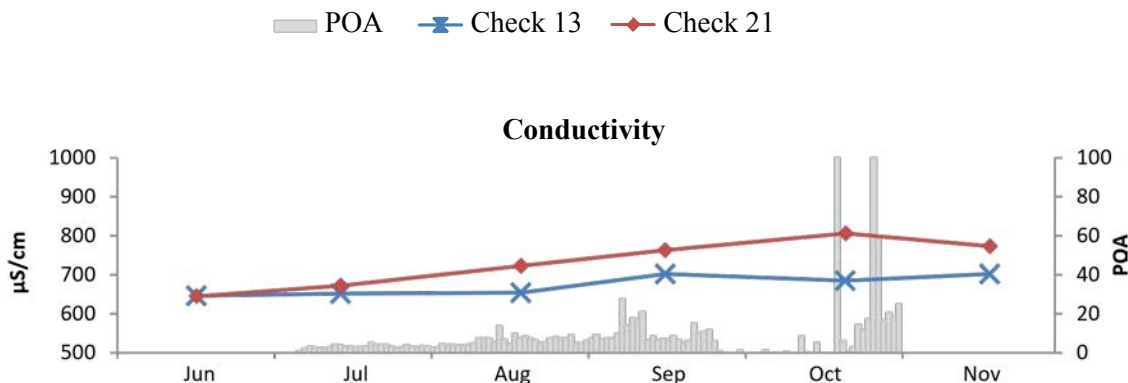
- A maximum allowable change caused by pumped GW at Check 21 (Kettleman) of not to exceed 600 $\mu\text{S}/\text{cm}$ EC (the 2020 WQMP allows 700 $\mu\text{S}/\text{cm}$);
- Less than 50 $\mu\text{S}/\text{cm}$ EC change between Check 13 and Check 21 (the 2020 WQMP allows no more than 100 $\mu\text{S}/\text{cm}$ EC change);

There is no mention of these changes in EC requirements in the SLC in the IS/ND, DEA or the 2020 WQMP, nor is there any analysis of the effects of this allowable EC increase or explanation as to why these EC control requirements have been weakened. We further note that compliance with the 2015 EC requirements in the SLC were exceeded routinely in 2015 as documented in DWR’s report on non-project water pump-ins for 2015¹³, as depicted in Figure 3-5 from that report:

CDEC continuous EC Data Checks 13 and 21 in 2015 From (DWR 2016)

Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015

Figure 3-5 Water Quality Constituents-of-Concern at Check 13 and Check 21 and Westlands Water District Percentage-of-Aqueduct Values



Note that Article 14(f) of the current Warren Act Contract between Reclamation and Westlands states, “At all times during the term of this Contract, the Contractor shall be in compliance with the requirements of the then-current Quality Assurance Project Plan (Plan) prepared by the Contracting Officer to monitor Non-Project Water introduced into and conveyed through the Project Facilities.”¹⁴ We see clear evidence from DWR reports of prior Westlands groundwater pump-ins that water quality requirements have been routinely exceeded both at the wellhead and at Check 21 in the SLC. This record of noncompliance calls for greater enforcement of water quality standards, not less. And further, the impact from these past discharges needs to be disclosed, alternatives considered along with mitigation measures adopted to prevent impacts to downstream beneficial water uses.

¹³ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

¹⁴ See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

Pump-In Project Likely to Harm State Fish and Wildlife Designated Beneficial Uses Associated with the California Aqueduct.

The groundwater contributions from the Pump-in Project are conveyed south through the California Aqueduct and stored in four reservoirs (Pyramid Lake, Castiac Lake, Silverwood Lake, and Lake Perris). The aqueduct and these four reservoirs are regulated under four Regional Water Boards jurisdictions. Designated fish and wildlife beneficial uses of the Aqueduct and downstream reservoirs are listed in Table 1.

The Central Valley Regional Water Quality Control Board (CV Regional Board) does not include fish (WARM) as a beneficial use for the aqueduct. Yet, the Department of Water Resources promotes fishing along the aqueduct and identifies five locations within or near Westlands (Fairfax, Three Rocks, Huron, Avenal Cutoff, and Kettleman City sites).¹⁵ Further, the CV Regional Board includes WARM beneficial use designation for the Delta Mendota Canal,¹⁶ so we can only surmise that the omission of a WARM beneficial use designation for the California Aqueduct is an oversight. Nonetheless, the Pump-in Project should be protective of downstream beneficial uses of the water in the California aqueduct and these impacts need to be addressed in the a full EIR that would replace this deficient IS/ND. Existing data simply does not support the adoption of a negative declaration for the environmental impacts from this project. Due to the high percentage of discharge volumes represented by the Westlands' pump-ins during certain time periods, especially drought conditions, humans who fish the California Aqueduct are likely to be periodically exposed to much higher contaminants than the long-term average. In addition, there will be higher contaminant levels in fish than monitored in canal water due to accumulation in fish tissue. This exposure, warnings, and monitoring are not disclosed, especially to low income communities in the surrounding areas, and there is no mention of fish tissue monitoring. Monitoring requirements in the WQMP do not include biological monitoring so that these impacts can be identified and assessed.

Table 1. Fish and Wildlife Beneficial Uses Associated with CA Aqueduct south of Pump-in Project

Waterbody Name	WARM	COLD	SPWN	WILD	RARE
California Aqueduct ¹⁷				E	
Castiac Lake ¹⁸	E	I	E	E	E
Pyramid Lake ¹⁸	E	E		E	E
Silverwood Lake ¹⁹	E		E	E	

¹⁵ See: https://calsport.org/news/wp-content/uploads/DWR_Fishing-Along-the-SWP.pdf

¹⁶ See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

¹⁷ Ibid.

¹⁸ See Beneficial Use Designations of Inland Surface Waters, Los Angeles Regional Water Board: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/2020/Chapter_2/Chapter_2_Table_2_1/Chapter_2_-_Table_2-1.pdf

¹⁹ See: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/ch2_bu.pdf

Lake Perris ²⁰	E	E		E	E
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E: Existing beneficial use.

I: Intermittent beneficial use.

WARM: Warm Freshwater Habitat - Uses of water that support warm water ecosystems including but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

COLD: Cold Freshwater Habitat - Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

SPWN: Spawning, Reproduction, and/or Early Development - Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

WILD: Wildlife Habitat - Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

RARE: Endangered Species - Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

Effects on Refuge Water Supplies – Percent of Aqueduct of Westlands' Pump-ins.

On page 34 under "item d" the IS/ND concludes that the proposed project would have less than significant impact on biological resources, but acknowledges that groundwater from the Pump-in Project will comingle with refuge water supplies: *“The Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the proposed Project, and this would occur partly during times of the year when these refuges would receive water supplies. However, the selenium levels are expected to remain well below the threshold for an adverse effect on wildlife, which is 2 parts per billion (0.002 mg/L) as measured in the water column (USBR and San Luis & Delta-Mendota Water Authority 2009 and references therein). Water introduced under the Project would be monitored and managed to ensure the quality of water does not exceed the requirements of the Water Quality Monitoring Plan, which establishes limits on the quality of water for selenium to 2 micrograms per liter...”* The IS/ND assumes the wellhead MCL of 2 µg/L selenium established in the 2020 WQMP will be adhered to, without providing any data on the water quality performance of prior Westlands pump-ins. We note that almost 40% of the discharge points identified in Table 1 of the IS/ND had at least one well sample that exceeded MCLs identified in the DEA for the constituents As, Se or TDS. This information is summarized in Appendix A to our comments. Information on volumes from each well, and which wells were shut down during prior groundwater pump-ins was not provided in the IS/ND nor the DWR reports of water quality assessments of non-project turn-ins to the California Aqueduct. Westlands also did not

²⁰ See:

https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2019/New/Chapter_3_June_2019.pdf

provide this information, as was requested under the California Public Records Act.²¹ These elevated selenium concentrations at the wellheads occurred even though the 2015 WQMP²² for this project listed an MCL for selenium of 2 µg/L, shown in Table 4 below. A lack of surveillance and enforcement has been a critical flaw of previous pump-in projects. The environmental impacts from this failure needs to be disclosed and analyzed.

San Luis Canal Non-Project Ground Water Pump-in Program 2015 Water Quality Monitoring Plan

Table 4. Water Quality Standards, Initial Test

Constituent	Maximum Contaminant Detection Limit for Analytical			Recommended CAS Registry	
	Units	Level	Reporting	Number	Method

Field Measurements

The IS/ND also fails to disclose any data on the percent of flow in the Aqueduct (POA) comprised of Westlands groundwater pump-ins. In 2014 and early 2015 there were days within the fall and winter months when the Dos Amigos Pumping Plant ceased pumping, resulting in Westlands pump-ins contributing 100% of the flow in the aqueduct on those days as depicted in the Figures 3-1 and 3-2 from DWR 2015²³ and Figure 3-1 from DWR 2016²⁴ reports and copied below. Some of these time periods overlap with refuge water deliveries to Kern NWR. The impacts from deliveries of degraded water to the refuge needs to be monitored and disclosed. The past performance of Westlands groundwater pump-ins into the SLC clearly does not support a less than significant impact on biological resources and warrants a full EIR analysis.

²¹ <https://calsport.org/news/wp-content/uploads/Canal-Integration-Program-Third-Response-Schifferle-071720.pdf>

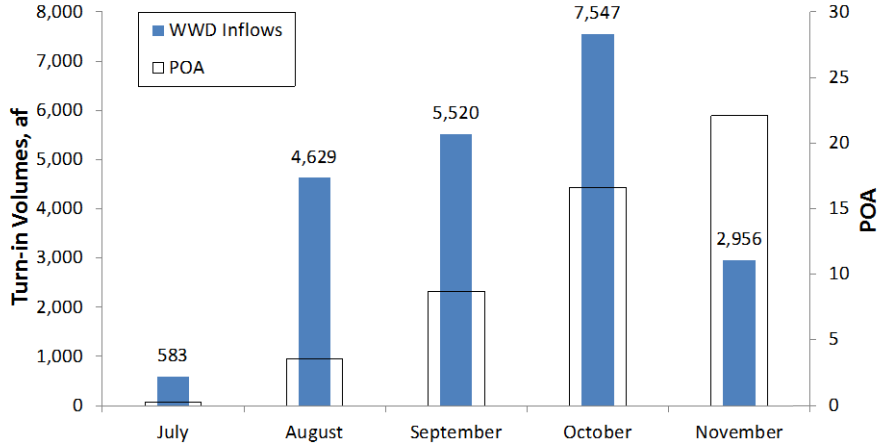
²² See Appendix C, pdf pg 4: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21986

²³ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

²⁴ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

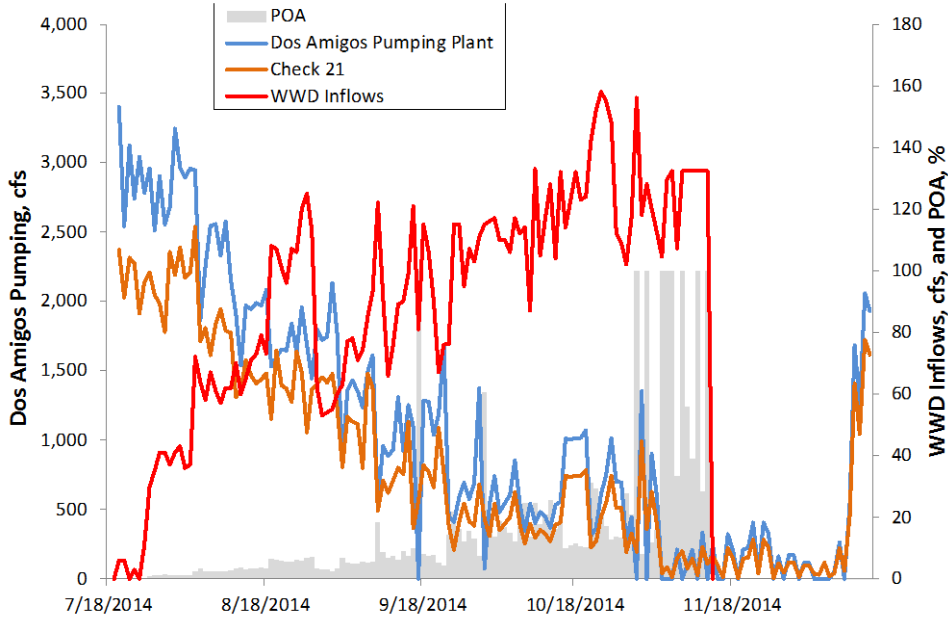
Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2014

Figure 3-1. Monthly Inflows to the Aqueduct from Westlands Water District and Calculated Percentage-of-Aqueduct Values



Notes: af = acre-feet, POA = percentage-of-Aqueduct, WWD = Westlands Water District

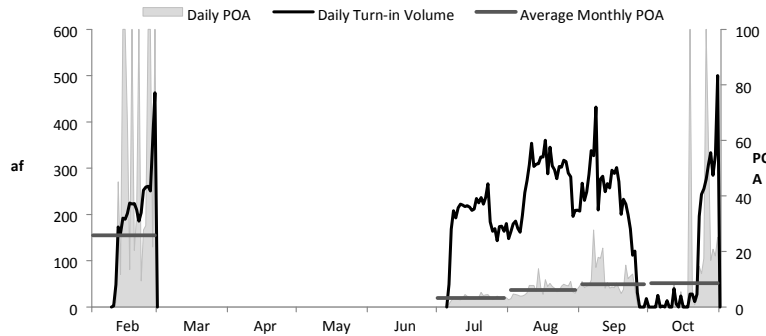
Figure 3-2. Daily Inflows to the Aqueduct from Westlands Water District, Pumping at Dos Amigos Pumping Plant, Check 21 Flows, and Calculated Percentage-of-Aqueduct Values



Notes: cfs = cubic feet per second, POA = percentage-of-Aqueduct, WWD = Westlands Water District

Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015

Figure 3-1 Daily Inflows to the Aqueduct from Westlands Water District and Calculated Percentage-of-Aqueduct Values



DAPP Pumping	18,297	66,621	110,738	150,896	70,871	131,353		
Total Turn-in Volume	4,297	-	-	-	-	5,014	6,341	2,932
Average Monthly POA	26 ^a	-	-	-	-	3.3 ^a	8.2	8.6

Notes:

af = acre-feet, DAPP = Dos Amigos Pumping Plant,
POA = percentage-of-Aqueduct

POAs of 100 percent during February and October represent days when Dos Amigos PP was inactive.

^aCalculations for monthly POAs begins on the first day of turn-in operations.

The California Department of Fish and Wildlife (CDFW) submitted comments on the previous IS/ND for the Pump-in Project dated June 22, 2020.²⁵ We adopt these comments by reference. CDFW wrote that, “Mendota Wildlife Area (MWA) is located directly adjacent to Westlands, and several groundwater wells are located either directly adjacent to the MWA or in the nearby vicinity. Some of these wells pump groundwater into the Inlet Canal, which runs along the southern boundary of the MWA and connects to the WWD via Lateral Canals 6 and 7. Although not identified as a subsidence prone area in the ND, MWA has been significantly affected by groundwater overdrafting and subsidence.” The Project’s potentially significant direct and cumulative contributions to land subsidence in the vicinity of Mendota WA requires a full EIR.

²⁵ See: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/5CSO8N>

The IS/ND states on page 33 under item “d” that “*Groundwater pumped from wells within the vicinity of the MWA under the Project would be conveyed directly to Lateral 7 and conveyed away from the MWA towards the SLC. Groundwater supplies conveyed through Lateral 7 would not mix with water supplies in the MWA to avoid introduction of any potential constituents of concern with regard to wildlife (e.g., selenium, TDS) into the MWA.*” Yet page 12 of Reclamation’s DEA for this project contradicts the IS/ND with respect to groundwater commingling with Mendota WA water supplies: “*Both Mendota Wildlife Area and Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the Proposed Action, and this would occur partly during times of the year when these refuges would receive water supplies.*” Further, on page 32 of the IS/ND it states, “*There are instances where the MWA receives non-Project water from Lateral 7; however, water introduced to Lateral 7 would not be conveyed to the MWA.*” It is unclear how MWA would not be affected by Project pump-ins into Lateral 7 if they can receive water from Lateral 7. These inconsistencies need to be addressed and corrected.

With respect to water quality requirements of pumped groundwater and associated refuge water quality impacts CDFW noted for Mendota Pool, “*The primary disqualifying factor would be high salinity levels, where any well with TDS exceeding 1,000 mg/L would be disqualified. This upper limit is 20% higher than the daily mean TDS water quality objective for the MWA of 800 mg/L or less (Reclamation Water Contract Number 14-OC-200 for Refuge Water Supplies to MWA). The addition of water with TDS higher than 800 mg/L would increase the salinity of the receiving waters in the MWA.*”

CDFW recommended “*...that an analysis with thresholds of significance for aquatic species be included in the IS/ND with measures proposed to reduce any potentially significant impacts.*” Again, the effects to Mendota WA do not a negative declaration of environmental impacts. Significant environmental impacts have been identified and thus, a full EIR analysis is required to adequately inform the public, downstream beneficial uses and other water contracts of the potential to degrade the waters of the state and nation from these discharges.

Water quality standards for Selenium in IS/ND are not Protective of Fish and Wildlife Beneficial Uses.

On page 32 under "item f" the IS/ND concludes that “*Because discharged water under the Project would be subject to rigorous monitoring and testing to meet Title 22 water quality standards and the requirements of the 2020 Water Quality Monitoring Plan, salinity levels of the Kern National Wildlife Refuge water supplies would also be protected. The proposed Project would not convey flows to the MWA. There are instances where the MWA receives non-Project water from Lateral 7; however, water introduced to Lateral 7 would not be conveyed to the MWA. Therefore, no impacts would occur.*” No data is provided to support this conclusion. In fact previous monitoring reports dispute such a blanket claim. Also, as previously noted, the IS/ND assumes the wellhead MCL of 2 µg/L selenium established in the 2020 WQMP will be adhered to with only vague enforcement assurances. Past data on the water quality performance of prior Westlands pump-ins draws this assumption into question. Biological data is absent. Furthermore, the monitoring provided in the IS/ND does not support such a conclusion.

Moreover, on page 7 of the IS/ND, it is stated that “*Reclamation will allow the introduction of water from two or more wells through one discharge point if the blended water meets the Title 22 standards.*” The Title 22 selenium objective of 50 µg /L and the 20 µg /L EPA drinking-water MCL for selenium, are

not protective of fish and wildlife resources that use water from the Aqueduct, which require levels less than 2 µg /L, specifically 1.5 µg /L. The blending of water from two or more wells to meet “Title 22 water quality standards” clearly is not protective of endangered species, migratory birds using the Pacific Flyway and other fish and wildlife that rely upon waters from the San Luis Canal/California Aqueduct.

On July 13, 2016 the Environmental Protection Agency (EPA) released a Final Updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water.²⁶ The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. The federal register notice identified revised chronic selenium criteria in water for lentic waters (e.g., meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps) and lotic waters (e.g., rivers and streams). EPA's revised chronic selenium criterion for lentic waters of 1.5 µg /L on a monthly basis is the criterion that should be applied to water in the aqueduct to protect downstream fish and wildlife beneficial uses.

As described in Reclamation's DEA for this project, both Mendota Wildlife Area and Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the proposed Pump-in Project, as well as, downstream State Water Project reservoirs. Rare species that could be impacted by selenium from Westlands' contaminated groundwater discharges from the Pump-in Project include the federally listed Buena Vista Lake shrew (endangered), federally listed giant garter snake (threatened), and federally protected bald eagle (USFWS 2017).

CDFW comments on the previous IS/ND for the Pump-in Project noted the likelihood for other species to be impacted: “*Special-status species in the Project vicinity include the State and federally threatened giant garter snake, the State threatened and federally endangered San Joaquin kit fox (Vulpes macrotis mutica), the State and federally endangered Tipton kangaroo rat (Dipodomys nitratoides nitratoides), the State and federally endangered and State fully protected blunt-nosed leopard lizard (Gambelia sila), the State threatened Swainson's hawk (Buteo swainsoni), the State threatened Nelson's antelope squirrel (Ammospermophilus nelsoni), the State threatened tricolored blackbird (Agelaius tricolor), the federally endangered and California Rare Plant Rank (CRPR) 1B.2 San Joaquin woollythreads (Monolopia congdonii), the CRPR 1B.2 Munz's tidy-tips (Layia munzii), the State candidate for listing crotch bumble bee (Bombus crotchii), and the State species of special concern American badger (Taxidea taxus), Tulare grasshopper mouse (Onychomys torridus tularensis), San Joaquin coachwhip (Masticophis flagellum ruddocki), and burrowing owl (Athene cunicularia).*”

These complex issues related to impacts on fish and wildlife beneficial uses require a full analysis of the proposed project and its impacts along with potential alternatives. The level of impact and complexity of

²⁶ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambientwater-quality-criterion-for-selenium-in-freshwater>

discharging contaminants that likely remain in the food chain for decades impacting not only threatened and endangered species but the entire Pacific Flyway, requires an EIR. Consultation with the CDFW and the USFWS is essential to ensure that biological resources are protected.

Water Quality Data from Previous Pump-ins is not Provided.

Data on groundwater quality from participating wells is not provided in the IS/ND. The only groundwater data from individual wells for a Westlands previous pump-in that was available on the web was collected by the California Department of Water Resources in 2008.²⁷ Some of the wells sampled in 2008 are included in Table 1 of the IS/ND for the current project. Further, we received DWR Technical Memoranda Reports on the Non-Project Turn-ins to the California Aqueduct for the years 2014,²⁸ 2015,²⁹ and 2016³⁰ from a Public Records Request to Westlands in July 2020.³¹ That data from 2008 and 2014-16 highlights the significant variability of selenium in well water from the Westlands pump-ins and many of the samples reported were well above the MCL for selenium in the 2015 WQMP (2 µg/L).

Reclamation's San Luis Canal Non-Project Water Pump-in Program Water Quality Monitoring Plan from 2015 required that:

“Westlands will provide the following information to Reclamation prior to pumping groundwater into the canal:

- the location of each well, pumping rate, and point of discharge into the San Luis Canal (Appendix B);*
- complete water quality analyses (Table 5) and Table 4 for new wells and each new year of pump-ins*
- the depth to groundwater in every well before pumping into the San Luis Canal commences...*

When the Project is operating, Westlands will provide DWR and Reclamation with periodic (daily and weekly, as necessary) schedules which identify the approved source wells flow rates, locations of pump-in by Aqueduct Mile Post, and deliveries by Reach.

²⁷ Select Project, then WWD 2008 Pump Ins at:
<https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>

²⁸ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

²⁹ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

³⁰ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2016.pdf>

³¹ <https://calsport.org/news/wp-content/uploads/Canal-Integration-Program-Third-Response-Schifferle-071720.pdf>

Westlands shall provide weekly updates identifying the current and anticipated water quality changes within the SLC by using the daily model. The goal is to provide Reclamation and the State Water Project Facilitation Group with a day-to-day prediction of downstream water quality using real-time pump-ins, real-time upstream background flows, and current background water quality data.”

Inexplicably, none of this data from previous pump-ins is presented in the IS/ND. The IS/ND fails to include any prior data from previous Westlands groundwater pump-ins on water quality, quantity of groundwater pumped by each well, depth to groundwater of each well prior to pumping, or contaminant mass balance in the SLC. Data on the previous performance of the Pump-in Project is essential information missing from the IS/ND. It is important to estimate mass balance contaminant loading in the California Aqueduct from these groundwater inputs to ensure that these discharges do not harm downstream beneficial uses and to determine the impacts from continuing the Pump-in Program. These data are also important to inform decision makers and the public with regard to the cumulative impacts of the Pump-in Project. As emphasized for other issues as well, the IS/ND should be withdrawn and replaced with a full EIR analysis that includes all of this and other critical information for public comment review.

Monthly Monitoring of Aqueduct Water Quality near Kettleman City is Insufficient to Assess Environmental Impacts of Pump-in Project.

The California Department of Water Resources (DWR) conducts monthly monitoring of the California Aqueduct and has documented occurrences of elevated levels of concern for selenium at Check 21 near Kettleman City (station number KA017226), especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct.³² As denoted in **Figure 1** below, monthly water quality samples at Check 21 have exceeded the US EPA’s July 2016 Final Updated CWA section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water 12 times between January 2012 and January 2020. These proposed objectives include a lentic water quality objective of 1.5 µg/L,³³ which would be the applicable selenium objective for Kern National Wildlife Refuge and other wetlands and reservoirs that are fed by water from the California Aqueduct. Further, the once-a-month water quality sampling is insufficient to establish a monthly mean water quality calculation, to capture contaminant spikes that accumulate downstream, or to assess potential bioaccumulation in the food chain. Refuge water delivered to the Kern National Wildlife Refuge is diverted from the California Aqueduct in Kern County near Check 29, downstream of where groundwater from the Pump-in Project is pumped into the Aqueduct. Inexplicably, DWR stopped collecting water quality data from Check 29 after November 2016.³⁴

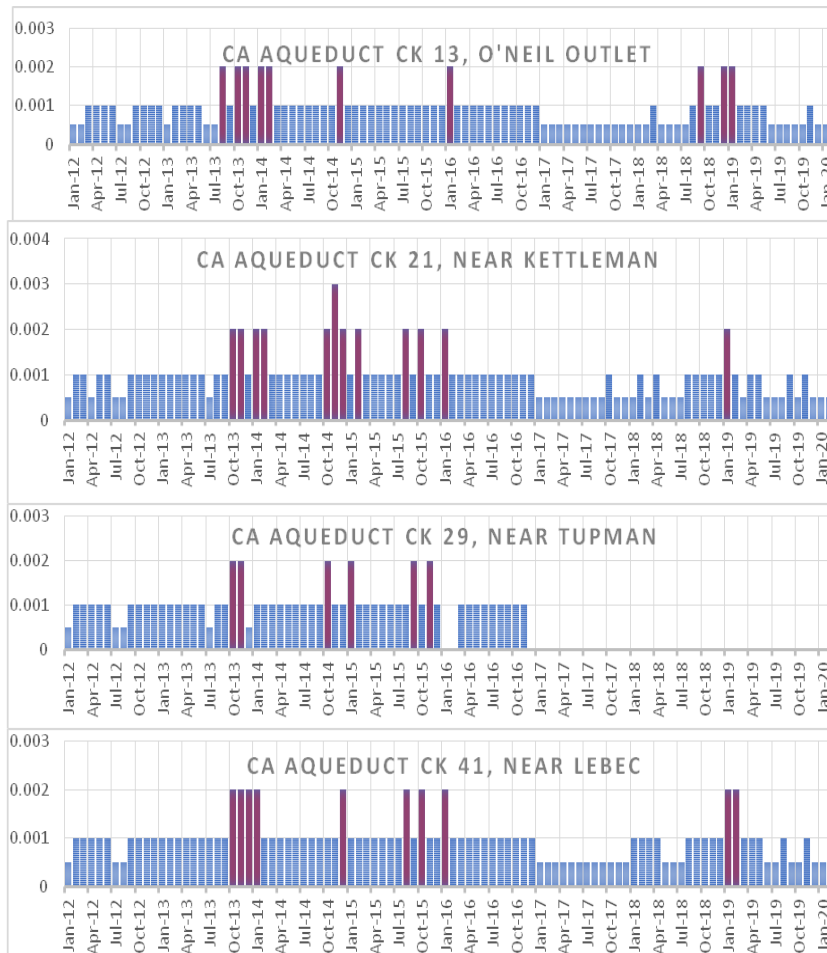
³² Water quality data for the California Aqueduct near Kettleman City is available here by specifying Station Name Check 21: <https://wdl.water.ca.gov/waterdatalibrary/>

³³ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-lifeambient-water-quality-criterion-for-selenium-in-freshwater>

³⁴ Selenium & Arsenic concentrations in the California Aqueduct at Check 29, downstream of where groundwater has been pumped into the canal increased markedly in 2015 and in the case of Arsenic were approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L. See: http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

Elevated selenium in the Aqueduct is typically associated with drier water years when a larger proportion of total volume in the Aqueduct is comprised of groundwater inputs. Groundwater inputs entering into the Aqueduct (from various sources including Westlands) were 46 percent of the total volume entering the aqueduct in 2014,³⁵ 44 percent in 2015,³⁶ and 8.3 percent in 2016.³⁷

Figure 1. Total selenium concentrations in water samples from the California Aqueduct at Checks 13, 21, 29, and 41. Light-shaded bars at 0.0005 mg/L are non-detections, dark blue bars are detections at 0.001 mg/L, and red bars are samples that equaled or exceeded 0.002 mg/L, and exceeded the lentic water quality objective for selenium of 0.0015 mg/L (1.5 µg/L). The Y axis is total Selenium in mg/L, the X axis is Mo-Yr of Sample Date:



³⁵ See page 86 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-15-r.pdf>

³⁶ See page 84 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-16-r.pdf>

³⁷ See page 94 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-17-r.pdf>

Project as Defined in IS/ND and WQMP Violates Article 16(b)(2) of Westlands WIIN Act Repayment Contracts.

Reclamation is in the process of completing and executing CVP repayment contracts for Westlands including contract #: 14-06-200-495A, 14-06-200-3365A, 14-06-200-8092, 7-07-20-W0055, 14-06-200-8018, 14-06-200-3365A, and 14-06-200-7823J. All of these contracts include language under Article 16(b) regarding use of Project facilities for conveyance and/or diversion of non-project water owned or acquired by Westlands.³⁸ Article 16(b)(2) of these contracts defines the following provisions for non-Project water: “*Delivery of such non-Project water in and through Project facilities shall only be allowed to the extent such deliveries do not:*

- (i) interfere with other Project purposes as determined by the Contracting Officer,*
- (ii) reduce the quantity or quality of water available to other Project Contractors;*
- (iii) interfere with the delivery of contractual water entitlements to any other Project Contractors; or*
- (iv) interfere with the physical maintenance of the Project facilities.”*

The IS/ND and WQMP allow degradation of water quality in the Aqueduct between Check 13 and Check 21 (a maximum allowable change in EC of 100 $\mu\text{S}/\text{cm}$). This would violate Article 16(b)(2)(ii) of the Westlands contracts. Further, the IS/ND and WQMP allows a selenium concentration of 2 $\mu\text{g}/\text{L}$ in the Aqueduct which exceeds the U.S.EPA’s revised chronic selenium criterion for lentic waters of 1.5 $\mu\text{g}/\text{L}$. As we have noted previously, EPA’s revised chronic selenium criterion for lentic waters is a monthly mean of 1.5 $\mu\text{g}/\text{L}$ and this is the criterion that should be applied to water in the California Aqueduct to protect fish and wildlife beneficial uses, including refuge water supplies at Kern NWR and Mendota WA. Allowing the degradation of water quality in the Aqueduct would interfere with Project obligations to provide water of suitable quality to refuges identified in CVPIA, a violation of Article 16(b)(2)(i) of the Westlands contracts. Lastly, as discussed below, previous Westland groundwater pump-ins have contributed to subsidence and resulted in significant operational impacts to the Aqueduct including reduced conveyance capacity, increase in power cost, and decrease in available freeboard. These impacts violate Article 16(b)(2)(iv) of the Westlands WIIN Act Repayment Contracts. And further these contracts do not comply with provisions of the CVPIA requiring the restoration and mitigation of fish, wildlife, migratory birds and waterfowl impacts.

Warren Act Contract and Agreement Between DWR and Westlands allowing the Pump-in Project are not Included in the in the IS/ND.

The proposed Westlands 5-year Warren Act Contract (Contract) is not included with the IS/ND and has not been made available for public review, thus an informed decision and analysis is precluded. A copy of the current Contract is available on Reclamation’s website and the term of this contract is through June 30, 2022.³⁹ Will there be changes to the contract after 2022? Further, Exhibit D to this Contract, which

³⁸ See: <https://www.usbr.gov/mp/wiin-act/docs/usbr-westlands-draft-wiin-act-contract-public-comment-period-10-22-19.pdf>

³⁹ See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

identifies the minimum water quality standards for monitoring the quality of Non-Project Water introduced by Westlands into the SLC is not included with the Contract. In order to accurately assess the impacts and cumulative impact of this Project, a copy of the Contract and all Exhibits for the time period being considered (2020-2025) should be disclosed and included in the IS/ND for this Project.

Additionally, adding to the incomplete project description and definition of the project, apparently there exists an Agreement between DWR and Westlands for introduction and conveyance of local groundwater in the California Aqueduct, and this Agreement is likewise not provided for public review. We note that a copy of a 2008 Agreement between DWR and Westlands allowing the introduction and conveyance of groundwater into the Aqueduct between June and September 2008 was included in the 2015 Final EA for Westlands groundwater pump-ins (SWPAO #08052).⁴⁰

Without these documents, the public is prevented from seeing key information regarding the contractual requirements of this action. Omitting these key documents keeps the public in the dark regarding the project definition, baseline and potential contractual remedies available to downstream beneficial uses that are harmed by the degradation of water quality in the SLC/California Aqueduct.

Subsidence Monitoring Requirements Are Insufficient.

Land subsidence is a major and growing consequence of groundwater pumping in the project area and threatens the California Aqueduct and other infrastructure. Increases in subsidence, impacts and costs to the California Aqueduct, and long-term cumulative impacts are significant. USGS recently reported, *“Extensive groundwater pumping from San Joaquin Valley aquifers is increasing the rate of land subsidence, or sinking. This large-scale and rapid subsidence has the potential to cause serious damage to the water delivery infrastructure that brings water from the north of the valley to the south where it helps feed thirsty cropland and cities. According to a new report by the U.S. Geological Survey the subsidence is occurring in such a way that there may be significant operational and structural challenges that need to be overcome to ensure reliable water delivery.”*⁴¹

Further, DWR has been funding and working with NASA’s Jet Propulsion Laboratory (JPL) to monitor subsidence in the San Joaquin Valley since July 2013. It uses interferometric synthetic aperture radar (InSAR) from satellites and aircraft to record the distance between the radar and the ground surface. This work has identified significant areas of subsidence in Westlands as shown in the figure below taken from DWR’s 2017 California Aqueduct Subsidence Study Report.⁴²

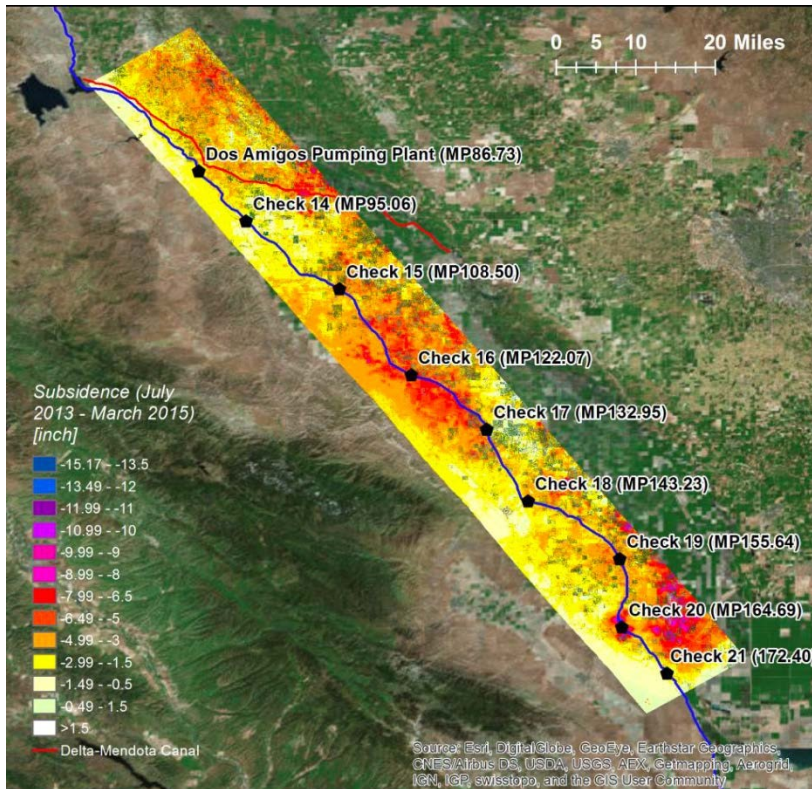
⁴⁰ The 2008 Agreement between DWR and Westlands for the introduction and conveyance of groundwater into the Aqueduct was included in Appendix A of the 2015 Final EA for the Pump-in Project. See pdf pg 19: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21984

⁴¹ See <https://pubs.er.usgs.gov/publication/sir20185144>

⁴² See: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Engineering-AndConstruction/Files/Subsidence/Aqueduct_Subsidence_Study-Accessibility_Compatibility.pdf

The Survey data in the DWR Subsidence Report show this section of the Aqueduct, the SLC (from Los Banos to Kettleman City), has subsided the most over the years.⁴³ The DWR report identifies a number of significant operational impacts of subsidence to the Aqueduct including: reduction in conveyance capacity, increase in power cost, decrease in available freeboard (the difference in elevation between the crest of the canal and the water level as fixed by design requirements). These effects are significant and costly to repair.

Figure taken from DWR’s 2017 California Aqueduct Subsidence Study Report



As denoted on page 16 of the IS/ND, there are “...two subsidence prone areas located within the District along the SLC...These two areas experienced increased rates of subsidence, which may threaten lands and infrastructure within their vicinity, namely the SLC.” The IS/ND proposes within these areas, to subject well pumping to “more restrictive minimum thresholds to protect critical head levels, and extraction from the Lower Aquifer (deep aquifer below the Corcoran Clay layer) would be limited in all years to minimize or avoid subsidence in susceptible lower aquifers.”

CDFW provided comments on the Westlands' previous IS/ND for this project on subsidence effects to MWA, “MWA is located within the Delta-Mendota Subbasin and borders the Westside Subbasin. Both the Westside and Delta-Mendota Subbasins are designated as critically overdrafted by the California Department of Water Resources, and such overdrafting is a serious issue within the Mendota Pool area

⁴³ [Ibid.](#)

due to ongoing subsidence. Over the years, the Mendota Dam has experienced subsidence, and the California Department of Water Resources, Division of Safety of Dams has required the water level to be lowered due to the subsequent compromised integrity of the dam. The lowered water level at the dam has resulted in lower water levels to the gravity flow and lift pump inlets at the MWA. The northernmost gravity flow inlet receives no water, causing loss of trees and habitat along the northern edge of the wildlife area. The lift stations no longer pump efficiently because the inlets are not fully covered with water, allowing air to be pulled into the pumps and decreasing water flows. Decreased water flow results in MWA operating its pumps for longer periods, increases the electricity cost and personnel cost to monitor and maintain the pumps, and increases wear and tear on the pumps.

Continued subsidence affects the ability of CDFW to operate the MWA according to its management objectives, and other areas where water is no longer delivered by gravity could increasingly lose associated wetland and riparian habitat features. Subsidence is irreversible and damage to surface water conveyance features caused by subsidence can only be mitigated by removal of damaged infrastructure and replacement, or re-engineering and reconstruction of infrastructure to allow surface water to flow at an acceptable level.⁴⁴

The effects of subsidence to Mendota WA are discussed in the IS/ND on page 33. The IS/ND concludes, “Two existing potential CIP wells that would be operated under the Project are located directly adjacent to the MWA, and are unlikely to contribute to ongoing subsidence because of the shutdown provision described in Section 15.10, Hydrology and Water Quality which protect the water level from achieving historic lows... The rate of groundwater pumping under the Project is not anticipated to result in an undesirable or adverse rate of subsidence which would impact CDFW operations or the quantity or quality of habitat within the MWA.”

The 2020 WQMP includes requirements for groundwater level management. As described therein, well owners participating in the Pump-in Project are required to measure the initial depth to groundwater in each well before pumping into the canal, monthly from April to August, and bi-monthly from September to March. Individual wells will be shut off if the depth to groundwater reaches 75 percent of the difference between the Fall/Winter median groundwater level and the maximum depth to groundwater.

It is encouraging to see that the IS/ND and the 2020 WQMP includes groundwater level monitoring and shutoff triggers. But neither the IS/ND nor the WQMP identify rates of pumping or quantities of water that could be safely pumped from the areas that have experienced high subsidence (including near MWA) while staying within these generous thresholds. And while the IS/ND indicates that the subsidence rate will be monitored during the implementation of the Pump-in Project, it provides no clear plan for what happens when monitoring reveals excessive subsidence. The impacts of this action are complex, broad and far reaching, and need to be considered in a full EIR analysis. Consistent with recommendations from CDFW on the Project, a full EIR should evaluate all areas that would be affected by increased subsidence, including the Mendota WA, and develop a plan to offset losses of wetland and riparian vegetation communities caused by changes in hydrology associated with subsidence caused by Project pumping. CDFW recommended that the plan address mitigation for impacted habitat value and function, to achieve a minimum no net loss of these habitats, consistent with California Fish and Game Commission policy on Wetlands Resources.

⁴⁴ See: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/5CSO8N>

Compliance with Clean Water Act is Absent.

As the U.S. EPA noted in scoping comments submitted for the Westlands pump-ins in 2010 the proposed discharge of contaminated groundwater from Westlands with potentially high salt, boron, chromium, arsenic, selenium and other metals would be subject to NPDES permitting requirements pursuant to the federal Clean Water Act (CWA). Further EPA noted, “Permits will need to be designed to ensure the discharges do not cause or contribute to exceedences of applicable State water quality standards or degradation of designated beneficial uses.”⁴⁵ Westlands has failed to obtain the required CWA permits.

The Clean Water Act prohibits the discharge of "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. Such a permit would contain limits on what can be discharged, monitoring and reporting requirements, and other provisions to ensure that the discharge does not harm water quality or human health. The term point source is also defined very broadly in the Clean Water Act. It means any discernible, confined and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure, or container.⁴⁶

No compliance with the federal CWA is provided in the IS/ND. Thus, the public is precluded from analyzing the permit and conditions to ensure protection and non-degradation of water supplies under the NPDES permit and potential mitigation measures. As we have noted above, 35 of the 88 discharge points included in Table 1 of the IS/ND under Westlands' previous pump-in projects had at least one well that exceeded maximum contaminant levels (MCLs) identified for the constituents As, Se or TDS. These elevated concentrations of constituents such as selenium can bioaccumulate in the food chain and have amplifying impacts in the environment.⁴⁷

A Final NEPA Document has Not Been Provided.

As described on page 10 of the IS/ND, footnote 5, USBR's approval of the Westlands' 2020-2025 Warren Act Contract authorizing the Pump-in Project is subject to environmental review under the National Environmental Protection Act (NEPA) pursuant to the Council on Environmental Quality regulations (40 Code of Federal Regulations Parts 1500- 1508). Review of Reclamation's approval of Westlands' 2020-2025 Warren Act Contract pursuant to the requirements of NEPA is being prepared under an Environmental Assessment (EA). A draft EA for the Pump-in Project was made available for public comment thru August 20, 2020. A Final EA has not yet been completed for this project. A Negative Declaration is not supported and especially not supported absent a Final EA for this project.

⁴⁵ See: <http://calsport.org/news/wp-content/uploads/EPA-comments-Westlands-WD-EIR-NOP-3-4-10.pdf>

⁴⁶ See: <https://www.epa.gov/npdes/npdes-permit-basics>

⁴⁷ DWR Groundwater Data from WWD 2008 Pump Ins at:
<https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>

And the following DWR Groundwater Data from previous WWD SLC Pump-ins:

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2016.pdf>

Inadequate Cumulative Impacts Analysis.

When assessing whether a cumulative effect requires an EIR, the lead agency shall consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable. An EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (CEQA Guidelines § 15064(h).) The IS/ND fails to follow these standards and fails to consider the cumulative impacts, including water quality, well drawdown and subsidence impacts, of past, current and future probable projects, whether they may be significant, or whether the Project's contribution would be cumulatively considerable.

Cumulative impacts from other water exchanges are not disclosed or analyzed. We adopt by reference our comments from previous exchanges and transfers and previous scoping comments.⁴⁸ In addition to the continued extraction of water from already over drafted groundwater basins, the impacts from discharging this groundwater on Westlands' toxic soils and exacerbating an existing subsurface agricultural drainage problem on the west-side of the San Joaquin Valley are not disclosed nor mitigated. Selenium found in groundwater and drainage water in Westlands is known to create life threatening impacts to migratory birds, wildlife and fish, magnifying up the food chain as these pollutants accumulate. These impacts are merely brushed aside. No data from previous pump-ins is provided to support Westland's conclusions of less than significant impact in the IS/ND. No alternatives are considered. Finally, there is insufficient analysis of the cumulative impact of discharging these contaminants into drinking water, wildlife refuge supplies, or downstream fish and wildlife beneficial uses.

Additionally, we refer to CDFW's recommendations on the previous IS/ND⁴⁹ for this project with respect to cumulative effects, "...lowered water quality and increased salt loading could potentially

⁴⁸ See: http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=14341 "Resnicks' Westside Mutual Water District member lands in Westlands Water District to the AEWSO service area and Westside Exchange Program are not disclosed nor analyzed. Nor are the impacts to Madera County from the potential groundwater transfers likely contemplated under the proposed action. The existing Exchange Program involves delivery of Arvin's supplies to Westside member lands as exchange water, based on a 1 for 1 or "bucket for bucket" basis, up to 50,000 acre feet (AF)."

See 30,000 acre feet of groundwater proposed to be transferred to Westlands et. al. from the Mendota Pool:

<http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=49107>

See also North Valley Regional Recycled Water Program-- <http://www.nvrrecycledwater.org/description.asp> The NVRWP could produce and deliver up to 32,900 acre-feet per year of tertiary-treated recycled water to the drought-impacted west side. This water can be used to irrigate food crops, public and privately owned landscaping, and for industrial uses. This basin transfer would alter San Joaquin River Flows and flows to refuges, and the South Delta Bay Estuary. The project would deliver up to 59,000 acre feet per year (AFY) of recycled water produced by the cities of Modesto and Turlock via the Delta-Mendota Canal (DMC), a feature of the Central Valley Project owned by Reclamation. Instead of discharging fresh treated water into the San Joaquin River, recycled water would be conveyed from Modesto and Turlock through pipelines from their wastewater treatment facilities, crossing the San Joaquin River, ending at the DMC.

⁴⁹ See: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/5CSO8N>

impact sensitive aquatic species such as the giant garter snake, and affect habitats for sensitive status species, especially in the context of other existing and pending projects affecting water quality and ground subsidence of Mendota Pool, the MWA, and surrounding areas. CDFW recommends that the cumulative impacts analysis include the effects to special status species from this Project and other current and foreseeable projects.” These and other cumulative impacts must be adequately studied in an EIR.

More Robust Monitoring Program & Enforcement Are Needed.

To protect downstream beneficial uses, we recommend the following be incorporated into a revised WQMP for the Pump-in Project:

- Well water should not be conveyed into the Aqueduct until it has been confirmed that the well water does not exceed the selenium wellhead standard of 2 µg/L (from Table 4 of the WQMP);
- Weekly monitoring of wells (while pumps are running) that have had at least one water quality sample above 2 µg/L selenium during the 2015 and 2016 pump-ins;
- Weekly water quality sampling for selenium at Check 21 of the California Aqueduct while Westlands is pumping groundwater into the Aqueduct;
- The selenium objective for the California Aqueduct should be 1.5 µg/L to be protective of downstream beneficial uses associated with the Aqueduct and Mendota Pool;
- Well water pumped into the Mendota Pool should not exceed 600 mg/L TDS to protect Mendota Wildlife Area water quality;
- Weekly water monitoring of wells and the Aqueduct at Check 21 should require rapid turnaround so results are received within 7 days and can be responsive to current and changing conditions.
- Well water from Westlands should not be pumped into the Aqueduct if Dos Amigos Pumping Plant is not operating.
- There needs to be an established protocol dictating required actions and enforcement when water quality standards are exceeded at individual wells or in the aqueduct and related conveyance canals.

Conclusion

CEQA requires that an Environmental Impact Report ("EIR") be prepared for any project that may have a significant impact on the environment. (Public Resources Code §§ 21000, 21151.) CEQA establishes mandatory findings of significance that require the preparation of an EIR when a project has the potential to substantially degrade the quality of the environment, to achieve short-term environmental goals to the disadvantage of long-term environmental goals, and when a project has possible environmental effects, which are cumulatively considerable (CEQA Guidelines § 15065). Moreover, whenever an agency is presented with a fair argument based upon substantial evidence that a project may have a significant effect on the environment, an EIR must be prepared, even though there may be evidence to the contrary in the record. (CEQA Guidelines § 15064(f)(1).

We find that the IS/ND fails CEQA's "most important" purpose, to fully inform the decision-makers and the public of the environmental impacts of the choices before them." (83 Cal.App.4th at p. 920.) The IS/ND does not adequately assess the potentially significant environmental impacts from the Pump-in Project or consider alternatives to the project. There are reasonably available alternatives that have not been considered and should be analyzed in order to reduce the potentially significant environmental impacts. Absent from the document is any assessment of the cumulative impacts including third party impacts and impacts to fish, wildlife and water quality. Required permits and compliance with the Clean Water Act that would govern the discharge of contaminants into the waters of the State and Nation have not been provided; nor have necessary consultations with Federal and State fish and wildlife agencies concerning potential endangered and threatened species impacts. The Project as described in the IS/ND would violate terms under Article 16(b)(2) of Westlands WIIN Act repayment contracts. The Warren Act Contract and associated Contract Exhibits and Agreement between Westlands and DWR governing the full discharge into the Aqueduct from 2020-2025 is absent and therefore, could not be reviewed.

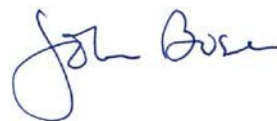
Prior to commencing with the proposed Project, which has in the past and likely will continue to harm downstream uses, a complete EIR is required. This document needs to include, among other things, a revised Water Quality Monitoring Plan to ensure waters of the State and Nation are not degraded, compilation and analysis of prior groundwater water quality data, flow rates and quantities pumped from participating wells from previous pump-ins, a mass-balance model for selenium in the Aqueduct, the Warren Act Contract and Exhibits, the Agreement between DWR and Westlands, documentation of Clean Water Act permit compliance, and full analysis of alternatives and cumulative impacts. This information should be included in the EIR that replaces the IS/ND. We object to the adoption of a Negative Declaration for this project, and the proposed 25-year authorization for all the discharge points in Table 1 of the IS/ND because they are not supported by data from past groundwater pump-ins into the Aqueduct from Westlands. Lastly, the conveyance period for the Pump-in Project in 2020 should not commence prior to the completion of the appropriate CEQA and NEPA decision documents.

Thank you for the opportunity to comment. Please add our names to Westlands' electronic notification lists for environmental documents regarding water supplies or contracts or conveyance.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



John Buse
Senior Counsel, Legal Director
Center for Biological Diversity
<mailto:jbuse@biologicaldiversity.org>



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Barbara Vlamis
Executive Director
AquAlliance
barbarav@aqualliance.net




Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



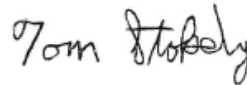
Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com

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- (DWR) California Department of Water Resources. October 2015. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2014. Technical Memorandum Report, Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 140 pp.
- (DWR) California Department of Water Resources. 2008. Fishing Along the SWP. Brochure. DWR, Sacramento, 9 pp.
- (USFWS) U.S. Fish and Wildlife Service. October 2017. Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries, Final Report to the U. S. Environmental Protection Agency Inter-Agency Agreement No. DW-14-95825001-0. USFWS, Sacramento, CA, 156 pp.

Appendix A. Proposed Discharge and Well Locations from the DEA that have exceeded MCLs for As, Se or TDS in previous years of pump-ins.

Table 1. Proposed Discharge and Well Locations from the DEA that have exceeded MCLs for As, Se or TDS.⁵⁰

SLC Milepost Discharge Location	State Well ID(s)	# of samples exceeding MCL for As ⁵¹ and (range of As reported)	# of samples exceeding MCL for Se ⁵² and (range of Se reported)	# of samples exceeding MCL for TDS ⁵³ and (range of TDS reported)
105.20L	141202R02	0	1 (4 µg/L)	1 (1290 mg/L)
115.43L, Lateral 7	151509R03,151509R04 151509R05,151503A02 151504A03,151503H01	2 (10.2-11.8 µg/L)	0	8 (1010-1390 mg/L)
117.52L	151419F01	0	12 (3.4-5.8 µg/L)	1 (1300 mg/L)
127.40L	161521N03 ⁵⁴	0	2 (2.8-3.9 µg/L)	0
128.49R	171413A01 ⁵⁵	0	6 (8.4-22 µg/L)	0
128.50L	161533J01 ⁵⁶	0	12 (4.2-6 µg/L)	0
128.54L	161532A06	0	6 (3-6.5 µg/L)	1 (1400 mg/L)
130.81R	171510M01	0	3 (2.1-2.5 µg/L)	0
133.80L	171601N03	0	2 (2.1-2.2 µg/L)	0
137.31L	181606F01	0	1 (3 µg/L)	1 (1200 mg/L)
139.40L	181609R01	0	1 (3 µg/L)	0
140.55LA	181617R02	0	0	1 (1040 mg/L)
142.58R	181629N02	0	1 (12 µg/L)	1 (1230 mg/L)
143.00L	181627N01	0	1 (7 µg/L)	1 (1070 mg/L)
152.75L	191723R01	0	0	2 (1014-1100 mg/L)

⁵⁰ Data Sources: DWR 2008, 2016, 2017. Locations/wells identified in blue were marked as new facilities in DEA.

⁵¹ MCL for As is 10 µg/L from page 13 of 2020 WQMP, Table 5 Water Quality Standards Short List.

⁵² MCL for Se is 2 µg/L from page 13 of 2020 WQMP, Table 5 Water Quality Standards Short List.

⁵³ MCL for TDS is 1000 mg/L from page 13 of 2020 WQMP, Table 5 Water Quality Standards Short List.

⁵⁴ Samples from adjacent State Well ID 161521N02.

⁵⁵ Samples from adjacent State Well ID 171413A06.

⁵⁶ Samples from adjacent State Well ID 161533J02.

155.15L	191831N01	0	1 (2.1 µg/L)	0
156.36R	201714K01	0	8 (2.1-7.4 µg/L)	1 (1200 mg/L)
	201712H01	0	2 (2.5-2.9 µg/L)	0
156.37LA	201806Q01 ⁵⁷	3 (12-13 µg/L)	5 (2.8-4.7 µg/L)	0
157.98L	201817G01	0	9 (2.4-3.2 µg/L)	0
158.95L	201820E01	0	1 (2.6 µg/L)	0
159.98R	201831C01	0	5 (2.3-2.6 µg/L)	0
161.49L	201831Q01	0	8 (5.3-11 µg/L)	0
161.60L	211805C01	0	6 (2.3-5.4 µg/L)	0
	211809D02	0	1 (7 µg/L)	0
162.08L	211805C01	0	6 (2.3-5.4 µg/L)	0
	211805M01	0	8 (5.2-7.5 µg/L)	0
162.10R	211806G01	0	2 (17-18 µg/L)	0
162.64L	211809L01	0	1 (7 µg/L)	0
164.11R	211818G03	0	6 (14-19 µg/L)	0
164.55L-A	211817N03	0	7 (10-12 µg/L)	0
	211816N01	0	7 (2.9-5.1 µg/L)	0
164.63R	211818G03	0	6 (14-19 µg/L)	0
164.95R	211833G01	0	8 (3-12 µg/L)	0
166.70R	211828G06	0	4 (3.9-4.6 µg/L)	1 (1200 mg/L)
166.90R	211827K02	0	6 (3.7-5.6 µg/L)	0
167.04L, Lateral 37	211823D06	0	1 (3 µg/L)	0
167.86R	211833N02	2 (11 µg/L)	0	0
	211833G01	0	8 (3-12 µg/L)	0

Data Sources:

⁵⁷ Samples from adjacent State Well ID 201806Q02.

(DWR) California Department of Water Resources. November 2017. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2016. Technical Memorandum Report, Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 146 pp.

(DWR) California Department of Water Resources. December 2016. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015. Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 172 pp.

(DWR) California Department of Water Resources. 2008. DWR Groundwater Data from WWD 2008 Pump Ins project at: <https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>



CA Save Our Streams Council



August 20, 2020

Mr. Brian Lopez
U.S. Bureau of Reclamation
South-Central California Area Office
1243 N Street
Fresno, California 93721
Email: blopez@usbr.gov

Comments on the Draft Environmental Assessment (DEA) for Groundwater Pump-ins Enabled by the Bureau of Reclamation Warren Act Contract for Westlands Water District (EA-20-008, CGB-EA-2020-032)

Dear Mr. Lopez:

Thank you for the opportunity to comment. We have reviewed the subject Draft Environmental Assessment (DEA) and find that it is incomplete with regard to addressing environmental impacts in several areas, which we address in detail in comments below. Furthermore, the DEA lacks sufficient data to determine compliance with NEPA, provisions of State of California water quality laws under Porter Cologne and the federal Clean Water Act, the federal and State of California Endangered Species Acts (ESA and CESA), and the California Environmental Policy Act (CEQA). The groundwater pump-in project ("Project" or "Pump-In Project") is a substantial and complex project that clearly requires a comprehensive Environmental Impact Statement (EIS) to properly address potential impacts and alternatives to the proposed project.

The National Environmental Policy Act (NEPA) compels an informed process. NEPA requires that federal decision makers be informed of the environmental consequences of their decisions and undertake an assessment of the environmental effects of their proposed actions prior to making decisions.¹ An informed decision document under NEPA should include all relevant data, including past monitoring data along with analysis of that data, to help inform the public and decision makers as to impacts and guide future implementation of the project.

The Draft Environmental Assessment (DEA) is incomplete in several respects, which we will discuss. There are significant data gaps that hinder the public and decision makers' from making an informed decision regarding the potential environmental consequences of allowing these discharges of contaminated groundwater into the San Luis Canal/California Aqueduct. Also completely neglected are the impacts from discharging this contaminated water and substituting or exchanging it with water exported from the Delta Estuary or other exchanges that have the potential to impact the American River, Yuba River, Sacramento River and Shasta dam operations.

There is substantial evidence that previous similar Westlands Water District (Westlands) pump-in projects have caused and—if permitted again, will continue to cause—water pollution, land subsidence, increased water supply costs to others, and damage to the California Aqueduct, which serves millions of people. The DEA fails to provide a complete assessment of the impacts of this project, fails to include effects of these prior pump-ins on subsidence damages to the San Luis Canal (the federal/state portion of the California Aqueduct, SLC), and completely neglects to include any information and analysis of prior water quality data, quantity of groundwater pumped, percent of aqueduct flow comprised of Westlands' groundwater pump-ins, or contaminant mass balance in the SLC from previous groundwater pump-ins associated with this project. The DEA, as presented, does not support a “fair argument” that this project does not have significant environmental impacts. A full Environmental Impact Statement (EIS) is required so that the environmental impacts, as well as costs and damage to downstream beneficial uses, can be adequately analyzed and described to the public and decision makers. The DEA fails to identify and examine the potential impacts of the Project.

Further, the NEPA process must be completed before an agency makes a final decision on a proposed action. We note that the DEA states on page 3 that the window for the conveyance period for this project in 2020 would commence on August 1, 2020, twenty days prior to the end of the comment period on the DEA. The conveyance period for this project in 2020 should commence when the NEPA and the associated CEQA documentation for this project have been finalized, not before it. Allowing discharge of this contaminated groundwater prior to completion of the NEPA analysis and Record of Decision precludes public input and analysis. It predetermines the federal action, contrary to NEPA requirements to carefully weigh and consider public input.

¹ https://ceq.doe.gov/docs/get-involved/Citizens_Guide_Dec07.pdf

Westlands, a state agency with a singular focus of providing irrigation water to roughly 350 vertically integrated irrigation operations,² is not the appropriate state agency to lead such a complex project impacting a broad geographical area and numerous downstream beneficial uses. Our organizations have stated in previous comments that the Department of Water Resources (DWR) should be the lead state agency for such a geographically complex project that impacts multiple counties and jurisdictions. Also, as an owner of the California Aqueduct, DWR is better able to ensure enforcement measures and non-degradation of these beneficial uses of water.

Our organizations provide these comments on Reclamation's DEA for a proposed five-year Warren Act Contract³ for the Westlands Groundwater Pumping and Conveyance Project. In accordance with NEPA, Reclamation, as the Federal lead agency, made the DEA available for a 30-day public comment period closing on August 20, 2020.⁴ Our organizations have previously submitted comments on this project: 1) Scoping Comments for Westlands Water District Proposed Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct dated March 2, 2010, and 2) Comments to the US Bureau of Reclamation (Reclamation) on the Draft Environmental Assessment Westlands Water District Groundwater Warren Act Contract EA-15-001 & FONSI-15-001, dated March 26, 2015, and 3) Comments on the Draft Initial Study/Negative Declaration for Westlands Water District Warren Act Contract for Groundwater Pump In Program, SCH # 2020050434, dated June 15, 2020. Our previous comments are incorporated here by reference.⁵

The following evaluation and comments supplement previous comments with more detail on key issues.⁶ Comments are organized in two parts: (1) a summary of the project as described in the DEA as background for the our critique, and (2) a critique of the project, monitoring plans, and environmental impact analysis.

² See <https://www.latimes.com/environment/story/2020-02-28/westlands-water-district-gets-permanent-u-s-contract-for-massive-irrigation-deliveries>

³ The Warren Act (Act of February 21, 1911; Chapter 141, 36 Stat. 925) authorizes USBR to enter into contracts to impound, store, or convey non-CVP water in federal facilities, when excess capacity is available. Warren Act Contracts are issued by Reclamation to allow movement of non-federal water through federal facilities.

⁴ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=46184

⁵ <http://calsport.org/news/wp-content/uploads/Conservation-Gr-04-19-2018-Cmt-Ltr-Delta-Mendota-CanalGroundwater-Pump-in-DEA-18-007-and-FON....pdf>

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<http://calsport.org/news/wp-content/uploads/Conservation-Gr-FinalScopingCmts-03-02-2010-100K-Pump-in-CalAqueduct.pdf>

⁶ https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-WWD-SLC-Pump-in-2020-IS_ND_6-10-2020-Cal-Aqueduct.pdf

SUMMARY OF PROJECT AS DESCRIBED BY RECLAMATION IN THE DEA

Proposed Pump-in Project Summary

Under the Pump-in Project, Reclamation would enter into a five-year Warren Act Contract (for the years 2020-2025) to allow Westlands to pump in up to 30,000 acre-feet per year (AF/y) (and up to 150,000 AF over the five-year life of the project) of potentially highly contaminated non-CVP groundwater into the California Aqueduct-San Luis Canal (SLC), in years in which Westlands Water District's CVP allocation is 20% or less. Reclamation has specified conditions outlined in Section 2.2.2 of the DEA and in the Water Quality Monitoring Plan in Appendix A. The period of introduction would be between April 1 and August 31 of a given year, except for 2020. Non-CVP water introduced into the SLC would either be directly delivered to agricultural users or wildlife refuges located downstream of the points of introduction or operationally exchanged with Reclamation for a like amount, less conveyance losses, of Westlands' available water supplies in San Luis Reservoir. The delivery of non-CVP water to wildlife refuges is a critical aspect of the Pump-in Project to evaluate because of the sensitivity of the refuges to contamination (discussed in detail below). Exchanged water would either be delivered to agricultural users located upstream of the points of introduction in Westlands or could be exchanged for water stored in San Luis Reservoir as non-CVP water for later delivery to Westlands via the San Luis Canal. The impacts of these exchanges, the quantities, timing, and location from where the water is taken, like the Delta Estuary for example, are not disclosed or defined.

In addition, Reclamation proposes to issue a combined 25-year authorization for 88 discharge points (identified in Table 1 of the DEA, pages 4-6) involved in the Westlands Pump-in Project. We discuss this further in the Comments and Recommendations section below.

Proposed Design Constraints and Operating Criteria

The Westlands Pump-in Project is supposed to be subject to water quality monitoring, groundwater monitoring, and reporting requirements as described in Reclamation's current San Luis Canal Non-Project Water Pump-in Program 2020 Water Quality Monitoring Plan dated May 2020 (WQMP) and provided in Appendix A of the DEA. There are numerous inconsistencies, as discussed in our detailed comments. Further enforcement actions are absent and instead are left to vague assurances between Westlands and Reclamation. These vague assurances do not mitigate impacts nor is it clear how they will be enforced.

Water Quality Monitoring Requirements

Baseline sampling and routine sampling of individual wells

The WQMP requires that all participating wells must have baseline sampling each year before pumping into the San Luis Canal begins for those constituents of concern used for screening-out non-compliant wells. Further, the WQMP requires that for all constituents in the Table 5 short list (except as specified in the footnotes), monitoring will continue to occur weekly for four consecutive weeks, and then monthly for the duration of pumping into the SLC.

In addition, each well is also required to be tested every three years for the full array of Title 22 constituents of concern. On page 7 of the DEA it states that, “Reclamation will allow the introduction of water from two or more wells through one discharge point if the blended water meets the Title 22 standards. Special monitoring may be required for these situations.” As we discuss in detail below, the Title 22 Drinking Water standard for selenium is not protective of fish and wildlife resources that use water from the aqueduct and this is inconsistent with the short list of water quality standards for selenium set forth in Table 5 in the WQMP. This inconsistency needs to be corrected. Further, the impacts of any such inconsistency, including the failure to monitor and enforce protective fish and wildlife water quality standards for selenium, have not been disclosed.

Also included with the sampling of individual wells is one-time screening for the presence of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) and, if detected, Reclamation and the California Department of Water Resources (DWR) will work with Westlands on conducting additional sampling.

Table 5 from 2020 SLC WQMP

San Luis Canal
Non-Project Water Pump-in Program
Water Quality Monitoring Plan

Table 5. Water Quality Standards, Short List

Constituent	Units	Maximum Contaminant Level	Detection Limit for Reporting	CAS Registry Number	Recommended Analytical Method
Arsenic	mg/L	0.01 (1)	0.002 (2)	7440-38-2	EPA 200.8
Boron	mg/L	2.0 (13)		7440-42-8	EPA 200.7
Bromide	mg/L	(14)			
Chloride	mg/L	250 (7)		16887-00-6	EPA 300.1
Chromium, total	mg/L	0.05 (1)	0.01 (2)	7440-47-3	EPA 200.7
Hexavalent chromium	mg/L	0.010 (1)	0.001 (2)	18540-29-9	EPA 200.8
Manganese	mg/L	0.05 (7)		7439-96-5	EPA 200.7
Nitrate (as nitrogen)	mg/L	10 (1)	0.4 (2)	7727-37-9	EPA 300.1
Selenium	mg/L	0.002 (10)	0.001	7782-49-2	EPA 200.8
Sodium	mg/L	69 (12)		7440-23-5	EPA 200.7
Specific Conductance	µS/cm	1,600 (7)			SM 2510B
Sulfate	mg/L	500 (7)		14808-79-8	EPA 300.1
Total Dissolved Solids	mg/L	1,000 (7)			SM 2540C
Total Organic Carbon	mg/L	(14)			EPA 415.3
Gross alpha ⁴	pCi/L	15 (3)	3 (3)		SM 7110C
1,2,3-Trichloropropane	mg/L	0.000005 (4)	0.000005 (5)	96-18-4	SRL 524M
One-Time Screening					
Perfluorooctanoic acid (PFOA) ⁵	ng/L	N/A		0.82 (15)	EPA 537.1
Perfluorooctanesulfonic acid (PFOS) ⁵	ng/L	N/A		2.7 (15)	EPA 537.1

Short list to be measured before pumping occurs, then weekly for four consecutive weeks, and monthly for the duration of pumping into the San Luis Canal.

(4) Monthly testing only

(5) One-time screening conducted prior to pumping individual wells and from Lateral 7 at the Adams Avenue pump station. Although there are no MCLs developed yet, there are notification levels and response levels. The notification levels are 5.1 PPT (PFOA) and 6.5 PPT (PFOS). The response levels are 10 PPT (PFOA) and 40 PPT (PFOS) based on a running four quarter average. The lowest concentration minimum reporting levels (LCMRL) are 0.82 ng/L (PFOA) and 2.7 ng/L (PFOS).

Lateral 7 water quality monitoring

Non-project water is only allowed to enter Lateral 7 when water is being pumped into the SLC,

not when flow is entering the Mendota Pool. Westlands is required to take weekly field measures for conductivity and turbidity at locations near Lateral 7 during these periods.

In addition to non-project well sampling, Westlands must collect samples from Lateral 7 at the Adams Avenue pump station. Lateral 7 water must be tested for the full suite of Title 22 (Table 6) every year. Table 5 constituents will be sampled weekly for the first four weeks, then monthly for the duration of pumping.

There will be a one-time screening for the presence of Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS) from Lateral 7 at Adams Avenue pump station and if detected, Reclamation and DWR will work with Westlands on conducting additional sampling.

Water Quality Monitoring of the Aqueduct

Mean daily salinity and turbidity will be measured with the DWR sensors that report real-time data to the California Data Exchange Center (CDEC). Westlands is required to download daily average data for SLC Checks 13 and 21 to measure changes in the canal between these checks that may be attributable to the addition of the non-project water.

The WQMP includes maximum allowable changes in the SLC caused by the addition of Westlands’ groundwater pump-ins. These commitments are summarized in Table 4 on page 12 of the WQMP and are included below. If the addition of the non-project water is increasing the salinity (measured as electrical conductivity, or EC) of water in the SLC more than 100 µS/cm between Check 13 and Check 21, Reclamation will work with Westlands and the well operators to turn off high salinity wells. These are vague directives that lack enforcement. Without an absolute requirement that these high salinity wells are turned off, the impacts of such delay or failure to act are not considered.

The addition of non-project water must not raise the salinity in the SLC at Check 21 above 700 µS/cm, equivalent to 450 mg/L Total Dissolved Solids.

If the salinity of water passing Check 13 is greater than 700 µS/cm, Reclamation and Westlands will coordinate with DWR to modify or restrict non-project pumping. Once again, these are vague directives that lack enforcement. Without an absolute requirement that these high salinity wells are turned off, such action cannot be ensured, but the potential impacts of such delay or failure to act are not disclosed.

Also, at Check 21 are requirements for TDS (NTE 450 mg/L) and selenium (NTE 2 µg/L).

Table 4. Maximum allowable changes in the San Luis Canal caused by the addition of non-project groundwater

Constituent	Monitoring Location	Maximum concentration in the San Luis Canal
Electrical conductivity	Between San Luis Canal Checks 13 and 21	Less than 100 uS/cm increase between the checks
Turbidity	Between the Lateral 7 upstream site and downstream site	Less than 10 NTU
Electrical conductivity	In the San Luis Canal at Check 21	Not to exceed 700 uS/cm
Total dissolved solids		Not to exceed 450 mg/L
Concentration of selenium		Not to exceed 2 ug/L
Concentration of any Title 22 constituent		Less than half of a Title 22 MCL

Depth to Groundwater Commitments

The WQMP also includes requirements to measure groundwater levels and a shutoff trigger to reduce subsidence impacts. The shutoff trigger included in the WQMP requires pumping to stop at 25% above the maximum drawdown experienced by any of the wells participating in the Program, i.e., 75% Max DTGW. The intent is to prevent further lowering of water levels beyond what has historically occurred in a given well, as illustrated in Figure 4 of the DEA.

Well owners are required to measure the initial depth to groundwater in each well before pumping into the SLC, and monthly from April through August and every other month outside of that range while the 2020 Pump-in Program is in effect. An individual well will be shutoff when its Depth to Groundwater reaches 75% of the difference between the Fall/Winter Median Groundwater Level and the Max DTGW using the following equation:

$$\text{Shutoff Trigger} = 0.75 * (\text{Max DTGW} - \text{Fall/Winter Median}) + \text{Fall/Winter Median}$$

If an individual well is shutoff due to groundwater levels reaching the shutoff trigger, it will not be allowed to resume pumping until it reaches 70% of the difference between the Fall/Winter Median

Groundwater Level and the Max DTGW using the following equation:

$$\text{Well Resumption} = 0.70 * (\text{Max DTGW} - \text{Fall/Winter Median}) + \text{Fall/Winter Median}$$

Groundwater level measurements are supposed to follow a strict schedule. If a well is shutoff it will not be measured again until the next scheduled measurement date. The participants must notify Reclamation in writing when a well is shutoff or resuming.

As shown in Figure 4, Max DTGW (also referred to as Critical Head) is the greatest amount of drawdown (lowest depth to water) that has occurred within a particular well.

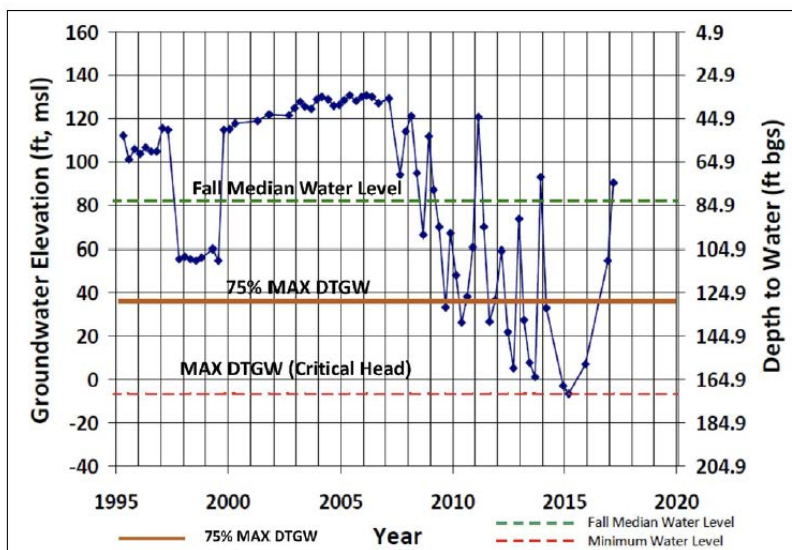


Figure 4. Example of Operation of the Shutoff Trigger

SPECIFIC COMMENTS AND RECOMMENDATIONS

Authorization of Discharge Points into the SLC should be for no more than 5 Years.

Reclamation proposes to issue a combined 25-year authorization for 88 discharge points (identified in Table 1 of the DEA, pages 4-6) involved in the Pump-in Project. The environmental impact of authorizing these discharges for 25 years has not been evaluated or disclosed. Further, sanctioning this groundwater discharge for a 25-year period for all discharge points in a document that covers only a 5-year Warren Act Contract for those discharges further fails to disclose the environmental impacts. As we will discuss below, 35 of the 88 discharge points identified in Table 1 of the DEA under Westlands' previous pump-in projects had at least one well that exceeded maximum contaminant levels (MCLs) identified for the constituents As, Se or TDS. This information is summarized in Appendix A to our comments. We note here that the use of the MCL terminology to the water quality standards applicable to this project leads to confusion because MCLs generally refer to federal drinking water standards, which these are not. Nevertheless, in our comments we will use Reclamation's definitions as defined in the DEA.

Inclusion of these discharge points for 25-years is arbitrary and capricious and not supported by any water quality data from previous groundwater pump-ins or long-term analysis of potential future impacts. Moreover, it is a violation of Article 14(f) of the current Warren Act Contract between Reclamation and Westlands that states, "*At all times during the term of this Contract, the Contractor shall be in compliance with the requirements of the then-current Quality Assurance Project Plan (Plan) prepared by the Contracting Officer to monitor Non-Project Water introduced into and conveyed through the Project Facilities.*"⁷ We therefore recommend that only those discharge points that do not exceed MCLs for constituents identified in Table 4 of the WQMP be authorized for 5 years, and that NO discharge points be authorized for a longer period.

Water Quality Monitoring at all Discharge Points

On page 8 of the DEA, in Table 2, Environmental Protection Measures and Commitments is the following, "*Reclamation requires monitoring of selenium levels in the San Luis Canal and at all discharge points [emphasis added] as described in the water quality monitoring plan (see Appendix A). Selenium levels in the San Luis Canal shall not exceed 2 parts per billion (ppb) during periods of introduction. If water quality in the San Luis Canal exceeds 2 ppb, Reclamation and/or its operating entity will require additional sampling at all discharge points to ensure that water being introduced does not exceed 2 ppb selenium.*"

We note that the WQMP does not include water quality monitoring at all discharge points as a requirement of the program. It requires monitoring at the wellhead, Lateral 7, and in the SLC at Checks 13 and 21. The WQMP should be revised to be consistent with the DEA and include the more appropriate and stringent monitoring requirements described in the DEA. The environmental impacts that may result from the failure to comply with the monitoring of selenium levels in the San Luis Canal and all discharge points needs to be analyzed and disclosed.

⁷ <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

Changes in SLC water quality requirements in the 2020 WQMP must be Addressed and Environmental Impacts Analyzed and Disclosed.

We note that the 2015 WQMP⁸ restricted salt contamination in the Aqueduct between Checks 13 and 21 compared with the 2020 WQMP as follows:

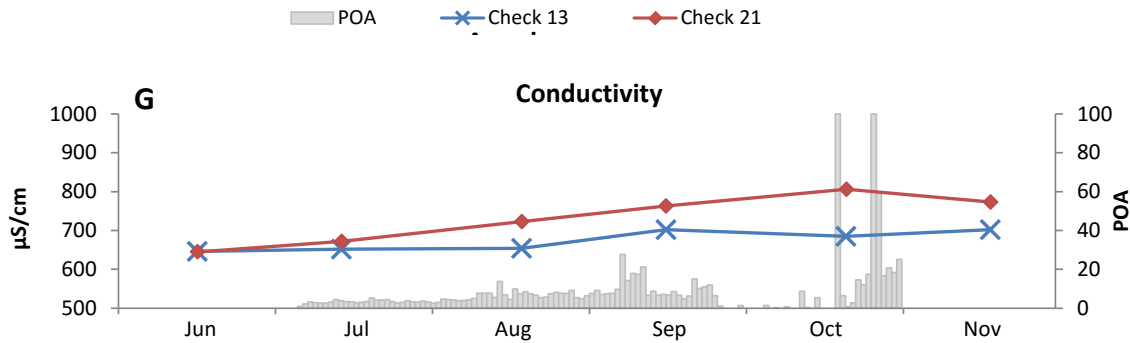
- A maximum allowable change caused by pumped GW at Check 21 (Kettleman) of not to exceed 600 $\mu\text{S}/\text{cm}$ EC (the 2020 WQMP allows 700 $\mu\text{S}/\text{cm}$);
- Less than 50 $\mu\text{S}/\text{cm}$ EC change between Check 13 and Check 21 (the 2020 WQMP allows no more than 100 $\mu\text{S}/\text{cm}$ EC change);

There is no mention of these changes in EC requirements in the SLC in either the DEA or the 2020 WQMP, nor is there any analysis of the effects of this allowable EC increase or explanation as to why these EC control requirements have been weakened. We further note that compliance with the 2015 EC requirements in the SLC were exceeded routinely in 2015 as documented in DWR’s report on non-project water pump-ins for 2015⁹, as depicted in Figure 3-5 from that report:

CDEC continuous EC Data Checks 13 and 21 in 2015 From (DWR 2016)

Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015

Figure 3-5 Water Quality Constituents-of-Concern at Check 13 and Check 21 and Westlands Water District Percentage-of-Aqueduct Values



⁸ See Appendix C, starting at pdf pg 4: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21986

⁹ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

Note that Article 14(f) of the current Warren Act Contract between Reclamation and Westlands states, “*At all times during the term of this Contract, the Contractor shall be in compliance with the requirements of the then-current Quality Assurance Project Plan (Plan) prepared by the Contracting Officer to monitor Non-Project Water introduced into and conveyed through the Project Facilities.*”¹⁰ We see clear evidence from DWR reports of prior Westlands groundwater pump-ins that water quality requirements have been routinely exceeded both at the wellhead and at Check 21 in the SLC. This record of non-compliance argues for improved enforcement of water quality standards and the impact from these past discharges needs to be disclosed.

Pump-In Project Likely to Harm State Fish and Wildlife Designated Beneficial Uses Associated with the California Aqueduct.

The groundwater contributions from the Pump-in Project are conveyed south through the California Aqueduct and stored in four reservoirs (Pyramid Lake, Castaic Lake, Silverwood Lake, and Lake Perris). The aqueduct and these four reservoirs are regulated under four Regional Water Boards jurisdictions. Designated fish and wildlife beneficial uses of the Aqueduct and downstream reservoirs are listed in Table 1.

The Central Valley Regional Water Quality Control Board (CV Regional Board) does not include fish (WARM) as a beneficial use for the aqueduct. Yet the DWR has promoted fishing along the Aqueduct and identifies five locations within or near Westlands (Fairfax, Three Rocks, Huron, Avenal Cutoff, and Kettleman City sites) (DWR 2008)¹¹. Further, the CV Regional Board includes WARM beneficial use designation for the Delta Mendota Canal,¹² so we can only surmise that the omission of a WARM beneficial use designation for the California Aqueduct is an oversight. Nonetheless, the Pump-in Project should be protective of downstream beneficial uses of the water from the California Aqueduct and these impacts need to be disclosed and addressed in a full EIS that would replace this deficient DEA. Existing data simply do not support the adoption of an EA/FONSI for environmental impacts of this action. Due to the high percentage of volumes in the Aqueduct and resulting high contaminant levels represented by the Westlands' pump-ins during certain time periods, especially drought conditions, humans who fish the California Aqueduct are likely to be periodically exposed to much higher contaminants than the long-term average. In addition, there will be higher contaminant levels in fish than monitored in canal water due to accumulations in fish tissue. This exposure, warnings, and existing monitoring data are not disclosed, especially to low income communities in the surrounding areas, and there is no mention of fish tissue monitoring. Monitoring does not include biological monitoring so that impacts can be assess and identified.

¹⁰ Ibid.

¹¹ See: https://calsport.org/news/wp-content/uploads/DWR_Fishing-Along-the-SWP.pdf

¹² See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

Table 1. Fish and Wildlife Beneficial Uses Associated with CA Aqueduct south of Pump-in Project

Waterbody Name	WARM	COLD	SPWN	WILD	RARE
California Aqueduct ¹³				E	
Castaic Lake ¹⁴	E	I	E	E	E
Pyramid Lake ⁵	E	E		E	E
Silverwood Lake ¹⁵	E		E	E	
Lake Perris ¹⁶	E	E		E	E

E: Existing beneficial use.

I: Intermittent beneficial use.

WARM: Warm Freshwater Habitat - Uses of water that support warm water ecosystems including but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

COLD: Cold Freshwater Habitat - Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

SPWN: Spawning, Reproduction, and/or Early Development - Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

WILD: Wildlife Habitat - Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

RARE: Endangered Species - Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

¹³ See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

¹⁴ See Beneficial Use Designations of Inland Surface Waters, Los Angeles Regional Water Board: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/2020/Chapter_2/Chapter_2_Table_2-1/Chapter_2_-_Table_2-1.pdf

¹⁵ See: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/ch2_bu.pdf

¹⁶ See: https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2019/New/Chapter_3_June_2019.pdf

Effects on Refuge Water Supplies – Percent of Aqueduct of Westlands Pump-ins

The DEA acknowledges on page 12 that groundwater from the Pump-in Project will comeingle with refuge water supplies: “Both Mendota Wildlife Area and Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the Proposed Action, and this would occur partly during times of the year when these refuges would receive water supplies. However, the selenium levels are expected to remain well below the threshold for an effect on wildlife, which is 2 ppb as measured in the water column...” However, the DEA assumes the wellhead MCL of 2 µg/L selenium established in the 2020 WQMP will be adhered to, without providing any data on the water quality performance of prior Westlands pump-ins. We note that almost 40% of the discharge points Reclamation identified in Table 1 of the DEA had at least one well sample that exceeded MCLs identified in the DEA for the constituents As, Se or TDS. This information is summarized in Appendix A to our comments. Information on volumes from each well, and which wells were shut down was not provided in the DWR reports. Westlands also did not provide this information, as was requested under the California Public Records Act.¹⁷ These elevated selenium concentrations at the wellheads occurred even though the 2015 WQMP¹⁸ for this project listed an MCL for selenium of 2 µg/L, shown in Table 4 below. A lack of surveillance and enforcement has been a critical flaw of previous pump-in projects. The environmental impacts from this failure needs to be disclosed and analyzed.

**San Luis Canal
Non-Project Ground Water Pump-in Program
2015 Water Quality Monitoring Plan**

Table 4. Water Quality Standards, Initial Test

Constituent	Units	Maximum Contaminant Level		Detection Limit for Reporting		CAS Registry Number	Recommended Analytical Method
Arsenic	mg/L	0.010	(1)	0.002	(2)	7440-38-2	EPA 200.8
Boron	mg/L	2	(12)			7440-42-8	EPA 200.7
Bromide	mg/L		(16),(17)			24959-67-9	EPA 300.1
Chloride	mg/L	250	(7)			16887-00-6	EPA 300.1
Chromium, total	mg/L	0.05	(1),(17)	0.01	(2)	7440-47-3	EPA 200.7
Chromium, hexavalent	mg/L	0.01	(1),(17)			18540-29-9	EPA 218.6
Manganese	mg/L	0.05	(6)			7439-96-5	EPA 200.8
Mercury	mg/L	0.002	(1)	0.001	(2)	7439-97-6	EPA 245.1
Nitrate (as NO3)	mg/L	45	(1)	2	(2)	7727-37-9	EPA 300.1
Selenium	µg/L	2	(10)	0.4		7782-49-2	EPA 200.8
Sodium	mg/L	69	(12)			7440-23-5	EPA 200.7
Sulfate	mg/L	250 - 600	(7)			14808-79-8	EPA 300.1
Total Dissolved Solids	mg/L	500-1500	(17)				SM 2540 C
Total Organic Carbon	mg/L		(16),(17)			7440-44-0	EPA 415.1
Gross alpha	pCi/L	15	(3),(17)	3	(3)	12587-46-1	SM 7110C

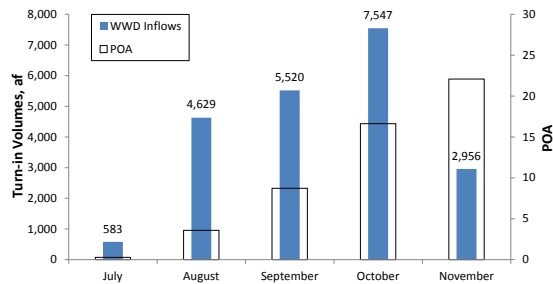
¹⁷ <https://calsport.org/news/wp-content/uploads/Canal-Integration-Program-Third-Response-Schifferle-071720.pdf>

¹⁸ See Appendix C, pdf pg 4: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21986

The DEA also fails to disclose any data on the percent of flow in the Aqueduct (POA) comprised of Westlands groundwater pump-ins. In 2014 and early 2015 there were days within the fall and winter months when the Dos Amigos Pumping Plant ceased pumping, resulting in Westlands pump-ins contributing 100% of the flow in the aqueduct on those days as depicted in the Figures 3-1 and 3-2 from DWR 2015¹⁹ and Figure 3-1 from DWR 2016²⁰ reports below. Some of these time periods overlap with refuge water deliveries to Kern NWR. The impacts from deliveries of degraded water to the refuge needs to be monitored and disclosed.

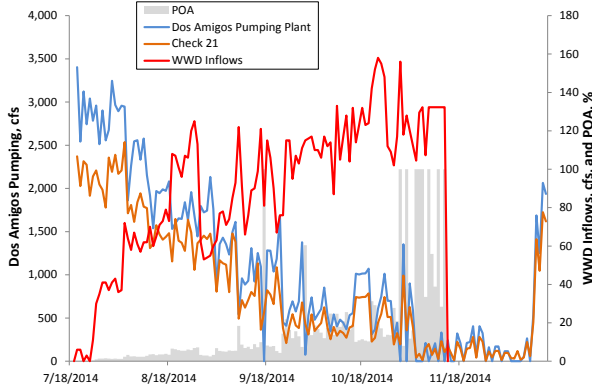
Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2014

Figure 3-1. Monthly Inflows to the Aqueduct from Westlands Water District and Calculated Percentage-of-Aqueduct Values



Notes: af = acre-feet, POA = percentage-of-Aqueduct, WWD = Westlands Water District

Figure 3-2. Daily Inflows to the Aqueduct from Westlands Water District, Pumping at Dos Amigos Pumping Plant, Check 21 Flows, and Calculated Percentage-of-Aqueduct Values



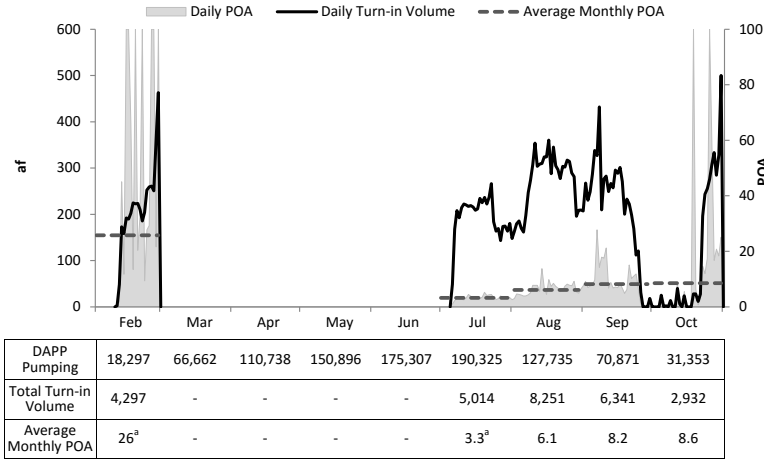
Notes: cfs = cubic feet per second, POA = percentage-of-Aqueduct, WWD = Westlands Water District

¹⁹ (DWR) California Department of Water Resources. October 2015. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2014. Technical Memorandum Report, Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 140 pp. <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

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(DWR) California Department of Water Resources. December 2016. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015. Technical Memorandum Report, Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 172 pp. <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

Figure 3-1 Daily Inflows to the Aqueduct from Westlands Water District and Calculated Percentage-of-Aqueduct Values



Notes:

af = acre-feet, DAPP = Dos Amigos Pumping Plant, POA = percentage-of-Aqueduct

POAs of 100 percent during February and October represent days when Dos Amigos PP was inactive.

^aCalculations for monthly POAs begins on the first day of turn-in operations.

The California Department of Fish and Wildlife (CDFW) submitted comments on the Westlands' IS/ND for the Pump-in Project dated June 22, 2020.²¹ CDFW wrote that, “*Mendota Wildlife Area (MWA) is located directly adjacent to Westlands, and several groundwater wells are located either directly adjacent to the MWA or in the nearby vicinity. Some of these wells pump groundwater into the Inlet Canal, which runs along the southern boundary of the MWA and connects to the WWD via Lateral Canals 6 and 7. Although not identified as a subsidence prone area in the ND, MWA has been significantly affected by groundwater overdrafting and subsidence.*” The DEA fails to provide sufficient information regarding the thresholds for overdrafting and subsidence and enforcement to enable the public and decision makers to determine whether such thresholds would be sufficient to prevent subsidence, the associated environmental impacts, and costs to other beneficial users. The Project's potentially significant direct and cumulative contributions to land subsidence require a full EIS.

With respect to water quality requirements of pumped groundwater and associated refuge water quality impacts CDFW noted for Mendota Pool, “*The primary disqualifying factor would be high salinity levels, where any well with TDS exceeding 1,000 mg/L would be disqualified. This upper limit is 20% higher than the daily mean TDS water quality objective for the MWA of 800 mg/L or less (Reclamation Water Contract Number 14-OC-200 for Refuge Water Supplies to MWA). The addition of water with TDS higher than 800 mg/L would increase the salinity of the receiving waters in the MWA.*”

CDFW recommended “*...that an analysis with thresholds of significance for aquatic species be included in the IS/ND with measures proposed to reduce any potentially significant impacts.*” Reclamation

²¹ See: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/5CSO8N>

likewise needs to conduct a full EIS analysis for this project and disclose the impact of discharging these contaminants on Refuge Water Supplies and other uses

Water Quality Standards for Selenium in the DEA are not Protective of Downstream Fish and Wildlife Beneficial Uses.

On page 13 of the DEA, Reclamation concludes that the Pump-in Project would have no effect on proposed or listed species or critical habitat under the federal ESA of 1973, as amended (16 U.S.C. §1531 et seq.), and there would be no take of birds protected under the Migratory Bird Treaty Act (16 U.S.C. §703 et seq.). Reclamation concludes that no consultation with the U.S. Fish and Wildlife Service or National Marine Fisheries Service is required. As previously noted, the DEA assumes the wellhead MCL of 2 µg/L selenium established in the 2020 WQMP will be adhered to with only vague enforcement assurances. Past data on the water quality performance of prior Westlands pump-ins draws this assumption into question. No biological data or monitoring is provided in the DEA to support such a conclusion.

Moreover, on page 7 of the DEA, it is stated that “*Reclamation will allow the introduction of water from two or more wells through one discharge point if the blended water meets the Title 22 standards.*” The Title 22 selenium objective of 50 µg /L and the 20 µg /L EPA drinking-water MCL for selenium, are not protective of fish and wildlife resources that use water from the Aqueduct, which require levels less than 2 µg /L, specifically 1.5 µg /L. The blending of water from two or more wells to meet “Title 22 water quality standards” clearly is not protective of endangered species, migratory birds using the Pacific Flyway and other fish and wildlife that rely upon waters from the San Luis Canal/California Aqueduct.

On July 13, 2016 the Environmental Protection Agency (EPA) released a Final Updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water.²² The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. The federal register notice identified revised chronic selenium criteria in water for lentic waters (e.g., meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps) and lotic waters (e.g., rivers and streams). EPA’s revised chronic selenium criterion for lentic waters of a monthly mean of 1.5 µg /L is the criterion that should be applied to water in the California Aqueduct to protect fish and wildlife beneficial uses.

As noted in the DEA, both Mendota Wildlife Area and Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the proposed Pump-in Project, as well as downstream State Water Project reservoirs. Rare species that could be impacted by selenium from Westlands’ contaminated groundwater discharges from the Pump-in Project include the federally listed as endangered Buena Vista Lake shrew, federally listed as threatened giant garter snake, and federally protected bald eagle (USFWS 2017).

²² See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

CDFW comments on the IS/ND for the Pump-in Project noted, “*Special-status species in the Project vicinity include the State and federally threatened giant garter snake, the State threatened and federally endangered San Joaquin kit fox (Vulpes macrotis mutica), the State and federally endangered Tipton kangaroo rat (Dipodomys nitratooides nitratooides), the State and federally endangered and State fully protected blunt-nosed leopard lizard (Gambelia sila), the State threatened Swainson’s hawk (Buteo swainsoni), the State threatened Nelson’s antelope squirrel (Ammospermophilus nelsoni), the State threatened tricolored blackbird (Agelaius tricolor), the federally endangered and California Rare Plant Rank (CRPR) 1B.2 San Joaquin woollythreads (Monolopia congdonii), the CRPR 1B.2 Munz’s tidy-tips (Layia munzii), the State candidate for listing crotch bumble bee (Bombus crotchii), and the State species of special concern American badger (Taxidea taxus), Tulare grasshopper mouse (Onychomys torridus tularensis), San Joaquin coachwhip (Masticophis flagellum ruddocki), and burrowing owl (Athene cunicularia).*”

These complex issues related to impacts on fish and wildlife beneficial uses require a full analysis of the proposed project and potential project alternatives that could better minimize environmental risks. This should be done as part of a full EIS and consultation with the CDFW and the USFWS is essential.

Water Quality Data from Previous Pump-ins is not Provided in DEA

Data on groundwater quality from participating wells from previous pump-ins is not provided in the DEA. The only groundwater data from individual wells for a Westlands previous pump-in that was available on the web was collected by the DWR in 2008.²³ Some of the wells sampled in 2008 are included in Table 1 of the DEA for the current project. Further, we received DWR Technical Memoranda Reports on the Non-Project Turn-ins to the California Aqueduct for the years 2014 2015 and 2016²⁴ from a Public Records Request to Westlands in July 2020.²⁵ That data from 2008 and 2014-16 highlights the significant variability of selenium in well water from the Westlands pump-ins and many of the samples reported were well above the MCL for selenium in the WQMP (2 µg/L).

Reclamation’s San Luis Canal Non-Project Water Pump-in Program Water Quality Monitoring Plan from 2015 required that:

²³ Select Project, then WWD 2008 Pump Ins at:
<https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>

²⁴ (DWR) California Department of Water Resources. November 2017. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2016. Technical Memorandum Report, Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 146 pp. <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2016.pdf> See also <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf> <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

²⁵ <https://calsport.org/news/wp-content/uploads/Canal-Integration-Program-Third-Response-Schifferle-071720.pdf>

“Westlands will provide the following information to Reclamation prior to pumping groundwater into the canal:

- the location of each well, pumping rate, and point of discharge into the San Luis Canal (Appendix B);*
- complete water quality analyses (Table 5) and Table 4 for new wells and each new year of pump-ins*
- the depth to groundwater in every well before pumping into the San Luis Canal commences...*

When the Project is operating, Westlands will provide DWR and Reclamation with periodic (daily and weekly, as necessary) schedules which identify the approved source wells flow rates, locations of pump-in by Aqueduct Mile Post, and deliveries by Reach.

Westlands shall provide weekly updates identifying the current and anticipated water quality changes within the SLC by using the daily model. The goal is to provide Reclamation and the State Water Project Facilitation Group with a day-to-day prediction of downstream water quality using real-time pump-ins, real-time upstream background flows, and current background water quality data.”

Inexplicably, none of this data from previous pump-ins is presented in the DEA. The DEA fails to include any prior data from previous Westlands groundwater pump-ins on water quality, quantity of groundwater pumped by each well, depth to groundwater of each well prior to pumping, or contaminant mass balance in the SLC. Data on the previous performance of the Pump-in Project is essential information missing from the DEA. It is important to estimate mass balance contaminant loading in the California Aqueduct from these discharges to ensure that discharges do not harm downstream beneficial uses and to determine the impacts from continuing the Pump-in Program. These data are also important to inform decision makers and the public with regard to the cumulative impacts of the Pump-in Project.

As emphasized for other issues as well, the DEA should be withdrawn and replaced with an EIS that includes all of this critical information and related analysis for public comment review.

Monthly Monitoring of Aqueduct Water Quality at Check 21 near Kettleman City is Insufficient to Assess Environmental Impacts of Pump-in Project

The California Department of Water Resources (DWR) conducts monthly monitoring of the California Aqueduct and has documented occurrences of elevated levels of concern for selenium at Check 21 near Kettleman City (station number KA017226), especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct.²⁶ As denoted in Figure 1 (on the following page), monthly water quality samples at Check 21 have exceeded the US EPA’s July 2016 Final Updated CWA section 304(a) recommended national chronic aquatic life

²⁶ Water quality data for the California Aqueduct at Check 21 near Kettleman City is available here: <http://wdl.water.ca.gov/waterdatalibrary/waterquality/index.cfm>

criterion for the pollutant selenium in fresh water 12 times between January 2012 and January 2020. These proposed objectives include a lentic water quality objective of 1.5 µg/L²⁷, which would be the applicable selenium objective for Kern National Wildlife Refuge and other wetlands and reservoirs that are fed by water from the Aqueduct. Further, the once-a-month water quality sampling is insufficient to establish a monthly mean water quality calculation, to capture contaminant spikes that accumulate downstream, or to assess potential bioaccumulation in the food chain. Refuge water delivered to the Kern National Wildlife Refuge is diverted from the California Aqueduct in Kern County near Check 29, downstream of where groundwater from the Pump-in Project is pumped into the Aqueduct. Inexplicably, DWR stopped collecting water quality data from Check 29 after November 2016.²⁸

Elevated selenium in the Aqueduct is typically associated with drier water years when a larger proportion of total volume in the Aqueduct is comprised of groundwater inputs. Groundwater inputs entering into the Aqueduct (from various sources including Westlands) were 46 percent of the total volume entering the aqueduct in 2014²⁹, 44 percent in 2015³⁰, and 8.3 percent in 2016.³¹

²⁷ See; <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

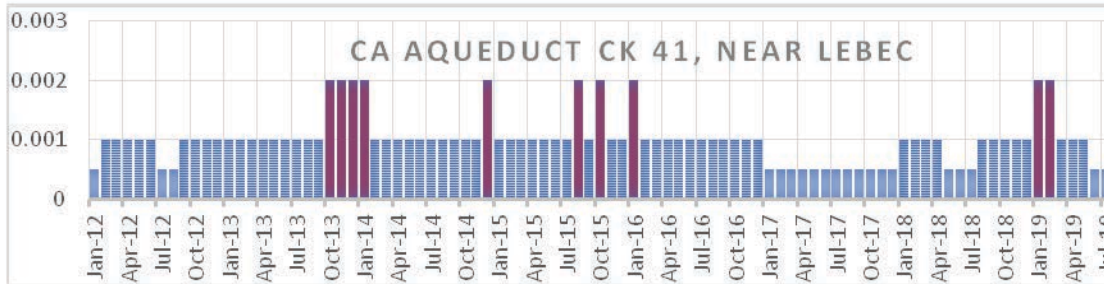
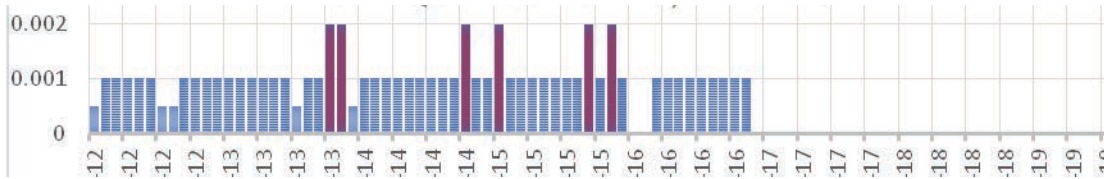
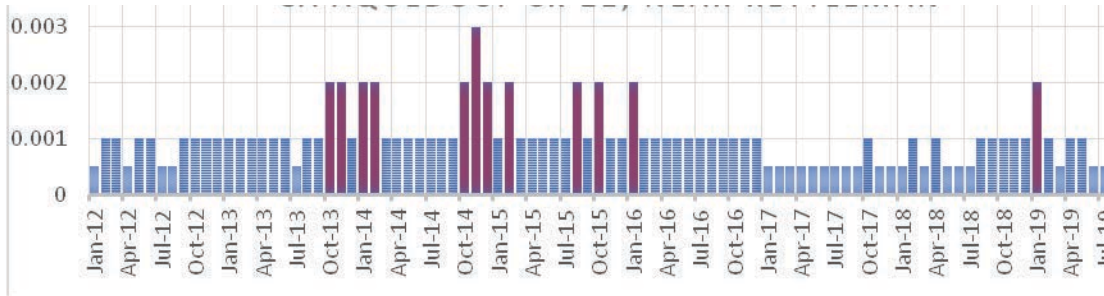
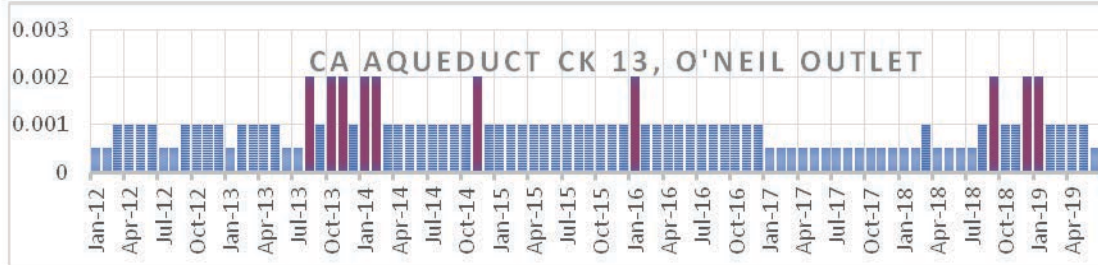
²⁸ Selenium & Arsenic concentrations in the California Aqueduct at Check 29, downstream of where groundwater has been pumped into the canal increased markedly in 2015 and in the case of Arsenic were approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L. See http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

²⁹ See page 86 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-15-r.pdf>

³⁰ See page 84 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-16-r.pdf>

³¹ See page 94 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-17-r.pdf>

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Warren Act Contract and Agreement Between DWR and Westlands allowing the Pump-in Project are not Included in the DEA.

The proposed Westlands 5-year Warren Act Contract (Contract) is not included with the DEA and has not been made available for public review, thus an informed decision and analysis is precluded. A copy of the current Contract is available on USBR's website and the term of this contract is through June 30, 2022.³² Will there be changes to the contract after 2022? Further, Exhibit D to this contract, which identifies the minimum water quality standards for monitoring the quality of Non-Project Water introduced by Westlands into the SLC is not included with the Warren Act Contract. In order to accurately assess the impacts and cumulative impact of this Project, a copy of the Contract and all Exhibits for the time period being considered (2020-2025) should be disclosed and included in the environmental analysis for this Project.

Further, adding to the incomplete project description and definition of the project, apparently there exists an Agreement between DWR and Westlands for introduction and conveyance of local groundwater in the California Aqueduct that is likewise not provided for public review. We note that an Agreement between DWR and Westlands for the introduction and conveyance of groundwater into the Aqueduct was signed in 2008 (SWPAO #08052).³³ Without these documents, the public is prevented from seeing key information regarding the contractual requirements of this action. Omitting these key documents keeps the public in the dark regarding the project definition, baseline and potential contractual remedies available to downstream beneficial uses that are harmed by the degradation of water quality in the SLC/California Aqueduct.

Subsidence Impacts are not Disclosed & Monitoring Requirements are Insufficient.

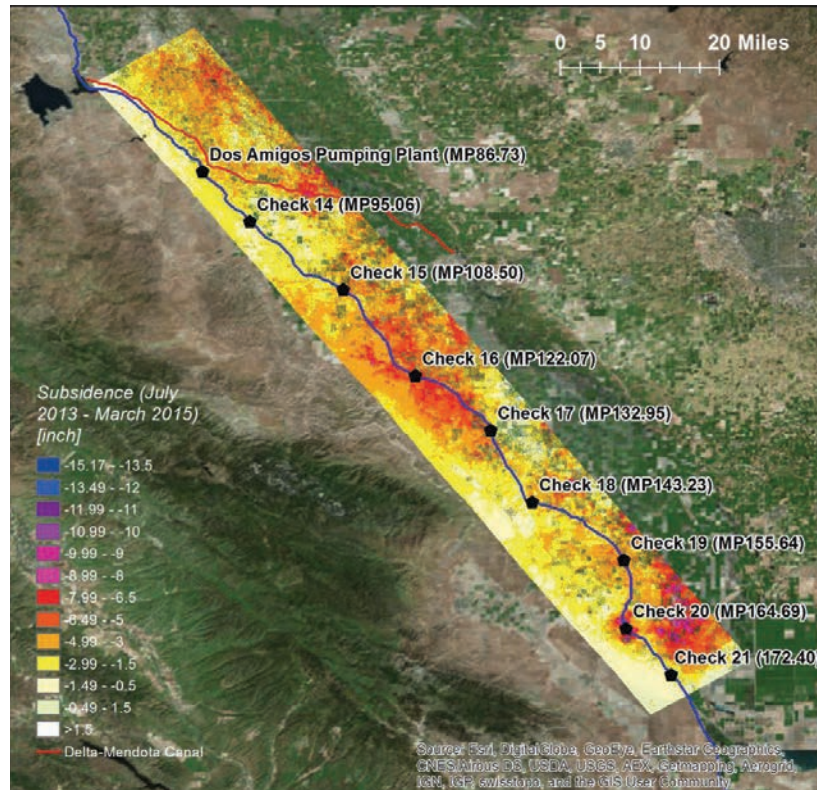
As denoted on page 16 of the DEA, "*A 2017 National Aeronautical and Space Administration (NASA) report prepared for DWR (Farr et al. 2017) documented that the two main subsidence bowls in the San Joaquin Valley (centered on Corcoran and El Nido) previously identified in 2015, had grown wider and deeper between March 2015 and September 2016 and that a third area, near Tranquillity in Fresno County also experienced intensified subsidence.*"

Land subsidence is a major and growing consequence of groundwater pumping in the project area and threatens the California Aqueduct and other infrastructure. Increases in subsidence, impacts and costs to the California Aqueduct, and long-term cumulative impacts are significant. USGS recently reported, "*Extensive groundwater pumping from San Joaquin Valley aquifers is increasing the rate of land subsidence, or sinking. This large-scale and rapid subsidence has the potential to cause serious damage to the water delivery infrastructure that brings water from the north of the valley to the south where it*

³² See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

³³ The 2008 Agreement between DWR and Westlands for the introduction and conveyance of groundwater into the Aqueduct was included in Appendix A of the 2015 Final EA for the Pump-in Project. See pdf pg 19: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21984

helps feed thirsty cropland and cities. According to a new report by the U.S. Geological Survey the subsidence is occurring in such a way that there may be significant operational and structural challenges that need to be overcome to ensure reliable water delivery.”³⁴ Further, DWR has been funding and working with NASA’s Jet Propulsion Laboratory (JPL) to monitor subsidence in the Valley since July 2013. It uses interferometric synthetic aperture radar (InSAR) from satellites and aircraft to record the distance between the radar and the ground surface. This work has identified significant areas of subsidence in Westlands as shown in the figure below taken from DWR’s 2017 California Aqueduct Subsidence Study Report.³⁵



The Survey data in the DWR Subsidence Report show this section of the Aqueduct, the San Luis Canal (Los Banos to Kettleman City), has subsided the most over the years.³⁶ The DWR report identifies a number of significant operational impacts of subsidence to the Aqueduct including: reduction in conveyance capacity, increase in power cost, decrease in available freeboard (the difference in elevation

³⁴ See: <http://www.usgs.gov/newsroom/article.asp?ID=3731#VRRBAKMtHVQ>

³⁵ See: [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Engineering-And-Construction/Files/Subsidence/Aqueduct Subsidence Study-Accessibility Compatibility.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Engineering-And-Construction/Files/Subsidence/Aqueduct%20Subsidence%20Study-Accessibility%20Compatibility.pdf)

³⁶ *Ibid.*

between the crest of the canal and the water level as fixed by design requirements). These effects are significant and costly to repair.

CDFW provided comments on the Westlands' IS/ND for this project on subsidence effects to MWA, *“MWA is located within the Delta-Mendota Subbasin and borders the Westside Subbasin. Both the Westside and Delta-Mendota Subbasins are designated as critically overdrafted by the California Department of Water Resources, and such overdrafting is a serious issue within the Mendota Pool area due to ongoing subsidence. Over the years, the Mendota Dam has experienced subsidence, and the California Department of Water Resources, Division of Safety of Dams has required the water level to be lowered due to the subsequent compromised integrity of the dam. The lowered water level at the dam has resulted in lower water levels to the gravity flow and lift pump inlets at the MWA. The northernmost gravity flow inlet receives no water, causing loss of trees and habitat along the northern edge of the wildlife area. The lift stations no longer pump efficiently because the inlets are not fully covered with water, allowing air to be pulled into the pumps and decreasing water flows. Decreased water flow results in MWA operating its pumps for longer periods, increases the electricity cost and personnel cost to monitor and maintain the pumps, and increases wear and tear on the pumps.*

Continued subsidence affects the ability of CDFW to operate the MWA according to its management objectives, and other areas where water is no longer delivered by gravity could increasingly lose associated wetland and riparian habitat features. Subsidence is irreversible and damage to surface water conveyance features caused by subsidence can only be mitigated by removal of damaged infrastructure and replacement, or re-engineering and reconstruction of infrastructure to allow surface water to flow at an acceptable level.³⁷”

These impacts are not disclosed in the DEA. It is encouraging to see that the 2020 WQMP includes groundwater level monitoring and shutoff triggers. But neither the DEA nor the WQMP identify rates of pumping or quantities of water that could be safely pumped from the areas of high subsidence while staying within these generous thresholds. And while the DEA indicates that the subsidence rate will be monitored during the implementation of the Pump-in Project, it provides no clear plan for what happens when monitoring reveals excessive subsidence. The impacts of this action are complex, broad and far reaching, and need to be considered in a full EIS analysis. Consistent with recommendations from CDFW on the Project, a full EIS should evaluate all areas that would be affected by increased subsidence, including the MWA, and develop a plan to offset losses of wetland and riparian vegetation communities caused by changes in hydrology associated with subsidence caused by Project pumping. CDFW recommended that the plan address mitigation for impacted habitat value and function, to achieve a minimum no net loss of these habitats, consistent with California Fish and Game Commission policy on Wetlands Resources.

³⁷ See: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/5CSO8N>

Compliance with Clean Water Act is Absent.

As the USEPA (EPA) noted in scoping comments submitted for the Westlands groundwater pump-ins in 2010, the proposed discharge of contaminated groundwater from Westlands with potentially high salt, boron, chromium, arsenic, selenium and other metals would be subject to the National Pollution Discharged Elimination System (NPDES) permitting requirements pursuant to the federal Clean Water Act. Further EPA noted, “Permits will need to be designed to ensure the discharges do not cause or contribute to exceedences of applicable State water quality standards or degradation of designated beneficial uses.”³⁸

The Clean Water Act prohibits the discharge of "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. Such a permit would contain limits on what can be discharged, monitoring and reporting requirements, and other provisions to ensure that the discharge does not harm water quality or human health. The term point source is also defined very broadly in the Clean Water Act. It means any discernible, confined and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure, or container.³⁹

No compliance with the federal Clean Water Act is provided in the DEA. Thus, the public is precluded from analyzing the permit and conditions to ensure protection and non-degradation of water supplies under the NPDES permit and potential mitigation measures. As we have noted above, groundwater from almost half of the wells included in Table 1 of the DEA have been reported in past monitoring reports to contain elevated concentrations of various metals and constituents such as selenium that can bioaccumulate in the food chain thus have amplifying the impacts on the environment (DWR 2016, 2017).⁴⁰

Cumulative Impacts

Cumulative impacts from these discharges and potential exchanges are not disclosed or analyzed. We adopt by reference our comments from previous exchanges and transfers and previous scoping

³⁸ See: <http://calsport.org/news/wp-content/uploads/EPA-comments-Westlands-WD-EIR-NOP-3-4-10.pdf>

³⁹ See: <https://www.epa.gov/npdes/npdes-permit-basics>

⁴⁰ DWR Groundwater Data from WWD 2008 Pump Ins at:

<https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>

And the following DWR Groundwater Data from WWD Pump-ins:

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2016.pdf>

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

comments.⁴¹ In addition to the continued extraction of water from already over-drafted groundwater basins, the impacts from discharging this groundwater to the SLC for irrigation of Westlands's toxic soils and exacerbating an existing subsurface agricultural drainage problem on the west-side of the San Joaquin Valley are not disclosed nor mitigated. Selenium found in groundwater and drainage water in Westlands is known to create life threatening impacts to migratory birds, wildlife and fish, magnifying up the food chain as these pollutants accumulate. These impacts are merely brushed aside. No data from previous pump-ins is provided to support Reclamation's conclusions of no impact in the DEA. No alternatives are considered. Finally, there is insufficient analysis of the cumulative impact of discharging these contaminants into drinking water, wildlife refuge supplies, or downstream fish and wildlife beneficial uses.

Data from previous pump-ins is not provided in the DEA. The only groundwater data from individual wells for a previous Westlands groundwater pump-in that was available on the web was collected by the DWR in 2008.⁴² Further, we received DWR Technical Memoranda Reports on the Non-Project Turn-ins to the California Aqueduct for the years 2014⁴³, 2015⁴⁴ and 2016⁴⁵ from a Public Records Request to

⁴¹ See comments provided http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=14341
"Resnicks' Westside Mutual Water District member lands in Westlands Water District to the AEWSD service area and Westside Exchange Program are not disclosed nor analyzed. Nor are the impacts to Madera County from the potential groundwater transfers likely contemplated under the proposed action. The existing Exchange Program involves delivery of Arvin's supplies to Westside member lands as exchange water, based on a 1 for 1 or "bucket for bucket" basis, up to 50,000 acre-feet (AF)."

See 30,000 acre-feet of groundwater proposed to be transferred to Westlands et. al. from the Mendota Pool
<http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=49107>

See also North Valley Regional Recycled Water Program-- <http://www.nvrrecycledwater.org/description.asp> *The NVRWP could produce and deliver up to 32,900 acre-feet per year of tertiary-treated recycled water to the drought-impacted west side. This water can be used to irrigate food crops, public and privately-owned landscaping, and for industrial uses. This basin transfer would alter San Joaquin River Flows and flows to refuges, and the South Delta Bay Estuary. The project would deliver up to 59,000 acre-feet per year (AFY) of recycled water produced by the cities of Modesto and Turlock via the Delta-Mendota Canal (DMC), a feature of the Central Valley Project owned by Reclamation. Instead of discharging fresh treated water into the San Joaquin River, recycled water would be conveyed from Modesto and Turlock through pipelines from their wastewater treatment facilities, crossing the San Joaquin River, ending at the DMC.*

⁴² Select Project, then WWD 2008 Pump Ins at:
<https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>

⁴³ (DWR) California Department of Water Resources. October 2015. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2014. Technical Memorandum Report. Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 140 pp.
<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

⁴⁴ (DWR) California Department of Water Resources. December 2016. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015. Technical Memorandum Report. Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 172 pp. <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

Westlands in July 2020.⁴⁶ The DEA should include this prior data, and any other relevant data on wellhead water quality, flows from each well, percent of Aqueduct comprised of Westlands pump-ins, water quality summary of Checks 13 and 21 in the Aqueduct, and mass balance modelling to assess the influence of the pump-ins on SLC water quality and effects to downstream beneficial uses.

Previous ground water pump-ins by Westlands can provide critical insights to the operation and impacts of the proposed Project. The DWR first adopted specific operating criteria for access to the California Aqueduct in 1990. The program was renewed yearly through 1994. Pump-ins from Westlands water users into the SLC were approximately 9,600 acre-feet (AF) in 1990; 72,000 AF in 1991; 97,000 AF in 1992; 12,400 AF in 1993; and 84,500 AF in 1994. However, in 1995, the integration of groundwater into the SLC was suspended because of concerns by DWR and other agencies that groundwater could degrade the water quality in the SLC.⁴⁷ No biological monitoring has been required to assess the long-term impacts from these pump-in projects.

Additionally, we refer Reclamation to the CDFW recommendations on the IS/ND⁴⁸ for this project with respect to cumulative effects, “...lowered water quality and increased salt loading could potentially impact sensitive aquatic species such as the giant garter snake, and affect habitats for sensitive status species, especially in the context of other existing and pending projects affecting water quality and ground subsidence of Mendota Pool, the MWA, and surrounding areas. CDFW recommends that the cumulative impacts analysis include the effects to special status species from this Project and other current and foreseeable projects.”

More Robust Monitoring Program & Enforcement Are Needed.

To protect downstream beneficial uses, we recommend the following be incorporated into a revised WQMP for the Pump-in Project:

- Well water should not be conveyed into the Aqueduct until it has been confirmed that the well water does not exceed the selenium wellhead standard of 2 µg/L (from Table 4 of the WQMP);
- Weekly monitoring of wells (while pumps are running) that have had at least one water quality sample above 2 µg/L selenium during the 2015 and 2016 pump-ins;

⁴⁵ (DWR) California Department of Water Resources. November 2017. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2016. Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 146 pp. <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2016.pdf>

⁴⁶ <https://calsport.org/news/wp-content/uploads/Canal-Integration-Program-Third-Response-Schifferle-071720.pdf>

⁴⁷ From page 3 of IS/ND for Westlands Pump-in Project 2020: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/764QUt>

⁴⁸ See: <https://ceqanet.opr.ca.gov/2020050434/2/Attachment/5CSO8N>

- Weekly water quality sampling for selenium at Check 21 of the California Aqueduct while Westlands is pumping groundwater into the Aqueduct;
- The selenium objective for the California Aqueduct should be 1.5 µg/L to be protective of downstream beneficial uses associated with the Aqueduct and Mendota Pool;
- Well water pumped into the Mendota Pool should not exceed 800 mg/L TDS to protect Mendota Wildlife Area water quality;
- Weekly water monitoring of wells and the Aqueduct at Check 21 should require rapid turnaround so results are received within 7 days and can be responsive to current and changing conditions.
- Well water from Westlands should not be pumped into the Aqueduct if Dos Amigos Pumping Plant is not operating.
- There needs to be an established protocol dictating required actions and enforcement when water quality standards are exceeded at individual wells or in the aqueduct and related conveyance canals.

Conclusion

The DEA does not adequately assess the potentially significant environmental impacts from the Westlands Pump-in Project. In addition, there are reasonably available alternatives that have not been considered and should be analyzed in order to reduce the potentially significant environmental impacts. Absent from the document is any assessment of the cumulative impacts, including third party impacts and impacts to fish, wildlife and water quality. Required permits and compliance with the Clean Water Act to allow discharge of contaminants into the waters of the State and Nation have not been provided; nor have necessary consultations with federal and state wildlife agencies concerning potential endangered and threatened species impacts. The Warren Act Contract and associated Contract Exhibits and Agreement between Westlands and DWR governing the full discharge into the Aqueduct from 2020-2025 is absent and therefore could not be reviewed.

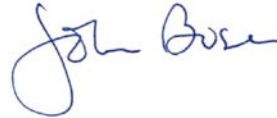
Prior to commencing with the proposed project, which has in the past and likely will continue to harm downstream uses, a complete EIS is required that includes, among other things, a revised Water Quality Monitoring Plan to ensure waters of the State and Nation are not degraded, compilation and analysis of prior groundwater water quality data, flow rates and quantities pumped from participating wells from previous pump-ins, a mass-balance model for selenium in the Aqueduct, the Warren Act Contract and Exhibits, the Agreement between DWR and Westlands, documentation of Clean Water Act permit compliance, and full analysis of alternatives and cumulative impacts. This information should be included in the EIS that replaces the EA. We object to the adoption of a FONSI for this project, and the proposed 25-year authorization for all the discharge points in Table 1 of the DEA because they are not supported by data from past groundwater pump-ins into the Aqueduct from Westlands. Lastly, the conveyance period for the Pump-in Project in 2020 should not commence prior to the completion of the appropriate NEPA and CEQA decision documents.

Thank you for the opportunity to comment. Please add our names to Reclamation's electronic notification lists for environmental documents regarding water supplies or contracts or conveyance.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](#)
jminton@pcl.org



John Buse
Senior Counsel, Legal Director
Center for Biological Diversity
<mailto:jbuse@biologicaldiversity.org>



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Barbara Vlamis
Executive Director
AquAlliance
barbarav@aqualliance.net



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org

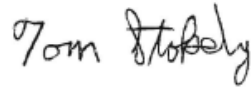


Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

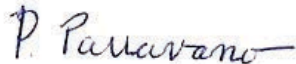
Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](#)
mike@ifrfish.org



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net

' :O:6:@B:9!C:!

(DWR) California Department of Water Resources. November 2017. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2016. Technical Memorandum Report. Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 146 pp.

(DWR) California Department of Water Resources. December 2016. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015. Technical Memorandum Report. Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 172 pp.

(DWR) California Department of Water Resources. October 2015. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2014. Technical Memorandum Report. Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 140 pp.

(DWR) California Department of Water Resources. 2008. Fishing Along the SWP. Brochure. DWR, Sacramento, 9 pp.

(USFWS) U.S. Fish and Wildlife Service. October 2017. Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries, Final Report to the U. S. Environmental Protection Agency Inter-Agency Agreement No. DW-14-95825001-0. USFWS, Sacramento, CA, 156 pp.

Appendix A. Proposed Discharge and Well Locations from the DEA that have exceeded MCLs for As, Se or TDS in previous years of pump-ins.

Table 1. Proposed Discharge and Well Locations from the DEA that have exceeded MCLs for As, Se or TDS.⁴⁹

SLC Milepost Discharge Location	State Well ID(s)	# of samples exceeding MCL for As ⁵⁰ and (range of As reported)	# of samples exceeding MCL for Se ⁵¹ and (range of Se reported)	# of samples exceeding MCL for TDS ⁵² and (range of TDS reported)
105.20L	141202R02	0	1 (4 µg/L)	1 (1290 mg/L)
115.43L, Lateral 7	151509R03,151509R04 151509R05,151503A02 151504A03,151503H01	2 (10.2-11.8 µg/L)	0	8 (1010-1390 mg/L)
117.52L	151419F01	0	12 (3.4-5.8 µg/L)	1 (1300 mg/L)
127.40L	161521N03 ⁵³	0	2 (2.8-3.9 µg/L)	0
128.49R	171413A01 ⁵⁴	0	6 (8.4-22 µg/L)	0
128.50L	161533J01 ⁵⁵	0	12 (4.2-6 µg/L)	0
128.54L	161532A06	0	6 (3-6.5 µg/L)	1 (1400 mg/L)
130.81R	171510M01	0	3 (2.1-2.5 µg/L)	0
133.80L	171601N03	0	2 (2.1-2.2 µg/L)	0
137.31L	181606F01	0	1 (3 µg/L)	1 (1200 mg/L)
139.40L	181609R01	0	1 (3 µg/L)	0
140.55LA	181617R02	0	0	1 (1040 mg/L)
142.58R	181629N02	0	1 (12 µg/L)	1 (1230 mg/L)
143.00L	181627N01	0	1 (7 µg/L)	1 (1070 mg/L)
152.75L	191723R01	0	0	2 (1014-1100 mg/L)
155.15L	191831N01	0	1 (2.1 µg/L)	0
156.36R	201714K01	0	8 (2.1-7.4 µg/L)	1 (1200 mg/L)
	201712H01	0	2 (2.5-2.9 µg/L)	0

⁴⁹ Data Sources: DWR 2008, 2016, 2017. Locations/wells identified in blue were marked as new facilities in DEA.

⁵⁰ MCL for As is 10 µg/L from page 13 of 2020 WQMP, Table 5 Water Quality Standards Short List.

⁵¹ MCL for Se is 2 µg/L from page 13 of 2020 WQMP, Table 5 Water Quality Standards Short List.

⁵² MCL for TDS is 1000 mg/L from page 13 of 2020 WQMP, Table 5 Water Quality Standards Short List.

⁵³ Samples from adjacent State Well ID 161521N02.

⁵⁴ Samples from adjacent State Well ID 171413A06.

⁵⁵ Samples from adjacent State Well ID 161533J02.

156.37LA	201806Q01 ⁵⁶	3 (12-13 µg/L)	5 (2.8-4.7 µg/L)	0
157.98L	201817G01	0	9 (2.4-3.2 µg/L)	0
158.95L	201820E01	0	1 (2.6 µg/L)	0
159.98R	201831C01	0	5 (2.3-2.6 µg/L)	0
161.49L	201831Q01	0	8 (5.3-11 µg/L)	0
161.60L	211805C01	0	6 (2.3-5.4 µg/L)	0
	211809D02	0	1 (7 µg/L)	0
162.08L	211805C01	0	6 (2.3-5.4 µg/L)	0
	211805M01	0	8 (5.2-7.5 µg/L)	0
162.10R	211806G01	0	2 (17-18 µg/L)	0
162.64L	211809L01	0	1 (7 µg/L)	0
164.11R	211818G03	0	6 (14-19 µg/L)	0
164.55L-A	211817N03	0	7 (10-12 µg/L)	0
	211816N01	0	7 (2.9-5.1 µg/L)	0
164.63R	211818G03	0	6 (14-19 µg/L)	0
164.95R	211833G01	0	8 (3-12 µg/L)	0
166.70R	211828G06	0	4 (3.9-4.6 µg/L)	1 (1200 mg/L)
166.90R	211827K02	0	6 (3.7-5.6 µg/L)	0
167.04L, Lateral 37	211823D06	0	1 (3 µg/L)	0
167.86R	211833N02	2 (11 µg/L)	0	0
	211833G01	0	8 (3-12 µg/L)	0

Data Sources:

(DWR) California Department of Water Resources. November 2017. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2016. Technical Memorandum Report, Division of

⁵⁶ Samples from adjacent State Well ID 201806Q02.

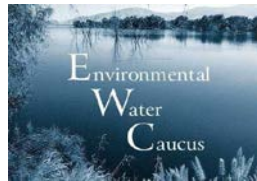
Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 146 pp.

(DWR) California Department of Water Resources. December 2016. Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015. Division of Operations and Maintenance State Water Project Operations Support Office Environmental Assessment Branch Sacramento, California, 172 pp.

(DWR) California Department of Water Resources. 2008. DWR Groundwater Data from WWD 2008 Pump Ins project at: <https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>



CA Save Our Streams Council



June 15, 2020

Mr. David Vang
Resources Engineer
Westlands Water District
3130 N. Fresno Street P.O. Box 6056,
Fresno, California 93703-6056
Email: dvang@wwd.ca.gov.

Comments on the Draft Initial Study/Negative Declaration for Westlands Water District Warren Act Contract for Groundwater Pump In

Dear Mr. Vang:

CEQA compels process. *It is a meticulous process designed to ensure that the environment is protected.*¹ We find this initial study incomplete with regard to environmental impacts and lacking sufficient data to determine compliance with the provisions of State of California water quality laws under Porter Cologne and the federal Clean Water Act, the California Endangered Species Act (CESA) and the California Environmental Policy Act (CEQA). Westlands Water District (Westlands), a state agency with a singular focus of providing irrigation water, is not the appropriate lead agency for such a complex project impacting a broad geographical area. The inadequate Initial Study and Negative Declaration (IS/ND) are the latest examples of the failure of Westlands to provide sufficient information to the public and impacted downstream beneficial water users. As stated in previous comments, the Department of Water Resources should be the lead agency for such a geographically complex project that impacts multiple counties and jurisdictions.

There is substantial evidence that this pump-in project has caused and if permitted again, will continue to cause, water pollution, land subsidence, increased water supply costs to others, and damage to the California Aqueduct, which serves millions of people. The initial study fails to provide a complete project description and omits monitoring requirements (sampling frequency, chemical analyses, etc.) and data on water quality and subsidence damages. The project as proposed does not support a “fair argument” that this project does not have significant environmental impacts. A full Environmental Impact Report (EIR) is required so that the environmental impacts, and costs and damage to downstream beneficial uses can be adequately analyzed and described to the public and decision makers.

¹ Planning and Conservation League v. Department of Water Resources (2000) 83 Cal.App.4th 892, 911.

Our organizations provide these comments on the Westlands Groundwater Pumping and Conveyance Project (Pump-in Project). In accordance with the California Environmental Quality Act (CEQA), Westlands, made a draft Initial Study/Negative Declaration (IS/ND) available for a 30-day public comment period closing on June 19, 2020, State Clearinghouse Number 2020050434.² Several of the undersigned organizations have previously submitted comments on this project: 1) Scoping Comments for Westlands Water District Proposed “Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct” dated March 2, 2010, and 2) Comments to the US Bureau of Reclamation (Reclamation) on the Draft Environmental Assessment Westlands Water District Groundwater Warren Act Contract EA-15-001 & FONSI-15-001, dated March 26, 2015. Our previous comments are incorporated here by reference.³ The following comments supplement previous comments with more detail on key issues.

Project Summary

Under the Pump-in Project, Reclamation would enter into a five-year Warren Act Contract⁴ (for the years 2020-2025) to allow Westlands to pump in up to 30,000 acre-feet per year (AF/y) (and up to 150,000 AF over the five-year life of the project) of potentially highly contaminated non-Central Valley Project (CVP) groundwater into the California Aqueduct-San Luis Canal (SLC). Such pump-in would occur in years in which Westland’s CVP allocation is 20% or less. The period of introduction would be between April 1 and August 31 of a given year. However, if it is not possible to begin conveyance by April 1, 2020, the conveyance period for 2020 would be shifted by three months, to between July 1 and December 30. All subsequent years would use the April 1 to August 31 window. According to Westlands' prepared documents the proposed Pump-in Project would involve four main components: groundwater pumping, water conveyance, ground subsidence monitoring, and water quality monitoring. At the heart of the CEQA compliance process is an accurate description of the project. The project fails to provide an accurate description. Many of the key elements of this project are not defined, omitted or not provided to the public for review.

Water Quality Monitoring Plan is not provided in IS/ND.

The IS/ND does not include requirements of a Water Quality Monitoring Plan which would be essential to fully assess the environmental impacts of the project. The Water Quality Monitoring Plan must identify sampling locations, sampling frequencies, applicable water quality standards, analytical methods,

² See: <https://ceqanet.opr.ca.gov/2020050434/2>

³ <http://calsport.org/news/wp-content/uploads/Conservation-Gr-04-19-2018-Cmt-Ltr-Delta-Mendota-Canal-Groundwater-Pump-in-DEA-18-007-and-FON....pdf>

<http://calsport.org/news/wp-content/uploads/Conservation-Gr-Cmt-Ltr-3-26-15-WWD-30-K-Groundwater-Discharge-Warren-Act-Contract-EA-15-001-CMTS-Dra....pdf>

<http://calsport.org/news/wp-content/uploads/Conservation-Gr-FinalScopingCmts-03-02-2010-100K-Pump-in-Cal-Aqueduct.pdf>

<http://calsport.org/news/wp-content/uploads/Environmental-Advocate-Cmts-WWD-SLC-Pump-in-Monitoring-2018-Cal-Aqueduct....pdf>

⁴ The Warren Act (Act of February 21, 1911; Chapter 141, 36 Stat. 925) authorizes USBR to enter into contracts to impound, store, or convey non-CVP water in federal facilities, when excess capacity is available. Warren Act Contracts are issued by Reclamation to allow movement of non-federal water through federal facilities.

detection limits and action thresholds. The IS/ND notes on page 9 footnote 6 that the 2020 Water Quality Plan is: “...currently being prepared and may be subject to change prior to publication and adoption of the final plan. The Project will be subject to the final water quality standards and requirements of the plan once adopted” and on page 50: “The Water Quality Monitoring Plan is being developed to establish the monitoring and reporting protocol for participating wells under the proposed Project, and establish thresholds of exceedance for certain constituents of concern, including TDS, metals, organic chemicals and other potential pollutants. The Water Quality Monitoring Plan would require regular testing of water conditions to ensure that the quality of CVP water is suitable for downstream users. The Water Quality Monitoring Plan requires each well to be tested weekly during the first four weeks of pumping for primary constituents, then monthly while actively pumping into the SLC to confirm that the water quality is consistent, predictable, and reliable.”

The undersigned attempted to obtain the water quality monitoring plan, the enforcement standards, and the well monitoring data for each well head, each discharge pipe and the quantities and the times of discharge for the current project and from previous discharges for 2008 and from 2014 to 2016.⁵ In a response to this Public Records Request, Westlands stated on June 5, 2020 that they did not have any responsive records. The proposed Pump-In Project cannot be evaluated without disclosure to the public of the IS/ND referenced Water Quality Monitoring Plan with time for public comment and review.

Although the Water Quality Monitoring Plan is not provided, on page 15 of the IS/ND it is noted that, “To confirm that the groundwater from the participating wells meets the Water Quality Monitoring Plan, which is based off the applicable Title 22 California Drinking Water Standards, the Project participants’ groundwater would be tested before the water is transferred via the SLC (see Appendix A for a complete list of water quality standards). No drainage water is permitted under this program.” We discuss below why the Title 22 Drinking Water standard for selenium is far from protective of fish and wildlife resources that use water from the aqueduct.

It is impossible to review the IS/ND without the key information in the Water Quality Monitoring Program. For example, Appendix A of the IS/ND includes a table of water quality standards, but without the Water Quality Monitoring Plan, it is unclear whether these standards apply to groundwater at the wellhead, or to water in the California Aqueduct. The IS/ND should be withdrawn and replaced with a full EIR that includes the Water Quality Monitoring Plan and its rationale based on analysis of existing data. Without the Water Quality Monitoring Plan and a full EIR the public is unable to determine if reasonable alternatives which could reduce the environmental impacts of the project have been considered.

Pump-In Project Likely to Harm State Fish and Wildlife Designated Beneficial Uses Associated with the California Aqueduct.

The groundwater contributions from the Pump-in Project are conveyed south through the California Aqueduct and stored in four reservoirs (Pyramid Lake, Castiac Lake, Silverwood Lake, and Lake Perris). The aqueduct and these four reservoirs are regulated under four Regional Water Boards jurisdictions.

⁵ See Pacific Advocates emails on behalf of the undersigned to Russ Freeman 5-19-2020 and 6-5-2020: Subject Pump-In Notice and Initial Study Missing Documentation and email to Jose Gutierrez and Russ Freeman 6-5-2020 Failure to Provide Documents Re Pump-In Notice and Initial Study Missing Documentation, that requested the IS/ND referenced monitoring plan, enforcement standards and previous pump-in data for 2008 and 2014-2016. <http://calsport.org/news/wp-content/uploads/PRA-Correspondence-Re-WWD-Pumpin-Cal-Aqueduct-Project-Monitoring-Plan-May-2020.pdf>

Designated fish and wildlife beneficial uses of the Aqueduct and downstream reservoirs are listed in Table 1.

The Central Valley Regional Water Quality Control Board (CV Regional Board) does not include fish (WARM) as a beneficial use for the aqueduct. Yet, the Department of Water Resources promotes fishing along the aqueduct and identifies five locations within or near Westlands (Fairfax, Three Rocks, Huron, Avenal Cutoff, and Kettleman City sites).⁶ Further, the CV Regional Board includes WARM beneficial use designation for the Delta Mendota Canal,⁷ so we can only surmise that the omission of a WARM beneficial use designation for the California Aqueduct is an oversight. Nonetheless, the Pump-in Project should be protective of downstream beneficial uses of the water from the California aqueduct and these impacts need to be addressed in the a full EIR that would replace the deficient IS/ND. Existing data simply does not support the adoption of a negative declaration for environmental impacts. Due to the high percentage of volumes represented by the Westlands' pump-ins during certain time periods, especially drought conditions, humans who fish the California Aqueduct are likely to be periodically exposed to much higher contaminants than the long-term average. In addition, there will be higher contaminant levels in fish than monitored in canal water due to accumulation in fish tissue. This exposure, warnings, and monitoring are not disclosed, especially to low income communities in the surrounding areas, and there is no mention of fish tissue monitoring.

Table 1. Fish and Wildlife Beneficial Uses Associated with CA Aqueduct south of Pump-in Project

Waterbody Name	WARM	COLD	SPWN	WILD	RARE
California Aqueduct ⁸				E	
Castiac Lake ⁹	E	I	E	E	E
Pyramid Lake ⁵	E	E		E	E
Silverwood Lake ¹⁰	E		E	E	
Lake Perris ¹¹	E	E		E	E

E: Existing beneficial use.

I: Intermittent beneficial use.

WARM: Warm Freshwater Habitat - Uses of water that support warm water ecosystems including but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

COLD: Cold Freshwater Habitat - Uses of water that support cold water ecosystems including, but not

⁶ See: https://water.ca.gov/LegacyFiles/pubs/swp/fishing_along_the_swp/fishingswpeng.pdf

⁷ See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

⁸ See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

⁹ See Beneficial Use Designations of Inland Surface Waters, Los Angeles Regional Water Board: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/2020/Chapter_2/Chapter_2_Table_2-1/Chapter_2_-_Table_2-1.pdf

¹⁰ See: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/ch2_bu.pdf

¹¹ See: https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2019/New/Chapter_3_June_2019.pdf

limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

SPWN: Spawning, Reproduction, and/or Early Development - Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

WILD: Wildlife Habitat - Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

RARE: Endangered Species - Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

Water quality standards for Selenium in IS/ND are not Protective of Fish and Wildlife Beneficial Uses.

On page 32 under "item d", the IS/ND concludes that the proposed project would have less than significant effect on biological resources, but acknowledges that groundwater from the Pump-in Project will commingle with refuge water supplies: *"Both Mendota Wildlife Area and Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the proposed Project, and this would occur partly during times of the year when these refuges would receive water supplies. However, the selenium levels are expected to remain well below the threshold for an adverse effect on wildlife, which is 2 parts per billion as measured in the water column (USBR and San Luis & Delta-Mendota Water Authority 2009 and references therein). Water introduced under the Project would be monitored and managed to ensure the quality of water does not exceed requirements of the Water Quality Monitoring Plan, which establishes limits on the quality of water for selenium to 2 micrograms per liter (equivalent to 2 parts per billion)."* Again, without the Water Quality Monitoring Plan, it is unclear if the 2 parts per billion (2 µg/L) selenium requirement applies to groundwater quality at the wellhead or in the aqueduct and what the sampling frequency would be to ensure compliance.

Moreover, on page 32 under "item f" the IS/ND concludes that *"Because discharged water under the Project would be subject to rigorous monitoring and testing to meet Title 22 water quality standards, salinity levels of the water supplies of the Mendota Wildlife Area or Kern National Wildlife Refuge would also be protected. Therefore, no impacts would occur."* The Title 22 selenium objective of 50 µg/L and the 20 µg/L maximum contaminant level for selenium, together with a detection limit of 50 µg/L specified in Appendix A of the IS/ND are not protective of fish and wildlife resources that use water from the Aqueduct, which require levels less than 2 µg/L. The undisclosed "monitoring and testing to meet Title 22 water quality standards" clearly are not protective of endangered species, migratory birds using the Pacific Flyway and other fish and wildlife that rely upon waters from the San Luis Canal/California Aqueduct.

On July 13, 2016 the Environmental Protection Agency (EPA) released a Final Updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water.¹² The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 recommended criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. The federal register notice identified revised chronic selenium criteria in water for lentic waters (e.g., meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps) and lotic waters

¹² See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

(e.g., rivers and streams). EPA's revised chronic selenium criterion for lentic waters is 1.5 µg/L on a monthly basis, and this is the criterion that should be applied to water in the aqueduct to protect fish and wildlife beneficial uses.

As noted in the IS/ND, both Mendota Wildlife Area and Kern National Wildlife Refuge water supplies may mix with groundwater introduced as a result of the proposed Pump-in Project, as well as, downstream State Water Project reservoirs. Rare species that could be impacted by selenium from Westlands' contaminated groundwater discharges from the Pump-in Project include the federally listed Buena Vista Lake shrew (endangered), federally listed giant garter snake (threatened), and federally protected bald eagle (USFWS 2017).

These complex issues related to impacts on fish and wildlife beneficial uses require a full analysis of the proposed project and potential alternatives and this should be done as part of an EIR. Consultation by the California Department of Fish and Wildlife and the USFWS are necessary.

Detection Limit for Selenium in Appendix A is Incorrect and Inconsistent with the 2017 Water Quality Monitoring Plan for the SLC.

The selenium Detection Limit for Reporting (DLR) in Appendix A is in error. The DLR for selenium from Title 22 drinking water standards should be 0.005 mg/L.¹³ The IS/ND has the DLR for selenium in Appendix A incorrectly as 0.05 mg/L. More important, however, for protection of fish and wildlife beneficial uses, the plan should incorporate a DLR consistent with 2017 SLC Water Quality Monitoring Plan which listed in Table 5 a DLR of 0.0004 mg/L (0.4 µg/L).¹⁴

Water Quality Data from Previous Pump-ins is not Provided.

Data on groundwater quality from participating wells is not provided in the IS/ND. The only groundwater data from individual wells for a Westlands previous pump-in that was available on the web was collected by the California Department of Water Resources in 2008.¹⁵ That 2008 data highlights the significant variability of selenium in well water from the Westlands pump-ins and many of the samples reported were highly elevated in selenium. Reported selenium concentrations ranged from below detection (<1 µg/L dissolved selenium) up to 38 µg/L dissolved selenium. Forty six of the 68 samples had dissolved selenium concentrations equal to or greater than 2 µg/L. Seventeen samples had dissolved selenium concentrations greater than 5 µg/L. In addition, 4 samples were reported to be >0.01 mg/L arsenic, an MCL threshold identified by DWR, and 8 samples contained >1100 mg/L total dissolved solids, an MCL threshold identified by DWR in the Agreement between the Department of Water Resources, of the State of California, and Westlands Water District for Introduction and Conveyance of Local Groundwater in the California Aqueduct, SWPAO #08052.¹⁶

¹³ See:

https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/mclreview/mcls_dlrs_phgs.xls

¹⁴ The 2017 SLC Water Quality Monitoring Plan was included as Appendix B to the Final EA on the Westlands Water District 5-year Warren Act Contract for Kings River Flows in the San Luis Canal. See:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=29590

¹⁵ Select WWD 2008 Pump Ins at:

http://wdl.water.ca.gov/waterdatalibrary/waterquality/station_county/index_prj.cfm

¹⁶ The Agreement between the Department of Water Resources and Westlands Water District is included as an attachment to the comment letter from the State Water Contractors to the Final EA on the Westlands Water District

Reclamation's San Luis Canal Non-Project Water Pump-in Program Water Quality Monitoring Plan from 2017 required that *"All flow and water quality data collected by Westlands will be presented each month to Reclamation and DWR via e-mail. Reclamation will review the data to identify changes in the quality of water in the canal and in individual wells, and potential changes in the local aquifer that could lead to overdraft or subsidence. Reclamation in consultation with DWR, will direct WWD on the continuation of pumping of groundwater into the San Luis Canal."*¹⁷ Inexplicably, none of this data is presented in the IS/ND.

Water quality data on the previous performance of the Pump-in Project is essential information that is missing from the IS/ND. It is important to estimate contaminant loading in the California aqueduct, to ensure that discharges do not harm downstream beneficial uses, and to determine the feasibility of continuing the Pump-in Program. It is impossible to review the IS/ND without the water quality data from the previous Westlands groundwater pump-ins and an evaluation of its implications for the proposed project.

The IS/ND should be withdrawn and replaced with an EIR that includes all of this critical information and related analysis for public comment review.

Monthly Monitoring of Aqueduct Water Quality near Kettleman City is Insufficient to Assess Environmental Impacts of Pump-in Project.

The California Department of Water Resources (DWR) conducts monthly monitoring of the California Aqueduct and has documented occurrences of elevated levels of concern for selenium at Check 21 near Kettleman City (station number KA017226), especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct.¹⁸ As denoted in Figure 1, monthly water quality samples at Check 21 have exceeded the US EPA's July 2016 Final Updated CWA section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water 12 times between January 2012 and January 2020. These proposed objectives include a lentic water quality objective of 1.5 µg/L¹⁹, which would be the applicable selenium objective for Kern National Wildlife Refuge and other wetlands and reservoirs that are fed by water from the Aqueduct. Further, the once-a-month water quality sampling is insufficient to establish a monthly mean water quality calculation, to capture contaminant spikes that accumulate downstream, or to assess potential bioaccumulation in the food chain. Refuge water delivered to the Kern National Wildlife Refuge is diverted from the California Aqueduct in Kern County near Check 29, downstream of where groundwater from the Pump-in Project is pumped into the aqueduct. Inexplicably, DWR stopped collecting water quality data from Check 29 after November 2016.²⁰

Groundwater Warren Act Contract, EA-15-001. See:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21984

¹⁷ See section on Data Compilation and Review in Appendix B:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=29590

¹⁸ Water quality data for the California Aqueduct at Check 21 near Kettleman City is available here:

<http://wdl.water.ca.gov/waterdatalibrary/waterquality/index.cfm>

¹⁹ See; <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

²⁰ Selenium & Arsenic concentrations in the California Aqueduct at Check 29, downstream of where groundwater

Elevated selenium in the Aqueduct is typically associated with drier water years when a larger proportion of total volume in the Aqueduct is comprised of groundwater inputs. Groundwater inputs entering into the Aqueduct (from various sources including Westlands) were 46 percent of the total volume entering the aqueduct in 2014²¹, 44 percent in 2015²², and 8.3 percent in 2016²³.

See Figure 1 on the following page:

has been pumped into the canal increased markedly in 2015 and in the case of Arsenic were approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L.

See: www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

²¹ See page 86 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-15-r.pdf>

²² See page 84 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-16-r.pdf>

²³ See page 94 in: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Bulletin-132/Bulletin-132/Files/Bulletin-132-17-r.pdf>

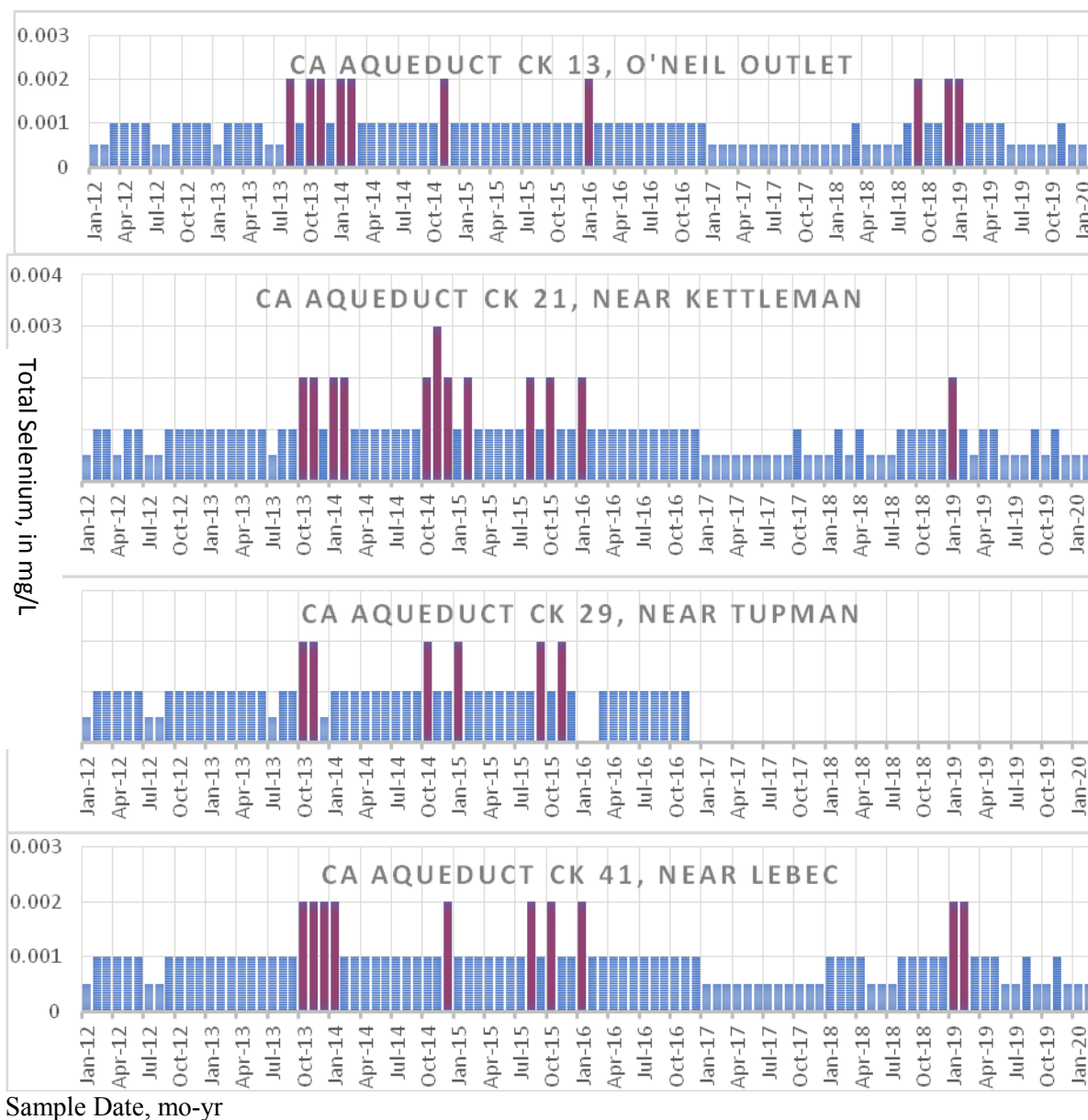


FIGURE 1. – Total selenium concentrations in water samples from the California Aqueduct. Light-shaded bars at 0.0005 mg/L are non-detections, dark blue bars are detections at 0.001 mg/L, and red bars are samples that equaled or exceeded 0.002 mg/L, and exceeded the lentic water-quality objective for selenium of 0.0015 mg/L.

Warren Act Contract Not Included in IS/ND.

The proposed Westlands 5-year Warren Act Contract (Contract) is not included with the IS/ND, so informed decision making and analysis is precluded. A copy of the current Warren Act Contract is available on USBR's website and the term of this contract is through June 30, 2022.²⁴ Will there be changes to the contract after 2022? Failure to provide the contract and terms renders the proposed project by definition incomplete. Public review and transparency require copy of the Contract for the time period being considered and needs to be included as an attachment to the to a Full EIR that replaces the deficient IS/ND .

Subsidence Monitoring and Requirements Are Absent.

As denoted on page 15 of the IS/ND, there are "...two subsidence prone areas located within the District along the SLC...These two areas experienced increased rates of subsidence, which may threaten lands and infrastructure within their vicinity, namely the SLC." The IS/ND proposes within these areas, to subject well pumping to "more restrictive minimum thresholds to protect critical head levels, and extraction from the Lower Aquifer (deep aquifer below the Corcoran Clay layer) would be limited in all years to minimize or avoid subsidence in susceptible lower aquifers." The proposed restrictive minimum thresholds are not provided nor data and information to support the conclusions.

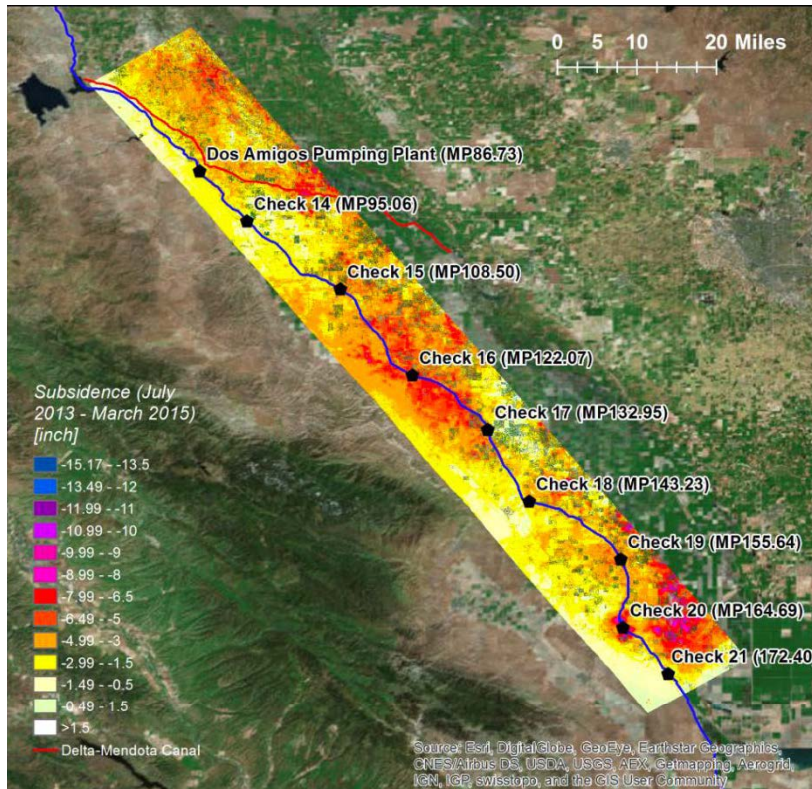
Increases in subsidence, impacts and costs to the California Aqueduct, and long-term cumulative impacts are significant. USGS recently reported, "*Extensive groundwater pumping from San Joaquin Valley aquifers is increasing the rate of land subsidence, or sinking. This large-scale and rapid subsidence has the potential to cause serious damage to the water delivery infrastructure that brings water from the north of the valley to the south where it helps feed thirsty cropland and cities. According to a new report by the U.S. Geological Survey the subsidence is occurring in such a way that there may be significant operational and structural challenges that need to be overcome to ensure reliable water delivery.*"²⁵

Further, DWR has been funding and working with NASA's Jet Propulsion Laboratory (JPL) to monitor subsidence in the Valley since July 2013. It uses interferometric synthetic aperture radar (InSAR) from satellites and aircraft to record the distance between the radar and the ground surface. This work has identified significant areas of subsidence in Westlands as shown in the figure below taken from DWR's 2017 California Aqueduct Subsidence Study Report.²⁶

²⁴ See: <https://www.usbr.gov/mp/warren-act/docs/contract-westlands-multiyear-convey-nonproject-water.pdf>

²⁵ See: <http://www.usgs.gov/newsroom/article.asp?ID=3731#.VRRBAKMtHVQ>

²⁶ See: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Engineering-And-Construction/Files/Subsidence/Aqueduct_Subsidence_Study-Accessibility_Compatibility.pdf



The Survey data in the DWR Subsidence Report show this section of the Aqueduct, the San Luis Canal (Los Banos to Kettleman City), has subsided the most over the years.²⁷ The DWR report identifies a number of significant operational impacts of subsidence to the Aqueduct including: reduction in conveyance capacity, increase in power cost, decrease in available freeboard (the difference in elevation between the crest of the canal and the water level as fixed by design requirements). These effects are significant and costly to repair.

The IS/ND on page 51 points to the unavailable Water Quality Monitoring Plan for establishing groundwater level monitoring and reporting requirements for participating wells:

It is impossible to review the IS/ND without the key information in the Water Quality Monitoring Program. The IS/ND should be withdrawn and replaced by an EIR that includes this critical information for public comment review. Without the Water Quality Monitoring Plan and a full EIR, the public is unable to determine if reasonable alternatives which could reduce the environmental impacts of the project have not been considered.

Compliance with Clean Water Act is Absent.

As EPA noted in scoping comments submitted for the Westlands pump-ins in 2010, and attached to these comments for reference, the proposed discharge of contaminated groundwater from Westlands with potentially high salt, boron, chromium, arsenic, selenium and other metals would be subject to NPDES permitting requirements pursuant to the federal Clean Water Act. Further EPA noted, *“Permits will need to be designed to ensure the discharges do not cause or contribute to exceedences of applicable State*

²⁷ Ibid.

water quality standards or degradation of designated beneficial uses.”²⁸ Westlands has failed to obtain the required CWA permits. No compliance with the federal Clean Water Act is provided in the IS/ND. Thus, the public is precluded from analyzing the permit and conditions to ensure protection and non-degradation of water supplies under the NPDES permit and potential mitigation measures. As we have noted above, the proposed discharges include various metals and constituents such as selenium that bioaccumulate in the food chain thus have amplifying the impacts.²⁹

Compliance with NEPA is Not Provided.

As described on page 9 of the IS/ND, footnote 5, USBR’s approval of the Westlands’ 2020-2025 Warren Act Contract authorizing the Pump-in Project is subject to environmental review under the National Environmental Protection Act (NEPA) pursuant to the Council on Environmental Quality regulations (40 Code of Federal Regulations Parts 1500- 1508). Review of Reclamation’s approval of Westlands’ 2020-2025 Warren Act Contract pursuant to the requirements of NEPA is being prepared under an Environmental Assessment (EA). NEPA compliance has not been provided to the public for this Pump-in Project. As mentioned, inconsistent and critical water quality monitoring and standards that will be enforced have not been provided. A Negative Declaration can be not be adopted absent this critical environmental analysis and sufficient time provided for the public to have an opportunity to comment on the impacts and alternatives.

Cumulative Impacts

Cumulative impacts from other water exchanges are not disclosed or analyzed. We adopt by reference our comments from previous exchanges and transfers and previous scoping comments.³⁰ In addition to the continued extraction of water from already over drafted groundwater basins, the impacts from discharging this groundwater on Westlands’s toxic soils and exacerbating an existing subsurface agricultural drainage problem on the west side of the San Joaquin Valley are not disclosed nor mitigated.

²⁸ <http://calsport.org/news/wp-content/uploads/EPA-comments-Westlands-WD-EIR-NOP-3-4-10.pdf>

²⁹ Select WWD 2008 Pump Ins at:
http://wdl.water.ca.gov/waterdatalibrary/waterquality/station_county/index_prj.cfm

³⁰ See comments provided http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=14341 “Resnicks’ Westside Mutual Water District member lands in Westlands Water District to the AEWSD service area and Westside Exchange Program are not disclosed nor analyzed. Nor are the impacts to Madera County from the potential groundwater transfers likely contemplated under the proposed action. The existing Exchange Program involves delivery of Arvin’s supplies to Westside member lands as exchange water, based on a 1 for 1 or “bucket for bucket” basis, up to 50,000 acre feet (AF).”

See 30,000 acre feet of groundwater proposed to be transferred to Westlands et. al. from the Mendota Pool
<http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=49107>

See also North Valley Regional Recycled Water Program-- <http://www.nvrrecycledwater.org/description.asp> The NVRWP could produce and deliver up to 32,900 acre-feet per year of tertiary-treated recycled water to the drought-impacted west side. This water can be used to irrigate food crops, public and privately owned landscaping, and for industrial uses. This basin transfer would alter San Joaquin River Flows and flows to refuges, and the South Delta Bay Estuary. The project would deliver up to 59,000 acre feet per year (AFY) of recycled water produced by the cities of Modesto and Turlock via the Delta-Mendota Canal (DMC), a feature of the Central Valley Project owned by Reclamation. Instead of discharging fresh treated water into the San Joaquin River, recycled water would be conveyed from Modesto and Turlock through pipelines from their wastewater treatment facilities, crossing the San Joaquin River, ending at the DMC.

Selenium found in groundwater and drainage water in Westlands is known to create life threatening impacts to migratory birds, wildlife and fish, magnifying up the food chain as these pollutants accumulate. These impacts are merely brushed aside. No monitoring or reporting plan is delineated in the IS/ND. No data is provided to support the IS/ND conclusions of no impact. No alternatives are considered. Finally, there is insufficient analysis of the cumulative impact of discharging these contaminants into drinking water, wildlife refuge supplies, or downstream fish and wildlife beneficial uses.

Conclusion

The IS/ND does not adequately assess the potentially significant environmental impacts from the project or alternatives to the project. There are reasonably available alternatives that have not been considered and should be analyzed in order to reduce the potentially significant environmental impacts. Absent from the document is any assessment of the cumulative impacts including third party impacts and impacts to fish, wildlife and water quality. Required permits and compliance with the Clean Water Act to allow discharge of contaminants into the waters of the state and nation have not been provided. Nor have necessary consultations with federal and state concerning potential endangered and threatened species impacts. The contract governing the full discharge period is absent. Prior to commencing with a project that has and likely will harm downstream uses, a complete EIR is required that includes, among other things, a comprehensive Water Quality Monitoring Plan to ensure waters of the State and Nation are not degraded, prior groundwater water quality data from participating wells from previous pump-ins, a copy of the Warren Act Contract, documentation of permit compliance, and full analysis of alternatives and cumulative impacts. This information should be included in the EIR that replaces the IS/ND. We object to the adoption of a Negative Declaration for this project. This IS/ND fails CEQA's "most important" purpose, to fully inform the decision-makers and the public of the environmental impacts of the choices before them." (83 Cal.App.4th at p. 920.)

Thank you for the opportunity to comment. Please add our names to Westlands' electronic notification lists for environmental documents regarding water supplies or contracts or conveyance.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



John Buse
Senior Counsel, Legal Director
Center for Biological Diversity
<mailto:jbuse@biologicaldiversity.org>



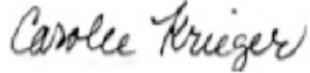
Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.com)
connere@gmail.com

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December 23, 2019

Ms. Rain Emerson
 U.S. Bureau of Reclamation
 South-Central California Area Office
 1243 N Street
 Fresno, CA 93721

Re: Comments on the Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area (Draft EA-19- 029)—A Comprehensive EIS is Required and Compliance with the Clean Water Act.

Dear Ms. Emerson,

The undersigned organizations respectfully submit comments on the Draft Environmental Assessment (DEA-19-029) titled, *10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area* (DEA).

We begin by noting the failure of Reclamation to meet the disclosure and transparency requirements of the National Environmental Policy Act (NEPA). Although our organizations have had a long history of involvement with the Grassland Bypass Project (GBP), no official notice of the availability of the DEA was provided, and no press release was issued. The notice of availability for this DEA was posted on

Reclamation's website under NEPA documents¹ on December 9, 2019 for a 2-week comment period ending on December 23, 2019. Furthermore, while the title of the DEA mentions a 10-Year Use Agreement, there is no Use Agreement included with the DEA. In addition, there is no draft FONSI provided with the DEA.² Failure to provide these essential documents, combined with a truncated public review period, prevents the public the opportunity to comment and does not comply with the disclosure and transparency required by the National Environmental Policy Act. Several of the undersigned groups, on December 10, 2019, raised these issues and requested a time extension to review such a significant action which will likely impact areas with pollution for decades.³ Reclamation did not respond.

At the heart of the National Environmental Policy Act review is the objective to clearly define the project so as to ensure informed decision making. Reclamation has failed to include essential elements for the project under review and to disclose the impacts of these project elements. Reclamation @ pg 7 claims *"there is no federal nexus for Reclamation outside use of the Drain. Such non-federal actions include the use of existing and new short-term storage basins to reduce storm-induced discharges to Mud Slough (North), enhancements to existing non-federal facilities, installation of new infrastructure such as new pump/conveyance systems and a remote shut-off system for the tile sumps within the GDA, among other features as shown in Figure 4."* And yet these project elements will be enabled by this federal action. There is no Grassland Bypass Project without use of the San Luis Drain. Logistically this federal action is necessary for the project as a whole to go forward. The project cannot proceed without this federal action thus a complete analysis of the impacts from the entire project is required. Furthermore, the claim of no federal nexus is inconsistent with what Reclamation has asserted in filings to the court under penalty of perjury. For example in 2017, Reclamation asserted to the court that the Grassland Bypass Project use of the federal San Luis Drain, the Demonstration Treatment Plant and San Joaquin River Improvement Program (SJ RIP) along with surface impoundments are *"to provide drainage service to the Northerly San Luis Districts."*⁴ Without a full EIS or compliance with the Endangered Species Act or Clean Water Act, the proposed project will add stormwater to the discharges sanctioned under the as yet to be disclosed use

¹ https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41544

² Federal law and regulation 'require at least thirty (30) calendar days before making the decision on whether, and if so how, to proceed with a proposed action, the Responsible Official must make the EA and preliminary FONSI available for review and comment to the interested federal agencies, state and local governments, federally-recognized Indian tribes and the affected public. The Responsible Official must respond to any substantive comments received and finalize the EA and FONSI before making a decision on the proposed action. 40 CFR § 6.203 - Public participation.

³ <https://www.restorethedelta.org/wp-content/uploads/Conant-Burman-Ltr-Re-Extension-of-Cmt-Re-SLD-Discharges-Use-Agreement-12-10-19.pdf> PCL et. al. December 20, 2019, to Commissioner Burman and Regional Director Conant: New Information Regarding Deformities in Sacramento Splittail and Drinking Water Quality Raise Significant National Issues for Consideration in the Draft Environmental Assessment for the proposed 10-Year Agreement to Use the San Luis Drain for Discharges to the San Joaquin River and San Francisco-Bay Delta by the San Luis & Delta-Mendota Water Authority--We Seek a Public Hearing, an EIS and Extended Comment Period--2 Weeks Is Insufficient.

⁴ See Dept of Interior Inspector General Report @ <https://www.usbr.gov/mp/docs/northerly-districts-agreement.pdf> pg 7 *"In a 2017 statement to the court, the BOR stated the purpose of the GBP & Demo Plant is, "..... to provide drainage service to the Northerly San Luis Districts... The Demo-Plant's 2012 environmental assessment contained a U.S. Fish and Wildlife Service (FWS) review that expressed several concerns about aspects of the plant, as well as about the San Luis Unit drainage planning documents from 2007 and 2008. Specifically, the FWS believed new information on the performance of the biotreatment system and evaporation ponds, and on mercury in drain water, had become available that should be considered for all future actions."*

agreement contract.⁵ The stated purpose of the Proposed Action is to provide a mechanism to manage storm water flows that cannot be contained within the SJRIP that will by definition include discharging collected polluted sub-surface drain water mixed with stormwater from retention ponds that collect runoff outside of the San Luis Unit service area, along with other mixed drain water and discharge from an expanded SJRIP into the federal San Luis Drain.

Polluted Discharges for 25 Years have been Exempted from Protective Water Quality Standards.

The Grasslands Bypass Project (GBP) began in 1995 as a two-year program, and its Federal Use Agreements for the San Luis Drain have been extended now through Three Use Agreements.⁶ All of these permits and environmental reviews and findings were predicated on zero discharge at the end of each period. First for 5 years, then 10 more and then 10 more. All that time--25 years--the polluted discharge was exempted from meeting protective water quality standards or only required to meet relaxed standards.

Monitoring Has Steadily Been Reduced Without Compliance with Use Agreement Requirements and Too Much Time has Passed Without Adequate Progress.

Furthermore, over that 25 years the project steadily reduced both monitoring of the discharge and compliance with water quality standards. Now the USBR in this DEA and the Grassland Drainers under the GBP Storm Water Plan addressed in a CEQA Addendum⁷ are now proposing a 4th Federal Use Agreement starting in January 2020. Enough is enough. Too much time has already passed without adequate progress on meeting water quality standards. Species are hanging by a thread and migratory bird deformities continue. If the 4th Federal Use Agreement is not approved by December 31, 2019, all discharges (including stormwater) into the San Luis Drain from the GBP are required to cease, and this is what should happen. The cessation of these selenium laden discharges has been promised for the last 25 years and must stop. Further, providing a DEA rather than a full EIR/EIS to accurately inform decision makers does not comply with CEQA and NEPA requirements.

Use of the San Luis Drain to Collect and Discharge Contaminated Stormwater Has Not Been Authorized.

⁵ 3rd Use Agreement pg 7 (K) Agreement No. 10-WC-20-3975 United States Department Of The Interior Bureau Of Reclamation Central Valley Project, California And San Luis & Delta-Mendota Water Authority Agreement For Continued Use Of The San Luis Drain January 1, 2010 Through December 31, 2019.

⁶ 3rd Use Agreement Agreement No. 10-WC-20-3975 United States Department Of The Interior Bureau Of Reclamation Central Valley Project, California And San Luis & Delta-Mendota Water Authority Agreement For Continued Use Of The San Luis Drain January 1, 2010 Through December 31, 2019. 2nd Use Agreement Agreement No. 01-WC-20-2075 United States Department Of The Interior Bureau Of Reclamation Central Valley Project, California And San Luis & Delta-Mendota Water Authority September 2001 to December 21, 2009. The AUTHORITY has entered into Contract No. 8-07-20-X0354 (the "Transfer Agreement"), with RECLAMATION, whereby the AUTHORITY is responsible for, among other things, the operation and maintenance of the San Luis Drain to the extent described in the Transfer Agreement and according to the terms set forth therein;

⁷ Available at these links: http://sldmwa.org/grasslandbypass/NOA_CEQA_GBP%20Addendum%2008-14-19.pdf
<http://sldmwa.org/grasslandbypass/LTSWMP%20Initial%20Study%20080519.pdf>
<http://www.sldmwa.org/grasslandbypass/LTSWMP%20Addendum%20080519.pdf>

The First Use agreement⁸ (1995) for the San Luis Drain authorized use of a 28-mile portion of the Drain by the San Luis Delta Mendota Water Authority (SLDMWA) to carry agricultural drainage water to Mud Slough. There was no stipulation for discharge of stormwater. In fact, in a 1997 report titled, “A Storm Event Plan for Operating the Grassland Bypass Project”⁹ by the Grassland Area Farmers and the SLDMWA, several issues were identified regarding major storm events in the GBP including:

1. *Storm water runoff carries sediment that should not be transported in the Grassland Bypass, or deposited in the San Luis Drain;*
2. *It is not possible during major storm events to separate agricultural drainage water from surface runoff and storm water flows;*
3. *It will not be possible to divert all of the commingled surface runoff, storm water flows, and agricultural drainage water through the Grassland Bypass Channel during major storm events.*
4. *During some storm events, the instantaneous flow rate in Panoche Creek, which carries water from hills adjacent to the agricultural area can exceed 12,000 cubic feet per second, while the average daily flow rate during such events can exceed 2,000 cubic feet per second. These flows can generate more than 40,0000 acre-feet of water during a two-week period that includes a storm event.*

Both Congress and the Use Agreements Have Limited Use of the San Luis Drain to Agricultural Drainage--Expanded Use to Include Stormwater is Not A Project Purpose.¹⁰

⁸ See <http://calsport.org/news/wp-content/uploads/GBP-First-Use-Agreement-1995.pdf>

⁹ See pages 2-3: “A Storm Event Plan for Operating the Grassland Bypass Project” by the Grassland Area Farmers and the SLDMWA, 1997.

¹⁰ In 1956, the Bureau of Reclamation delivered to the United States Congress, “A Report on Feasibility of Water Supply Development” for the San Luis Unit (the 1956 Feasibility Report), which recommended constructing a group of water management facilities, called the San Luis Unit, as an addition to the Central Valley Project, in order to bring irrigation waters to an area of approximately 496,000 acres in the San Joaquin Valley. In 1960, Congress passed the San Luis Act, Pub. L. No. 86-488, 74 Stat. 156 (1960). Section 1(a) of the San Luis Act established the obligation of the Secretary of the Interior, prior to construction, to provide drainage and to “construct, operate, and maintain the San Luis unit as an integral part of the Central Valley Project,” for the purpose of furnishing water to approximately 500,000 acres in the San Joaquin Valley See § 1(a). On June 21, 1961, California notified the Secretary of Interior that the State would not provide a master drain. In response, in January 1962, the Secretary of Interior reported to Congress that DOI would construct the San Luis Drain. While the San Luis Drain was still in the planning stages, concerns arose about the potential effect of draining untreated, irrigation waters into the Sacramento-San Joaquin Delta and the San Francisco Bay. Reflecting those concerns, on October 22, 1965, Congress passed Public Law 89-299, 79 Stat. 1096 (1965), which contained an appropriations rider prohibiting selection of a final discharge point for the San Luis Drain until certain conditions were met, including completion of a pollution study and development of a plan to mitigate damage from drainage water on the San Francisco Bay. Those conditions still have not been met. Similar language in the appropriations bill was passed December 2019.

As part of the San Luis Drain system, USBR began constructing the Kesterson Reservoir, which was originally intended to serve as a reservoir that would regulate water flows in the San Luis Drain prior to their discharge into the Sacramento-San Joaquin Delta, but which instead became the temporary terminal disposal site for the San Luis Drain. By 1975, approximately eighty-three miles of the San Luis Drain and the first stage of the Kesterson Reservoir had been completed. At that time, however, the USBR suspended construction of the San Luis Drain, citing public “concerns.”

In addition, the Congressionally authorized, 1978 Task Force Report further indicated that the United States Environmental Protection Agency, which was responsible for issuing permits for discharge of pollutants into

Both the purpose of the project and previous Use Agreements confirm the use only for agricultural drainage. And such use was for a limited amount of time. For example, the Grassland drainers stated explicitly in 1997, "The Grassland Bypass Channel and the San Luis Drain were designed and constructed explicitly for the purpose of conveying agricultural drainage water. Neither facility can accommodate storm water flows nor surface runoff from major storm events."¹¹ The 1995 First Use Agreement stated clearly, "The AUTHORITY has requested that the UNITED STATES permit it to use a portion of the San Luis Drain consisting of approximately 28 miles from the terminus (Kesterson Reservoir) to Milepost 105.72, Check 19 (near Russell Avenue) for the discharge and transportation of a maximum flow of 150 cubic feet per second (cfs) of drainage water to Mud Slough (said portion hereinafter referred to as the Drain)" highlight added.¹² Finally the NEPA documents all stated the purpose of the project was for "a field experiment designed to evaluate approaches to agricultural drainage management. There is no commitment, at this time, to approve long-term use of the Drain."¹³ (highlight added)

These issues associated with permitting continued discharge of pollutants from the federal San Luis Drain are numerous and complex and can only be assessed with a full Environmental Impact Statement (EIS), especially since the 2009 GBP EIR/EIS was predicated upon zero discharge to the San Luis Drain, Mud Slough and the San Joaquin River after December 31, 2019. The current proposed project would expand the project purposes and use to allow storm water and agricultural drain water laced with selenium (and other toxic drainwater constituents such as salt, sulfates, boron, and mercury) be discharged through the federal San Luis Drain to Mud Slough and the San Joaquin River and the Delta Estuary.

We, the signatory organizations on these comments, recommend that the DEA proposing a 10-year extension of the use of the San Luis Drain to discharge stormwater into Mud Slough (North) and the San Joaquin River from Sack Dam to the Merced River be withdrawn. At a minimum a full Environmental Impact Report/Statement (EIR/EIS) must be completed that includes disclosure of the Use Agreement for the San Luis Drain and addresses the full range of interconnected factors related to the GBP, including storm water detention ponds, the SJRP, the lack of viable treatment options, continued discharge of drainage water from areas not included in the GBP, and so on as further described below.

Below, we detail our concerns in several areas and recommend what we believe is the only reliable and cost-effective solution to this evasive contamination problem--order the cessation of this polluted discharge; stop the delivery of water to these contaminated soils; and retire these drainage impaired lands as determined in study after study by the federal government.¹⁴

navigable waters, had not yet established pollution control requirements for the discharge point of the San Luis Drain.

¹¹ Ibid. page 12.

¹² Op. cit. First Use Agreement 1995 pages 1-2.

¹³ USBR,SLDMWA,EPA& USFWS letter to Karl Longly, CVRWQCB 11-3-95 pg 2
<http://calsport.org/news/wpcontent/uploads/USBR-SLDMWA-EPA-USFWS-11-3-95-Ltr-to-CRWQCB.pdf> and Supplemental Environmental Assessment April 1991 and the FONSI dated October 18,1991.

¹⁴ The San Joaquin Valley Drainage Program (SJVDP) *A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley*, also known as the "Rainbow Report" (September 1990); Also see USGS *Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California* Open-File Report 2008-1210 By: Theresa S. Presser and Steven E. Schwarzbach available at: <http://pubs.usgs.gov/of/2008/1210>; Also see USBR Final Environmental Impact Statement in May 2006 and signed

A DEA is Insufficient under NEPA to Address Impacts of 10+ Years of Expanded Use and Additional Discharges from the Federal San Luis Drain.

Under the proposed GBP Stormwater Plan described in the DEA, selenium-contaminated discharges would continue adding stormwater commingled with subsurface agricultural drainage into the San Luis Drain and downstream surface waters for an additional 10 years. This is a substantial change in the definition of the project (from what was included in the 2009 GBP EIS/EIR) and should be analyzed in a full EIR/EIS. Further, there are numerous impacts that are significant and need to be disclosed, including:

- 1) cumulative impacts to downstream beneficial uses
- 2) the failure to meet protective water quality standards
- 3) impacts to endangered and listed species and
- 4) migratory bird impacts.

Individually and together these significant impacts warrant a full EIR/EIS analysis to adequately inform decision makers of the risks posed by continuing these discharges without proper permits and without compliance with the Clean Water Act, including state and federal non-degradation policies, the Migratory Bird Treaty Act and the Endangered Species Act.

The undersigned organizations have a long-standing concern about the GBP because contaminants in agricultural drainage discharges and the added storm water discharges have profound effects to the environment, including effects to downstream waterways, aquatic life, and migratory birds. We include our previous comments on the 2019 Tentative Waste Discharge Requirements for the GBP, the GBP

the Record of Decision (ROD) for the San Luis Drainage Feature Re-evaluation EIS in March 2007, selecting the “In-Valley/ Water Needs/ Land Retirement Alternative” available at:
https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=61

Stormwater Plan EIR Addendum, the USEPA's proposed water quality criteria for selenium in California, the GBP EIR/EIS and the Basin Plan Amendment by reference.¹⁵

¹⁵ Comments of Pacific Coast Federation of Fishermen's Associations (PCFFA) and the Institute for Fisheries Resources (IFR), and the signatory organizations Re: Comments on Tentative Waste Discharge Requirements (WDRs) for Surface Water Discharges from the Grassland Bypass Project in Merced and Fresno Counties. November 5, 2019.

Coalition comments on Grassland Bypass Project Long-Term Storm Water Management Plan EIR Addendum and Initial Study--A Full EIR-EIS is Required. September 9, 2019.

Coalition comments of environmental, fishing and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019.

<http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf>

Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker, June 22, 2015.

https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf

Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR, September 8, 2014.

<http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbp-land-retirement.pdf>

Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project, June 30, 2014. <http://calsport.org/news/wp-content/uploads/Final-coalition-comments-on-Draft-GBP-WDR-6.30.14.pdf>

Coalition Comments: Grasslands Bypass Project -- Violations of the Endangered Species Act and Reduced Monitoring Threaten Endangered Species and Public Health, November 27, 2013.

<http://calsport.org/news/wpcontent/uploads/2013/12/Coalition-Letter-on-GBP-ESA-Violations-Monitoring-Reductions-LTR.Corrected-.pdf>

Coalition Comments: Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project. August 11, 2011. <http://calsport.org/news/wp-content/uploads/2011/09/Opposition-To-Grassland-Bypass-MonitoringReductions.pdf>

CSPA, CWIN and AquAlliance submit Comments to State Water Board Regarding Grassland Bypass Project and Basin Plan Amendment. September 22, 2010. <http://calsport.org/news/cspa-cwin-and-aqualliance-submit-comments-to-state-water-board-regarding-grassland-bypass-project-and-basin-plan-amendment/>

Sierra Club et. al. Comments: Grassland Bypass Project & San Joaquin River Selenium Basin Plan Amendments September 22, 2010.

https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/jim_metropulos.pdf

Comments of California Sportfishing Protection Alliance and California Water Impact Network on the draft environmental impact report for the Irrigated Lands Regulatory Program and related documents. Also attached are several comments prepared by three expert consultants September 27, 2010.

<http://calsport.org/doclibrary/pdfs/207.pdf>

Now, the GBP Drainers propose to continue to use the federally owned San Luis Drain to convey stormwater commingled with contaminated agricultural drainage water to the San Joaquin River via Mud Slough (North). The GBP Stormwater Plan includes a number of management actions and commitments that will not be sufficient to protect downstream beneficial uses. The DEA and drainers' GBP Stormwater Plan effectively sanction continued excessive pollution, especially during stormwater events, of Mud Slough (North), the San Joaquin River, and ultimately the Sacramento-San Joaquin Delta, by failing to enforce science-based protective water quality standards for selenium and allowing the continued contamination of these water bodies. Excess selenium in streams kills or deforms fish and other aquatic life and is a human-health concern to people who fish or hunt in impacted areas.

Under the proposed GBP Stormwater Plan, selenium (and other drain water constituents, such as salt, sulfates, boron, and mercury) will continue to be discharged from the federally owned San Luis Drain directly into the waters of the state and nation. The failure to enforce protective selenium water quality objectives transfers pollution from these Grassland drainers through this federal drain to the waters of the state, harming beneficial uses of these waters by our members and the public, including but not limited to, domestic water supplies, public health, and other public trust values. In addition, impacts of climate change, which were not considered in previous environmental assessments in concert with implementation of the GBP Stormwater Plan, must be disclosed in a full EIR/EIS review. Also the cumulative impacts from sanctioning this selenium discharge across decades without compliance with the Clean Water Act and the continued discharge without adequate permitting and monitoring must be disclosed. Recent testimony before the California Regional Water Quality Control Board, indicates lethal and deforming selenium levels have accumulated in Sacramento splittail fish in the Delta Estuary downstream.¹⁶

State and Federal Permitting Agencies Are Permitting Different Projects with Different Time Frames--NEPA Requires a Stable Project.

We note that the time frame reviewed in DEA considers use of the San Luis Drain for 10 years. Yet the GBP Stormwater Plan EIR Addendum proposed use of the San Luis Drain is for a period of 25 years (2020-2045).¹⁷ Further, in light new evidence of selenium effects to fish in the Delta, and public comments submitted on a tentative Waste Discharge Requirement (WDR) for the GBP Stormwater Plan, the Central Valley Regional Water Quality Control Board approved a WDR for the GBP Stormwater Plan for 25 years with a mandatory 2-year review of the permit (in end of 2021).¹⁸

There was no Use Agreement provided with the DEA, making it impossible to know what the duration of the proposed action is and compromising the public's ability to review and comment on this action. We therefore recommend that the DEA be withdrawn until a full EIS can be completed which includes the new Use Agreement for the San Luis Drain.

Environmental Coalition Comments on Draft Staff Report for Grasslands Bypass Project Basin Plan Selenium Amendments to The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, April 26, 2010 available at:
https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf

¹⁶ See the Central Valley RWQCB staff testimony before the Central Valley RWQCB, December 5, 2019.

¹⁷ See: <https://ceqanet.opr.ca.gov/Project/2007121110>

¹⁸ https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/#tentwdrsgbp

A National Pollutant Discharge Elimination System (NPDES) Permit is Required.

On September 6, 2019 the Ninth Circuit Court of Appeals ruled that commingled discharges from the GBP are not exempt from NPDES permitting requirements. *Pac. Coast Fed'n. of Fishermen's Ass'ns v. Glaser*, 937 F.3d 1191, 1199 (9th Cir. 2019). In reaching its decision, the Court issued a landmark ruling under the Clean Water Act's exemption for discharges from irrigated agriculture. First, the Court held that the Defendants had the burden of establishing that their discharges were "composed entirely of return flows from irrigated agriculture." *Id.* at 1197. Second, the Court ruled that only those discharges that are composed entirely of return flows from irrigated agriculture were exempt. *Id.*

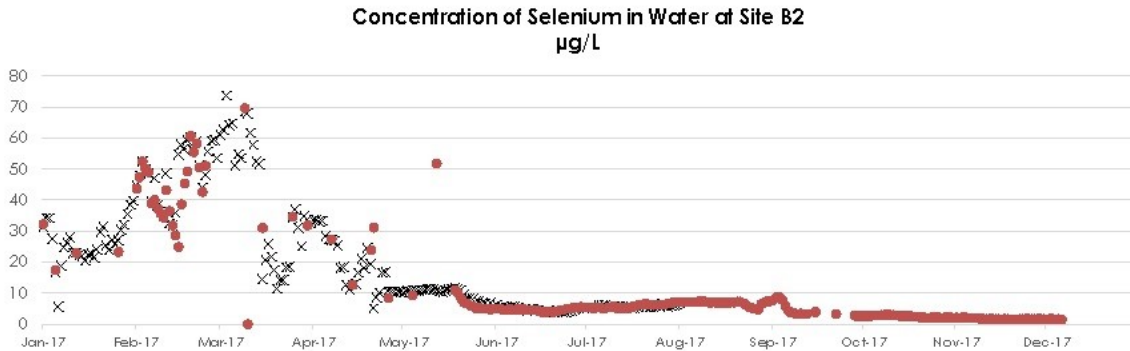
Applying these rulings to the commingled discharges of the GBP, the Court held that all of the Plaintiffs' claims should proceed. *Id.* at 1200. Because those commingled discharges were not composed entirely of return flows from irrigated agriculture, they did not fall within the exemption. In other words, the Court held that the return flow exemption from the Clean Water Act's NPDES permit requirements did not apply based on the fact that non-exempt flows were commingled with discharges from irrigated agriculture. This DEA proposes a Use Agreement that does not conform to federal law and this court ruling.

The US Environmental Protection Agency (USEPA), and by delegation under the Clean Water Act (CWA) and California's Porter-Cologne Water Quality Control Act, the California State and Regional Water Quality Control Boards, have the authority to regulate agricultural drainage under the CWA under comprehensive federal statutory authority for regulating pollutant discharges to the nation's navigable waters. The term "pollutant" under Porter-Cologne includes "agricultural waste discharged into water," and the term "navigable waters" encompasses the San Joaquin River, its principal tributaries, and inflowing ditches and drains.¹⁹ Thus, discharges of agricultural drainage water to the San Joaquin River and its tributaries are subject to regulation under the CWA (Thomas and Leighton-Schwartz, 1990). The GBP Stormwater Plan should be required to obtain a NPDES permit to discharge pollution to navigable waters or to discharge commingled groundwater, surface water and agricultural drainage containing pollutants such as selenium, boron, salt, sulfate and mercury.²⁰

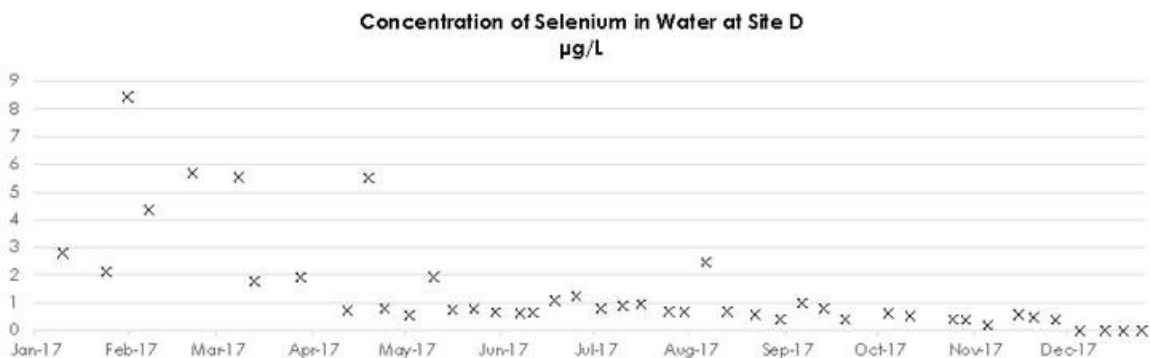
Excessive discharges of selenium-laden drainage and contaminated groundwater still is occurring from the GBP. For example, during the winter/spring of 2017, water quality monitoring data clearly show high selenium concentrations (e.g., 20-40 µg/L) associated with high flow conditions in water entering the San Luis Drain from the GBP. These levels can be lethal to fish and wildlife and accumulate up the food chain, magnifying the impacts to other species. The figure below shows selenium concentrations at Site B2 in the San Luis Drain during 2017.

¹⁹ See, e.g., Karl Phale, *Water Quality Control In California: Citizen Participation In the Administrative Process*, Ecology Law Quarterly 400, 406 (1971), available at: <https://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=1011&context=elq> ("Among the items defined as waste prior to the Porter-Cologne Act are agricultural drainage waters containing materials not present prior to use,..and materials used in agricultural operations which are not intentionally applied to waters, such as insecticides, herbicides, and other chemicals.")

²⁰ See, e.g., EPA's NPDES description on its website, available at <https://www.epa.gov/cwa-404/clean-water-act-section-402-national-pollutant-discharge-elimination-system>.



Although the San Luis Drain flow adds a relatively small percentage of flow to Mud Slough, it nevertheless substantially increased the selenium concentrations in Mud Slough in 2017 to unacceptably high levels of 5-10 µg/L (see data for Site D below). Dilution is not the solution to pollution—especially in the case of selenium, which bioaccumulates in the food chain and magnifies impacts on fish, wildlife, migratory birds and terrestrial species (Lemly and Skorupa, 2007; Skorupa 1998; USDI 1998). According to selenium expert Dr. Dennis Lemly, the 5 µg /L water quality objective is an outdated number from the 80's and 90's, which has been shown repeatedly through field case study research to be under-protective. In other words, 5 µg /L won't protect downstream fish and wildlife, including salmon, Sacramento splittail and green sturgeon.



A comprehensive cumulative effects analysis on downstream impacts of the GBP Stormwater Plan in an EIR/EIS is needed.

The DEA and drainers GBP Stormwater Plan will allow continued discharges of a blend of stormwater, polluted groundwater and drainage to Mud Slough (North) and the San Joaquin River. This plan should be analyzed in a full EIR/EIS and the cumulative impacts to downstream anadromous fish, wildlife, and terrestrial species should be included in that analysis. Impacts to the Delta Estuary and its species from the proposed action, as well as other actions, are profound. Continued operation of the CVP and SWP is likely to jeopardize the continued existence of endangered species in the Delta, and stormwater runoff and subsurface agricultural drainage from GBP and nearby CVP-irrigated lands contaminates the San Joaquin River and hence the Delta with selenium and other toxic constituents. See testimony from Restore the Delta on Salinity and Selenium Science and Modeling for the Bay/Delta Estuary.²¹

²¹ Testimony on Recent Salinity and Selenium Science and Modeling for the Bay/Delta Estuary Submitted by Tim Strohane Senior Research Associate California Water Impact Network (CWIN) August 17, 2012 https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/RestoretheDelta/part2/RTD_161.pdf

Further, in a letter from National Marine Fisheries Service (NMFS) to the SWRCB on the San Joaquin River Selenium Control Plan Basin Plan Amendment (dated September 22, 2010), NMFS stated selenium contamination in the San Joaquin River is problematic in restoring spring and fall-run Chinook salmon to the upper reach of the San Joaquin River. The NMFS letter also noted that selenium in the San Joaquin River could negatively affect Central Valley steelhead and the Southern distinct population segment of the North American green sturgeon.²²

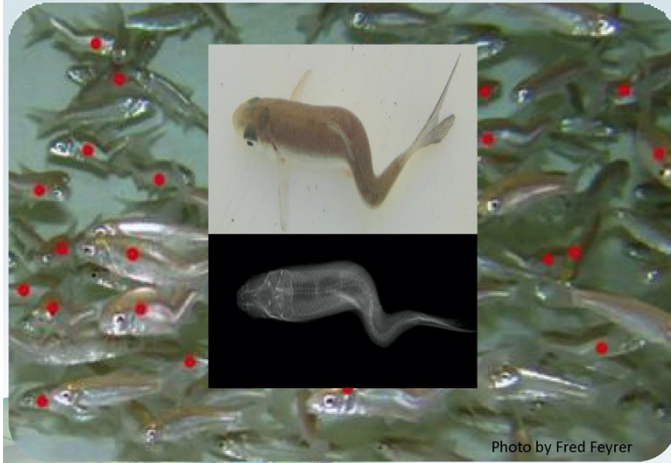
Studies by the US Geological Survey have documented elevated levels of selenium in the benthic clam food chain used by the Sacramento splittail and the federally listed green sturgeon.²³ Worthy of note is a photo from Dr. Rachel Johnson, provided to the Central Valley Regional Water Board and presented at the State of the Estuary Conference in 2019²⁴ depicting high numbers of Sacramento splittail (photographed in the Delta with an underwater camera in 2011) with spinal deformities (marked by red dots) typical of selenium contamination. As described in Stewart et al (2019), “*In the spring of 2011, young-of-year Splittail displaying a high incidence (>40%) of spinal deformities characteristic of Se toxicity were discovered at the site of a water diversion station in the San Joaquin Valley of the Delta (U.S. Department of the Interior, Bureau of Reclamation Tracy Fish Collection Facility).*” Dr. Johnson noted at the State of the Estuary conference that, “*It’s actually rare to actually see deformed animals in nature because usually something eats them, and so we wanted to take this opportunity to try and diagnose why it is that we had so many of these fish that had these deformities.*” Although the Sacramento splittail is not currently listed as threatened or endangered by the Federal or State government, they serve as an indicator species for species such as federally listed as threatened Green sturgeon²⁵ which feed on the same species of clam (Asian clam) as splittail.

²²https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/howard_brown.pdf

²³ See Stewart *et al*, Dec 7, 2019, *Resolving selenium exposure risk: Spatial, temporal, and tissue-specific variability of an endemic fish in a large, dynamic estuary* in Science of the Total Environment, available at: <https://www.sciencedirect.com/science/article/pii/S0048969719359145>

²⁴ See Mavens Notebook summary of Dr. Johnson’s presentation at the 2019 State of the Estuary Conference: <https://mavensnotebook.com/2019/12/05/state-of-estuary-standing-too-close-to-the-elephant-addressing-scales-in-restoration-and-fisheries-conservation/>

²⁵ <https://www.fisheries.noaa.gov/species/green-sturgeon>



R. Johnson, 22 Oct 2019 State of the Estuary Conference

Greater outflow of the San Joaquin River associated with CVP and SWP operations in the Delta could result in even further transport of selenium and sulfate from agricultural drainage discharges in the San Joaquin River and into the Delta (Lucas and Stewart 2007). Also, note the Lucas and Stewart (2007) discussion on seasonal trends of bivalve selenium concentrations in the North Delta and its relationship to the San Joaquin River, “*Several explanations for the temporal trends in bivalve Se concentrations (which did not exist in the 1980’s) are possible. One possibility is that refinery inputs of selenium have been replaced by San Joaquin River inputs. Models indicate that if SJR inflows to the Bay increase, as they may have in recent years with barrier management, particulate Se concentrations in the Bay could double, even with no increase in irrigation drainage inputs to the SJR. The fall increase in Se in C. amurensis also occurs during the time period when the ratio of SJR/Sac River inflow is highest. Further changes in water management could exacerbate these trends...*”.

Stormwater runoff from GBP and its upstream watershed can also contain elevated concentrations of mercury. Results from the CalFed Mercury study found elevated levels of mercury in fish from the lower San Joaquin River and Mud Slough (Davis et al. 2000; Slotton et al. 2000). A significant finding of the CalFed Mercury Study in the San Joaquin Basin was that Mud Slough contributes about 50% of the methylated mercury at Vernalis (legal boundary of the Delta), but only 10% of the water volume during the non-irrigation season (September to March) (Stephenson et. al., 2005).

Sulfate loading in the San Joaquin River from the GBP discharges in concert with Delta operations could result in downstream environmental impacts that should be considered in a full EIR/EIS. Sulfate reducing bacteria are the primary agents responsible for the methylation of mercury in aquatic ecosystems. Wood et al. (2006) found that sulfate concentrations are about seven times higher in the San Joaquin River than in the Sacramento River, and that addition of sulfate is predicted to stimulate methylmercury production when it is limiting. Two factors influencing sulfate concentrations in the Bay-Delta are the electrical conductivity (EC) and the ratio of San Joaquin River to Sacramento River water.

Since these impacts are potentially significant, an EIS must be prepared²⁶ along with a complete CEQA analysis to accurately inform decision-makers before allowing these pollutants to be spread downstream.

²⁶ See 40 C.F.R. § 1508.27(b)(9).

The 5 ppb Se water quality performance goal in Mud Slough and San Joaquin River upstream of Merced is not protective of downstream beneficial uses and public trust resources.

The 5 µg/L selenium water quality objective in the Basin Plan for Mud Slough (North) and the San Joaquin River from Sack Dam to Vernalis and referenced in the DEA and in Table 5.2 of Attachment A in the Tentative WDRs for the GBP Stormwater Plan is not protective of downstream beneficial uses including fish and wildlife resources that use those surface waterways. The USEPA in the 1990’s had proposed a 5 µg/L selenium water quality objective for California in the California Toxics Rule (CTR). Pursuant to the Endangered Species Act (ESA), and prior to the USEPA promulgating water quality objectives (including selenium) for the CTR, the USEPA was required to consult with the US Fish and Wildlife Service and the National Marine Fisheries Service (collectively, “Services”) and obtain the Services’ concurrence that none of the proposed criteria would jeopardize any ESA-listed species. Upon that review, the Services found that the 5 µg/L chronic criterion for selenium proposed by USEPA in the CTR would likely jeopardize 15 ESA-listed species (Emphasis added). To avoid a final “Jeopardy Opinion” from the Services, and the associated legal ramifications, the USEPA agreed to reevaluate their CWA criteria guidance for selenium by 2002 (FWS and NMFS 2000).²⁷

To comply with the Service’s 2000 Biological Opinion on the CTR, the USEPA in November 2018 proposed new water quality objectives for California (lentic and lotic water, and fish tissue) that would be protective of listed species: Federal Selenium Criteria for Aquatic Life and Aquatic Dependent Wildlife Applicable to California Docket RIN, 2040-AF79 EPA-HQ-OW-2018-0056 FRL-9989-46-OW. The USEPA’s proposed rule did not include waters within known selenium-contaminated geographical areas, including tributary flows into the San Francisco Bay Delta system such as, the San Joaquin River from Sack Dam to Vernalis, Mud Slough, Salt Slough, along with the water supply channels in the Grassland watershed, and the Grasslands Ecological Area in Fresno and Merced Counties. Instead, the USEPA proposed rule defers to existing State established water quality objectives for Mud Slough (North) and the San Joaquin River upstream of the Merced River of 5 µg/L 4-day average (as defined in the Regional Board’s June 2010 Basin Plan Amendment to address Selenium Control in the San Joaquin River Basin²⁸).

From page 30 of Attachment A for the Tentative WDRs:

Table 5.2: Selenium Numerical Objectives

4-day Average	Maximum	Location
5 µg/L	20 µg/L	Mud Slough (north) and the San Joaquin River from the Mud Slough confluence to the Merced River
5 µg/L	12 µg/L	San Joaquin River, mouth of the Merced River to Vernalis

The selenium objectives for Mud Slough and the San Joaquin River are not based on the current science of selenium toxicology and are not protective of beneficial uses. Both the Canadian government and the

²⁷ Final Biological Opinion on the effects of the U.S. Environmental Protection Agency's "Final Rule for the Promulgation of Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California (March 24,2000), available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0144&contentType=pdf>

²⁸ https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/sac_sj_basins_salinity_staffrpt.pdf

USEPA have established water quality criteria to protect aquatic life that are substantially lower than the 5 µg/L Basin Plan selenium objectives for Mud Slough and the San Joaquin River. Even the new EPA criteria are unlikely to be adequately protective. A recent Canadian study²⁹ concluded “that fish exposed to aqueous selenite concentrations at levels similar to the current CCME [Canadian Council of Ministers of the Environment] water quality guideline for the protection of aquatic life (1 µg /L) can exceed tissue guidelines for the protection of fish populations established by the USEPA and that there is potential for adverse effects particularly in developing embryos.” The authors also state: “*In Canada, Se bioaccumulation exceeding the toxicity threshold for fish tissues set by the USEPA and the BC MoE (there are currently no federal tissue-based guidelines in Canada) have been documented recently in areas downstream of coal, uranium, and metal mining operations, even in cases where aqueous selenium concentrations have not exceeded the current CCME guideline of 1 µg g/L (Muscatello et al. 2008; Kuchapski and Rasmussen 2015; Ponton and Hare 2015).*” In addition, USGS and USEPA recently reported on fish sampling downstream of Libby Dam in Montana, USA, where every sample of Mountain Whitefish ovaries had selenium concentrations were well in excess of EPA's new (2016) ovary tissue criterion, even though all water samples (along 100+ river miles of sampling) were at < 1.2 ppb selenium. Also, it was confirmed that the chemical form of selenium in that stretch is predominantly selenate, the same speciation of selenium present in the San Joaquin River watershed.

To comply with the Service’s 2000 Biological Opinion on the CTR, the USEPA in July 2016 proposed selenium water quality criteria that would be protective of federally-listed species in the San Francisco Bay Delta (Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta, State of California, Docket RIN 2040–AF61, EPA–HQ–OW–2015–0392; FRL–9946–01–OW). Supporting documentation for this USEPA Docket for Selenium in California includes 2 reports by USFWS: *Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries, for a list of species considered most at risk for selenium exposure in CA*³⁰ and *Species at Risk from Selenium Exposure in the San Francisco Estuary*³¹. The species identified at most risk for selenium exposure in the San Joaquin Valley and San Francisco Estuary were denoted as:

- Mammals: Buena Vista Lake Ornate Shrew;
- Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
- Reptiles: Giant Garter Snake;
- Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

²⁹ <https://www.ncbi.nlm.nih.gov/pubmed/31145497> *Distribution of Experimentally Added Selenium in a Boreal Lake Ecosystem Environ Toxicol Chem.* 2019 Sep;38(9):1954-1966. doi: 10.1002/etc.4508. Epub 2019 Jul 26. Pg 1955 and USGS and USEPA reported on fish sampling downstream of Libby Dam in Montana, USA, where every sample of Mountain Whitefish ovaries had Se concentrations well in excess of EPA's new (2016) ovary tissue criterion even though all water samples (along 100+ river miles of sampling) were at < 1.2 ppb Se. Also, it was confirmed that the chemical form of selenium in that stretch is predominantly selenate, the same speciation as in the San Joaquin River watershed.

See: <https://www.epa.gov/newsreleases/epa-and-partners-release-data-and-findings-kootenai-riversampling-effort>

See: <https://www.sciencebase.gov/catalog/item/5d3b6ef1e4b01d82ce8d7aef>

³⁰ <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0144&contentType=pdf>

³¹ <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0265&contentType=pdf>

The proposed GBP Stormwater Plan and DEA is seeking to comply with the selenium water quality objectives specified in the 2010 Basin Plan Amendment (5 µg/L, 4-day average), but the proposal is lax, allowing for high spikes of selenium contaminants that will bio-accumulate throughout the ecosystem. The Stormwater plan includes mitigation measures that establish a Mud Slough (North) water quality “goal” of 3 µg/L Se, 4-day average. For every 3 months that the drainers meet this 3 µg/L performance goal, one exceedance of 5 µg/L 4-day average is allowed. These goals and objectives would likely result in harm to aquatic fish and wildlife as denoted in the Service’s 2000 Biological Opinion on the CTR. We recommend that State and Federal Fish and Wildlife agencies be consulted on the effects of implementation of the GBP Stormwater Plan and relaxed standards that are not protective of migratory birds and endangered anadromous fish populations and that these consultations be included in a full EIS.

Short term spikes of selenium in a waterway can have longer lasting effects in an ecosystem. Beckon (2016) noted that when a bioaccumulative substance such as selenium is introduced into or removed from the environment, the processes by which it is assimilated into upper trophic levels of the ecosystem may be complex and prolonged. These processes include several levels of trophic transfer, each entailing the time required to consume food, assimilate the substance of interest, and the time span during which the organism continues to survive before being eaten by a member of the next higher trophic level. Beckon noted that for some species of piscivorous fish the lag time for selenium exposure to bioaccumulate in the upper trophic level of fish is over one year from the initial exposure. Thus, short-term exceedances of the 5 µg/L selenium objective can continue to have deleterious effects to the upper trophic level species several months to over a year after the event.

Our organizations have submitted several comment letters on protective selenium objectives in California.³² In March 2019, PCFFA and others provided comments to the USEPA on their proposed selenium criteria for California.³³ We recommended that a chronic, legally binding selenium objective of no greater than 2 µg/L (4-day average) be included in the GBP Stormwater Plan for receiving waters of stormwater/drainage discharges. That comports with the recommendations of several experts that the criterion should be 2 µg/L or less (DuBowy 1989; Lemly and Skorupa 2007; Peterson and Nebeker 1992; Swift 2002). Exceeding the water criterion should trigger additional biological monitoring to determine if the tissue criteria for selenium proposed by USEPA has also been exceeded. Allowing higher contaminant levels would require reinitiation of consultation under the State and Federal Endangered Species Acts.

Environmental Assessment of the Use Permit & Continued Pollution Discharges Must Consider Effects GBP Discharges on Compliance with USEPAs Proposed Selenium Criteria for The Bay-Delta Estuary.

On July 15, 2016, the USEPA proposed selenium water quality criteria applicable to the San Francisco Bay and Delta to ensure that the criteria are set at levels that protect aquatic life and aquatic-dependent wildlife, including federally listed threatened and endangered species. Establishment of Revised Numeric

³² See <http://calsport.org/news/wp-content/uploads/EPA-Selenium-Cmt-LTR-Re-Docket-No.-EPA-HQ-OW-20040019.pdf> and <http://calsport.org/news/wp-content/uploads/Technical-Review-2004-EPAs-Draft-Tissue-BasedSelenium-Criterion.pdf>

³³ Coalition comments of environmental, fishing and environmental justice organizations oppose U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. <http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf>

Criteria for Selenium for the San Francisco Bay and Delta, State of California, Docket RIN 2040–AF61, EPA–HQ–OW–2015–0392; FRL–9946–01–OW.³⁴ The USEPA proposed rule established selenium criteria based on fish tissue values, prey (clam) tissue values, and dissolved and particulate water column values. As USEPA noted in their technical support document for the proposed selenium criteria, “Since the most significant exposure pathway of selenium to species of concern in the San Francisco Bay and Delta is through diet, the currently applicable criteria for selenium from the NTR [5 µg/L] no longer adequately protect species in the estuary.”

The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta, including the Carquinez Straits, Suisun Marsh, and Sacramento-San Joaquin Delta, are listed as impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).³⁵ Sources of selenium contamination include agricultural drainage from the Central Valley and effluent discharges from oil refineries (Linares et al 2015; Presser and Luoma 2010). Several endemic species are listed under the ESA as threatened or endangered, including green sturgeon, Chinook salmon, steelhead trout, delta smelt, and the California Ridgway’s rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters. The USEPA noted on page 46036 of the Federal Register Notice 81(36) that “[t]he analyses to develop the fish tissue and the avian egg tissue benchmarks used in the modeling, and the modeling results used to derive the proposed water column criteria, indicate the health of these species would be negatively impacted from exposure to selenium water column concentrations above 0.2 µg /L, which would be allowed to occur under the existing NTR selenium criterion of 5.0 µg /L. Accordingly, EPA finds that it is necessary to propose revised and more protective criteria for selenium in order to help ensure the continued protection of these vulnerable species and associated designated uses.”

Our organizations submitted comments to USEPA on the proposed selenium water quality and tissue criteria for the Bay Delta supporting more protective water quality criteria and hereby incorporate those comments by reference.³⁶ Reclamation should consider how the selenium discharges allowed in the DEA GBP will affect the Bay-Delta ecosystem and could affect compliance with EPA’s proposed water quality criteria for San Francisco Bay and Delta. The 5.0 µg /L Basin Plan selenium objective for Mud Slough and the San Joaquin River will result in non-compliance with proposed water quality criteria and cause deleterious effects to fish and wildlife in the Bay-Delta.

³⁴ Available at <https://www.federalregister.gov/documents/2016/07/15/2016-16266/water-quality-standards-establishment-of-revised-numeric-criteria-for-selenium-for-the-san-francisco>

³⁵ Available at https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

³⁶ Coalition comments of environmental, fishing and environmental justice organizations on EPA’s Water Quality Standards for the Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta. October 28, 2016. Available at: <https://www.regulations.gov/document?D=EPA-HQ-OW-2015-0392-0246>

Table 2. Proposed Selenium Water Quality Criteria for the San Francisco Bay and Delta

Media Type	Tissue		Water Column ¹		
			Dissolved		Particulate
Criteria	Fish Whole Body or Muscle	Clam	Chronic	Intermittent Exposure ²	Chronic
Magnitude	8.5 µg/g dw whole body or 11.3 µg/g dw muscle	15 µg/g dw	0.2 µg/L	$WQC_{int} = \frac{0.2 \mu\text{g/L} - C_{bkgrnd}(1 - f_{int})}{f_{int}}$	1 µg/g dw
Duration	Instantaneous measurement	Instantaneous measurement	30 days	Number of days/month with an elevated concentration	30 days
Frequency	Not to be exceeded	Not to be exceeded	Not more than once in three years	Not more than once in three years	Not more than once in three years

¹ Dissolved and particulate water column values are based on total selenium (includes all oxidation states, i.e., selenite, selenate, organic selenium and any other forms) in water.

² Where C_{bkgrnd} is the average background selenium concentration in µg/L, and f_{int} is the fraction of any 30-day period during which elevated selenium concentrations occur, with f_{int} assigned a value ≥ 0.033 (corresponding to one day).

Effects on Drinking Water Supplies in the Delta Need to be Disclosed and Analyzed.

The Contra Costa Water Agency in their oral comments to the Regional Board on the GBP WDR on December 5, 2019 also voiced concerns over increases in salinity from GBP discharges. Contra Costa WA pumps their drinking water from the south Delta and increases in EC(salinity) can have real deleterious effects to their drinking water supply, and these effects should be addressed in a full EIS.

Electrical conductivity (EC) at Station R was as high as 4,000 µs/cm in 2015 and 1,700 µs/cm in 2018, exceeding the 1,600 µs/cm EC objective in Basin Plan.

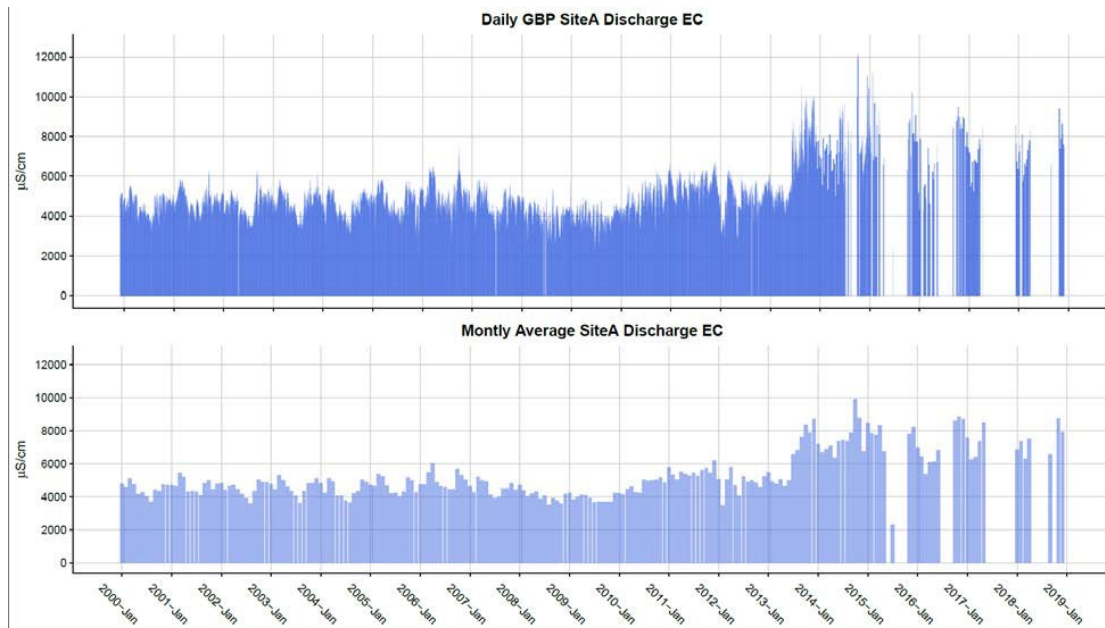


Figure 1 Electrical conductivity (EC) of discharges from Grassland Bypass Project (GBP) (2000 – 2019)

The Proposed and Existing Monitoring and Reporting Programs for the GBP are not sufficient to assess Environmental Impacts and Protect Beneficial Uses.

The GBP monitoring and reporting program was revised by USBR³⁷ in violation of the terms of the current San Luis Drain Use Agreement contract which states on @ pg 19-20 of Appendix A of the Final GBP EIS/R: “*The monitoring program shall consist of the monitoring program established by the parties during the 2001 Use Agreement, as such program may be modified by the parties after consultation with the agencies represented by the Oversight Committee. The Oversight Committee in consultation with the AUTHORITY shall resolve disagreement as to proposed modifications.*”³⁸ The Oversight Committee was never convened to address the concerns raised by USFWS and submitted to the Regional Board (discussed below). Further in violation of Federal Advisory Management Committee rules, despite requests for notification and participation, the public was excluded from the few meetings of Data Technical Group that were held along with the Oversight Committee.

The monitoring and reporting requirements for GBP were revised by the Regional Board in 2015³⁹ without compliance with the current Use Agreement contract provisions. These monitoring revisions are not adequate to determine the level of pollution being discharged by the GBP and adjacent agricultural lands, and the harm it is causing to the environment. We have provided comments three times on the inadequacies of the Revised Monitoring and Reporting Program for the GBP. We hereby incorporate by reference our coalition letters of August 11, 2011, April 22, 2013, and November 26, 2013, and June 22, 2015. We also refer to comments submitted to the Regional Board by USFWS on the Revised Monitoring

³⁷ See https://www.usbr.gov/mp/grassland/documents/gbp_2013_rev_mon_plan.pdf

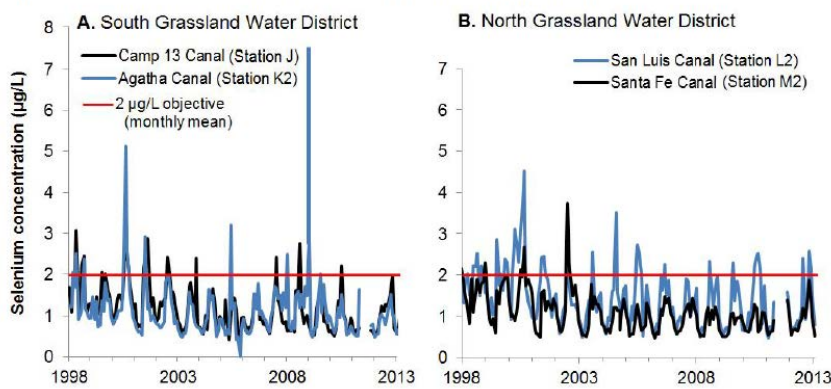
³⁸ See Appendix A, Agreement for Continued Use of the San Luis Drain for the Period January 1, 2010 through December 31, 2019 available at: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=3513

³⁹ https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/fresno/r5-2015-0094.pdf

and Reporting Program for the GBP dated June 22, 2015 and June 25, 2015.⁴⁰ The USFWS recommended that the Regional Board reinstate weekly water quality monitoring for selenium at GBP Stations J, K, and L2 as exceedences of 2 µg/L are still occurring in those wetland channels, those channels are listed on the State's 303(d) list as impaired for selenium, and elevated selenium in those channels could be resulting in harm to federally listed species.

Absent compliance with the existing Use Agreement, as part of Regional Board **ORDER R5-2015-0094**, Waste Discharge Requirements for the GBP (2015 WDR), sampling frequencies for Mud Slough, Grasslands wetland channels, and Salt Slough were reduced or completely eliminated. Stations A, B, C, I2, F, J, K, L/L2, M/M2, G and H have all been eliminated from required monitoring. The Grasslands Marshes (wetland supply channels) remain on the 303(d) list as impaired for selenium, so reducing water quality monitoring in these channels to only during stormwater events is inexplicable. As denoted in Figure 12 of Attachment A to the Tentative WDRs for the GBP Stormwater Plan, significant spikes of selenium above water quality objectives in the Grasslands wetland channels were still being documented up through 2013 when monitoring in those channels ended.⁴¹

Figure 12: Selenium Concentrations in Wetland Supply Channels



In 2002 the Regional Board issued a report reviewing selenium concentrations in the Grasslands wetland water supply channels (Eppinger and Chilcott 2002). This report documented sources of selenium contamination in these channels that are not being monitored or addressed by the GBP:

⁴⁰https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_usfws.pdf and see this link for a copy of the USFWS letter to Ms. Margaret Wong Regional Water Quality Control Board, Central Valley Region: USFWS Comments on the May 2015 Draft Waste Discharge Requirements for the Surface Water Discharges from the Grassland Bypass Project and the Discharges to Groundwater from the Growers in the Grassland Drainage Area @ <http://calsport.org/news/wpcontent/uploads/Exhibit-5.pdf>

⁴¹Available at these links:

https://www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders/grassland/r5-2015-0094-01_tent_wdr.pdf
https://www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders/grassland/r5-2015-0094-01_tentwdr_noph.pdf

"Two areas have been identified where agricultural subsurface drainage can enter wetland water supply canals from farmland not contained in the DPA [Grasslands Drainage Area]. One area is west of the wetland water supply channels and historically drained into the Almond Drive Drain. Since Water Year 1999, these discharges have been collected in the CCID Main Drain and diverted into the CCID Main Canal downstream of internal supply channels. Data for Water Years 1999 and 2000 is not available for the Almond Drain site.

The second area where agricultural subsurface drainage can enter wetland water supply canals from outside the DPA is a triangle-shaped area of approximately 7,000 acres south of the Poso Drain (also known as the Rice Drain) and north of the DPA. This area historically drained into the Poso Drain, entering South Grassland Water District from the east. Three sites on the Poso (Rice) Drain were monitored for selenium during Water Years 1999 and 2000. Selenium concentrations at all three sites were above 2 ug/L a majority of the time, though a change in tail water management after June 1999 has apparently helped to reduce and stabilize concentrations...

During Water Year 1999, selenium concentrations in the Poso Drain were highly variable with concentrations at the upstream Russell Boulevard site ranging from <2 ug/L to 39 ug/L and concentrations at the downstream site (Mallard Road) ranging from <2 ug/L to 24 ug/L...After June 1999, more tail water was discharged through the Rice [Poso] Drain at Russell...Mean selenium concentrations continued to remain above 2 ug/L at all the Rice Drain sites."

The 2009 EIS/R for the GBP noted the following with respect to these lands that continue to discharge drainage directly into the Grassland wetland supply channels that are outside of the DPA:

"The GDA does not include the lands that are described, and they are not under the jurisdiction of the Grassland Basin Drainers (GBD). Additionally, the GBD have no authority to compel these lands to become part of the GBP. However, the GBD will work with the landowners in the areas described to encourage management of drain waters that may contain selenium that is entering wetland supply channels and specifically will work with the 1,100 acres of lands that are identified as lands that "... could be annexed to the GDA."

Unfortunately, nothing has been done to bring these lands into the jurisdiction of the GBP and they are not included in the DEA or the GBP Stormwater Plan. With the exception of stormwater events, these sources of drainage-water contamination in wetland supply channels are currently not being regulated or monitored. The additive effects of these uncontrolled discharges on Salt Slough and the San Joaquin River need to be considered together with the effects of the San Luis Drain discharges to Mud Slough as allowed in the Use Agreement.

In addition, we specifically protested the change in the Hills Ferry monitoring site (Site H) to China Island (Site R). There is a comprehensive database with documented selenium water quality violations at Hills Ferry. Site R appears closer to the mouth of the Merced River than Site H, allowing for greater dilution and underrepresenting the contaminant threat in the San Joaquin River upstream of the Merced River.

We also opposed Reclamation's changes to the GBP monitoring and reporting program in 2013 and recommended a more robust monitoring plan similar to the required 2001 GBP monitoring requirements under the existing use agreement. The reduction in monitoring frequency and locations will prevent the collection of necessary data sufficient to protect public trust values, endangered species and evaluate compliance with water quality standards. Here we reference and reiterate our previous comments and recommend a vigorous monitoring program that does not hide or understate the discharge of selenium and other toxins through stormwater discharges into Mud Slough and the San Joaquin River.

We further recommend that monitoring and reporting for total mercury and methyl-mercury concentrations in water and biotic tissue be required at all sampling locations of the GBP to establish a mass-balance of sources of mercury in this watershed.

The DEA fails to Disclose All the Sources and Impacts of the Proposed Discharges into San Luis Drain

The DEA only assesses the effects of GBP discharges into the San Luis Drain. The GBP's San Joaquin River Improvement Project (SJRIP) drainage reuse area and proposed expansion and proposed stormwater detention basins in the GBP Stormwater Plan are inexplicably excluded from the scope of the DEA. Reclamation arbitrarily eliminated the SJRIP and stormwater detention basins from their analysis in the DEA, even though the SJRIP has been part of previous GBP NEPA reviews. Although the GBP drainers are receiving State funds to implement some improvements at the SJRIP, Reclamation continues to fund drainage activities through contract agreements⁴², and USBR is obligated to provide drainage service through the CVP water contracts. Further, six drainage sumps that historically discharged drainage into the Delta Mendota Canal were diverted to be managed in the SJRIP. This action is included in a License to Panoche Drainage District to connect the Firebaugh Sumps to the SJRIP⁴³ and is an included activity as part of the San Luis and Delta Mendota Water Authority's Operations and Maintenance Activities on federal facilities.⁴⁴

The proposed GBP Stormwater Plan includes use of an unspecified acreage of existing ponds and the addition of up to 200 acres of stormwater detention basins (regulating reservoirs) to store and regulate disposal or distribution of stormwater. How is such a basin different from an evaporation pond? Proposed use of regulating ponds to help control flow as a part of the engineered reuse system and ponding during flood events in the GBP area also may create a potential wildlife exposure risk similar to those originally realized at Kesterson National Wildlife Refuge (Presser and Ohlendorf, 1987). Ponding of stormwater and agricultural drainage will support an aquatic food chain and be attractive hazard to birds within a short period of time.

Selenium poses a hazard to fish and wildlife because of its toxicity at environmentally relevant concentrations and its tendency to accumulate in food chains (Skorupa, 1998). The San Joaquin Valley provides critically important habitat for wintering waterfowl of the Pacific Flyway. Eight to twelve million ducks and geese, along with hundreds of thousands of shorebirds and other marsh birds annually winter or pass through the valley. The history of the ecological impacts of disposal of selenium at Kesterson National Wildlife Refuge within the valley is well documented (e.g., Presser and Ohlendorf, 1987; SJVDP, 1990a, b). Additionally, from 1986 to 1993, the National Irrigation Water-Quality Program (NIWQP) of the U.S. Department of the Interior (USDOI) studied whether contamination was induced by irrigation drainage in 26 areas of the western United States. This program developed guidelines to interpret effects on biota of selenium (USDOI, 1998). These guidelines, along with revisions based on more recent studies and modeling, can be used to interpret and guide management and mitigation of the

⁴² See Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.

⁴³ See https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=18761

⁴⁴ See <https://www.usbr.gov/mp/sccao/water-contracting.html>

risk of selenium in food chains and wildlife.⁴⁵ The GBP reuse areas present opportunities for wildlife use and selenium exposure. Proposed use of regulating ponds to help control flow as a part of the engineered reuse system and ponding during stormwater events in the GBP area also may create a potential wildlife exposure risk similar to those originally realized at Kesterson National Wildlife Refuge⁴⁶ (Presser and Ohlendorf, 1987).

The GBP has been monitoring and reporting annual bird use from April thru June at the SJRIP drainage reuse area since 2008. Many of those reports are posted on the SFEI website, however, no reports have been posted since the 2015 report. We note that additional reports were made available during the public comment period at this website.⁴⁷

The 2017 wildlife monitoring report for the GBP drainage reuse area (SJRIP) documented 50 avian species were observed at the drainage reuse area between April 13 and June 21, 2017. Eighteen species either were observed nesting or were suspected of nesting, including Swainson's hawk, a species listed by the State of California as a threatened. Twelve of the species observed—spotted sandpiper, least sandpiper, whimbrel, western wood-peewee, willow flycatcher, American pipit, savannah sparrow, White-crowned sparrow, common yellowthroat, yellow warbler, Wilson's warbler, and western tanager—were present only as spring Migrants.⁴⁸

The 2019 CEQA Addendum for the GBP Stormwater Plan notes that the filling of these stormwater detention basins will begin with the first significant storm (typically December), and basins will be emptied by May. So, the potential is that stormwater commingled with drainage water will be stored in basins for up to 6 months! If these basins will hold water longer than 30 days, a state water permit is required (CCR, Title 23, Sec. 657-658). As described in Skorupa et al (2004), low winter temperatures substantively increase the toxicity of dietary selenium to birds, fish, and mammals (referred to as winter stress). And the SJRIP wildlife monitoring reports do document use of the drainage reuse area by a large number of avian species (50 in 2017), including twelve species that are spring migrants.

It appears evident that there is a federal nexus to the SJRIP and associated drainage activities. We recommend, therefore, that the effects of disposal of selenium in the SJRIP and stormwater detention basins be included in a full EIS analysis. Such an analysis should include an assessment of the effects of selenium exposure and associated winter stress to migratory birds using the SJRIP or detention basins.

NEPA Compliance Demands Biological Monitoring Requirements, Performance Standards, and Enforcement and Mitigation Provisions for Disposal of Agricultural Drainage at the SJRIP Reuse Area and Stormwater Detention Basins.

The GBP Stormwater Plan EIR Addendum includes a proposed expansion of the existing drainage reuse area from 6,100 acres analyzed in the 2009 EIR/EIS to 7,550 acres of reuse area and increase in acreage of 1,450 acres. The addition of acreage was not analyzed in the 2009 EIR/EIS. Reuse of polluted drainage in reuse areas does not eliminate the loading of wastes. It simply stockpiles wastes on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into salted up

⁴⁵ See <https://pubs.usgs.gov/pp/p1646/>

⁴⁶ See <https://pubs.usgs.gov/of/2008/1210/>

⁴⁷ <http://www.summerseng.com/grasslandbypassproject.htm>

⁴⁸ <https://drive.google.com/file/d/1mudCtShFmoQ-RW0YJaVF2-oia2TIXqn5/view>

wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to permanent fallowing of more and more land.

One significant environmental concern at the SJRIP is ponding of seleniferous drainage water within the fields of the reuse area. The GBP Stormwater Plan EIR addendum includes mention of a contingency plan in the event of inadvertent flooding, but only a reference to the plan, not the plan itself, is included in the EIR Addendum. Bird use, already showing impacts under current acreage, would increase in the vicinity of the SJRIP with the addition of stormwater detention basins. This expansion of the SJRIP should be included as part of the proposed action in a full EIS for the Use Agreement.

The GBP SJRIP reuse area already poses exposure risks to wildlife from selenium exposure. The use of regulating ponds to help control flow as a part of the engineered reuse system and ponding during stormwater events in the GBP area also creates a potential wildlife exposure risk similar to those originally realized at Kesterson National Wildlife Refuge (Presser and Ohlendorf, 1987).⁴⁹

Further, the 2017 SJRIP Wildlife Monitoring Report noted that the mitigation site for the SJRIP, which was supposed to provide compensation for avian exposure at the SJRIP, documented extremely elevated selenium concentrations in some bird eggs collected there. This suggests that the mitigation site is not providing compensation benefit for the SJRIP and also highlights the breadth of selenium contamination and wildlife exposure in this area.⁵⁰

Table 5. Selenium Concentrations in Recurvirostrid Eggs from the Mitigation Site in 2017

ID Number	Field Number ¹	Date	Embryo ²		Embryo Age (days)	Selenium (ppm, dry wt) ³	Log	
			Condition	Status			Base 10	Anti-Log
Black-Necked Stilt								
PM-01	MS-01	June 9	U	U	1	3.74	0.5729	
PM-02	MS-02	June 9	L	N	13	4.52	0.6551	
PM-03	MS-03	June 9	U	U	1	5.54	0.7435	
American Avocet								
PM-04	MA-01	June 9	L	N	9	51.1	1.7081	
PM-05	MA-02	June 9	U	U	1	8.7	0.9395	
Arithmetic/geometric mean						14.7	0.9238	8.4
Standard deviation						20.4	0.4591	2.9
Standard error							0.2053	1.6
Lower limit of 95% confidence interval							0.5214	3.3
Upper limit of 95% confidence interval							1.3263	21.2

¹ See Appendix H.

² L = live; N = normal; U = unknown.

³ ppm, dry wt = parts per million dry weight.

⁴⁹ Available at: <https://pubs.usgs.gov/of/2008/1210/> *Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California* by Theresa S. Presser and Steven E. Schwarzbach, U.S. Geological Survey Open-File Report 2008-1210 version 1.0.

⁵⁰ *Ibid.* page 20.

NEPA Demands Full Disclosure of Treatment Methods that Have Not Operated Effectively.

The 2006 EIS for SLDFR and the 2009 EIR/EIS for the GBP included treatment as a significant component of the plan to manage drainage and reduce brine volumes to be discharged or disposed of. Reclamation has promoted and funded drainage treatment solutions for decades with repeated operational failures and unreliable results. Both the 2006 SLDFR EIS and the 2009 GBP EIS/R included a bio-treatment plant to reduce the selenium load being discharged, and to ultimately achieve zero discharge of agricultural drainage to the San Luis Drain and San Joaquin River.

In 2012, construction began of the SLDFR Demonstration Treatment Plant (Demo-Plant) in Panoche Drainage District. The purpose of the Demo-Plant was to demonstrate and operate water treatment processes to collect cost and performance data for the design of a full-scale water treatment facility to be constructed in Westlands. The Demo-Plant was completed in 2014 but did not operate consistently due to operational failures and faulty design. The treatment plant has yet to become operational.⁵¹

The Department of Interior's Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant.⁵² The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational performance criteria. In addition, the USBR was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, USBR spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals. Warned of fraud, the Inspector General found that "work at the "pilot" Demo-Plant included: "invalid single audits, conflicts of interest with key personnel, a general absence of project oversight, and questionable use of a cooperative agreement as the legal instrument." The Inspector General also raised federal fraudulent funding issues, stating: "*We also question how and why the project grew from a pilot-scale \$15 million demonstration and research and development plant to a full-size \$37 million plant. Further, we have been told that the costs to operate and maintain the plant could outweigh the benefits of the treated water produced.*"⁵³

All action alternatives in the SLDFR FEIS included bio-treatment and reverse osmosis treatment as a large part of the schematic to manage drainage for the San Luis Unit. Since the Demo-Plant has yet to work reliably, the viability and costs of the drainage plans put forth in the SLDFR ROD and in the GBP Stormwater Plan are questionable. Without treatment, how will drainage volumes and selenium loads be managed into the future?

Upper Watershed Selenium Monitoring System Never was Implemented in Violation of the Current Use Agreement.

Appendix G of the 2010 Use Agreement @ pg 42 references an "Upper Watershed Exemption" that requires an "Upper Watershed Selenium Monitoring System". The Use Agreement stipulates that "no amount of discharge will be exempted pursuant to Appendix G until an Upper Watershed Selenium Monitoring System has been developed as described in this Appendix and submitted to and approved by

⁵¹ Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.

⁵² See <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luis-demonstration-treatment-plant>

⁵³ See https://www.doioig.gov/sites/doioig.gov/files/ManagementAdvisory_ProposedModification_112717.pdf

the Oversight Committee.” Yet the Oversight Committee has not met in over a decade, and there is no mention of this Upper Watershed Selenium Monitoring System in the WDR.

Long term viability and legality of GBP Drainers' Proposed Actions.

The DEA authorizing 10 years of adding the discharge of polluted stormwater raises questions regarding the long-term viability of the actions proposed in the GBP Stormwater Plan. The 2009 EIR/EIS relied on unproven treatment technologies to treat and reduce the volume of drainage from the GBP that would need to be disposed of. These treatment technologies have yet to prove reliable or cost effective. Without treatment, how will drainage volumes and selenium loads be managed at the SJRIP? Can the SJRIP remain viable after 25 additional years (the time period considered in the GBP Stormwater Plan EIR Addendum) of irrigation with selenium and salt-laden drainage? What is the life of the reuse area before too much salt accumulation prevents future agricultural use? Where is the selenium and salt that is accumulated in the SJRIP ultimately disposed of? All of these questions need to be evaluated in a full EIR/EIS. Dubbed a treatment area, the SJRIP is looking more and more like an unpermitted selenium and salt disposal facility.

Reuse of polluted drainage in the GBP’s SJRIP drainage reuse area won’t eliminate the loading of wastes. It is simply stockpiling wastes on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to having to permanently fallow more and more land.

Land Retirement is the Most Effective Management Strategy.

Our organizations have previously submitted comments to the Regional Board about the success of land retirement in relation to the GBP’s drainage volume load reductions.⁵⁴ The USBR’s 2004 Broadview Water Contract Assignment Draft Environmental Assessment cites Summer’s Engineering as predicting a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year from the cessation of irrigation on 9,200 acres of agricultural land in Broadview Water District as per Table 4-1 below (USBR 2004). This amounts to a per acre reduction of 0.28 AF of drainage, 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of boron.

**TABLE 4-1
DRAINAGE AND WATER QUALITY EFFECTS OF PROPOSED ACTION ON THE
SAN JOAQUIN RIVER**

	Existing Conditions	Under Proposed Action Conditions	Estimated Reduction Attributable to Proposed Action
BWD Drainage to San Joaquin River (afy)	3,700	1,100	2,600
BWD Estimated Salt Production (tons/yr)	24,300	7,300	17,000
BWD Estimated Selenium Production (lbs/yr)	2,140	640	1,500
BWD Estimated Boron Production (lbs/yr)	74,000	22,000	52,000

Source: Summers Engineering, 2003

⁵⁴ See Coalition letter to CVRWQCB on Selenium Basin Plan Amendment, April 26, 2010, p 15-16; available at http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf, and Coalition letter to Karl Longley on Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements: available at <http://calsport.org/news/wp-content/uploads/Coalitionresponse-letter-to-Longley-re-gbpland-retirement.pdf>.

Land retirement likely accounted for most of the reductions in selenium, and the majority of reductions in drainage volume, boron, and salt claimed by the Grasslands Bypass Project in the 2009 EIR/EIS.

The USEPA, in a letter regarding the Bay Delta Conservation Plan,⁵⁵ strongly recommended the USBR’s Land Retirement Program be revived to save water and prevent further selenium contamination and impacts to endangered species (page 13):

***Recommendations:** To mitigate for the project’s impacts to selenium levels in the estuary as a result of the BDCP operations, consider reviving and funding the Bureau of Reclamation’s Land Retirement Program¹⁷ to remove from cultivation and irrigation large areas of selenium laden lands on the West side of the San Joaquin Valley. This would save irrigation water, reduce discharges of selenium into the San Joaquin River basin, and advance attainment of selenium reduction targets¹⁸ set by EPA and the Central Valley Regional Water Quality Control Board. Evaluate the extent to which restoration of these “retired” lands to the native plant community could also contribute to the recovery of threatened and endangered plants and animals listed by FWS. Consider analyzing the cost/benefit of implementing treatment technologies vs. land retirement. Although cost/benefit analyses are not required under NEPA, such an analysis may be useful to decision makers and the public in this case.”*

Further, the USBR’s San Luis Drainage Feature Re-Evaluation (SLDFRE) Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit. Three land alternatives were evaluated in the SLDFRE EIS, 306,000 acres, 194,000 acres and 100,000 acres, respectively. The Final EIS found that the only environmentally and economically preferred alternative was to retire 306,000 acres (In-Valley/Drainage Impaired Area Land Retirement).⁵⁶ It’s clear from the NED findings in Table N-10 below that additional land retirement would provide increased net economic benefits.

**Table N-10
Benefit/Cost Summary
Changes Relative to the No Action Alternative (\$/year in 2050)**

Subarea	In-Valley Disposal	Out-of-Valley Disposal	In-Valley/ Groundwater Quality Land Retirement	In-Valley/ Water Needs Land Retirement	In-Valley/ Drainage-Impaired Area Land Retirement
Total NED Benefit	\$37,962,000	\$38,430,000	\$31,164,000	\$20,629,000	\$9,931,000
Total NED Cost	51,225,000	51,370,000	46,767,000	30,778,000	6,288,000
Net NED Benefit	-\$13,263,000	-\$12,940,000	-\$15,603,000	-\$10,149,000	\$3,643,000

Notes:

Values represent net NED benefits relative to No Action.

Values rounded to nearest \$1,000. Totals may not add due to rounding.

Moreover, the US Fish and Wildlife Service, in their Fish and Wildlife Coordination Act Report (FWCAR) for SLDFRE, recommended that all of the northerly area within the San Luis Unit (GBP Drainage Area) be retired as well,⁵⁷ though USBR did not consider that alternative. The Service concluded on page 67 of the FWCAR that, “[t]o avoid and minimize risks and effects to fish and wildlife

⁵⁵ Available at <http://calsport.org/news/wp-content/uploads/bay-delta-conservation-plan-deis.pdf>.

⁵⁶ SLDFRE Final EIS, Appendix N, Table N-10, page N-17, accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2240

⁵⁷ SLDFRE Final EIS, Appendix M, USFWS FWCAR, accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236

resources in the San Joaquin Valley and Pacific Flyway, the Service recommends land retirement on all drainage impaired lands in the SLU. This approach would maximize the elimination of drainage at its source, and therefore avoidance of adverse fish and wildlife effects.”

By ignoring permanent land retirement and the associated benefits of reducing water exports to these toxic soils, the DEA, and GBP Stormwater Plan Addendum and associated Tentative WDRs will continue to kick the can down the road and concentrate and store salt, selenium, boron and other toxic substances in the shallow aquifers of the Grasslands area. This creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River, and the Bay-Delta estuary, especially in wetter years.

Conclusion

We urge that all polluted discharges of agricultural drainwater and stormwater cease as required under the 2009 GBP EIS/R. We recommend land retirement and curtailing the importation of additional water supplies that mobilize these contaminants on the west side of the Southern San Joaquin Valley. Despite repeated promises, no viable treatment has been developed in the more than two decades. Before proceeding to load even more contaminants on downstream beneficial uses, we recommend no new Use Agreement for the San Luis Drain authorizing further discharges of either stormwater, agricultural drainage, or contaminated groundwater be permitted until a full EIS/EIR be completed. That EIS/EIR should include:

- A copy of the new Use Agreement for the San Luis Drain;
- Copies of the ESA consultations from NMFS and USFWS;
- Expansion of the scope of the proposed action to include drainage management activities at the SJRIP and stormwater detention basins;
- A National Pollutant Discharge System Permit prior to any additional use of the federal San Luis drain for discharge of contaminants from the west side into the San Joaquin River and Delta Estuary;
- A comprehensive cumulative effects analysis of stormwater and drainage disposal into Mud Slough and the San Joaquin River and Delta Estuary;
- A chronic, legally binding selenium objective of no greater than 2 µg/L (4-day average) for receiving waters of stormwater/drainage discharges;
- No exceedance of the 2 µg/L selenium water criterion should be allowed. If it is exceeded, enforcement mechanisms should trigger all discharges to cease and require additional biological monitoring to determine if there are downstream effects to meeting tissue criteria for selenium proposed by USEPA in 2016 (for the Bay Delta);
- An analysis of effects to wildlife, including factors such as winter stress, of disposal of selenium in the SJRIP and stormwater detention basins;
- Environmental commitments that include biological monitoring, performance standards, consequences if those performance standards are exceeded, and mitigation provisions for disposal of agricultural drainage at the SJRIP reuse area and stormwater detention basins;
- A description of the status and viability of drainage treatment at the SJRIP;
- A description and evaluation of the long-term viability of drainage disposal strategies at the SJRIP and a description of where salt, selenium, and other contaminants accumulate and are ultimately disposed of. This should not become an unregulated dumping ground for west-side contaminants.

Finally, Congress in its authorization of the San Luis Unit in 1960 never envisioned use of the

San Luis Drain for stormwater discharge. Congress provided its authorization under specified conditions, including approval by the State of California⁵⁸ for “...provision for constructing the San Luis interceptor drain to the Delta designed to meet the drainage requirements of the San Luis unit...” *Senate Report No 154, page 2, San Luis Unit, Central Valley Project, California, April 8, 1959.*⁵⁹ This brings into question whether the “Drain” can be legally used for storm water discharge without Congressional approval. And further Section 3404 of the Central Valley Project Improvement Act requires the Secretary to administer all existing, new and renewed contracts in conformance with the requirements and goals of the CVPIA. A full NEPA review is required along with mitigation measures and adherence to water quality standards to protect fish and wildlife.

The use of the federal San Luis Drain for stormwater also raises consistency questions with existing State Board orders. The California State Water Resources Control Board (SWRCB 1985), following the Kesterson debacle, issued its Order WQ 85-1 in February 1985. The SWRCB found that agricultural drainage and wastewater reaching Kesterson Reservoir “is creating and threatening to create conditions of pollution and nuisance” (Emphasis added). The Order then warned, “[i]f the Bureau closes Kesterson Reservoir and continues to supply irrigation water to Westlands Water District without implementing an adequate disposal option, continued irrigation in the affected area of Westlands Water District could constitute an unreasonable use of water” (Emphasis added). We urge Reclamation to not repeat the mistakes made at Kesterson Reservoir in the 1980’s. The continued irrigation of toxic soils in the GBP area constitutes an unreasonable use of water and continued and future disposal of agricultural drainage in ponds, on land, and in surface waters will cause significant harm to public trust resources and violates non-degradation policies.

Thank you for your consideration,



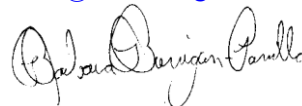
Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen’s Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
noah@ifrfish.org



John McManus
President
Golden State Salmon Association
john@goldengatesalmon.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restoredelta.org

⁵⁸ See PL86-488 San Luis Act June 3, 1960: Proviso: (2) *received satisfactory assurance from the State of California that it will make provision for a master drainage outlet and disposal channel for the San Joaquin Valley,which will adequately serve, by connection therewith, the drainage system for the San Luis unit or has made provision for constructing the San Luis interceptor drain to the delta designed to meet the drainage requirements of the San Luis unit as generally outlined in the report of the Department of the Interior, entitled "San Luis Unit, Central Valley Project," dated December 17, 1956.* The State of California has not made such a provision and Congress never consider the use of the drain for stormwater.

⁵⁹ See H. Rpt 399, available at <http://calsport.org/news/wp-content/uploads/Exhibit-3.pdf> S. Rpt 154...<http://calsport.org/news/wp-content/uploads/Exhibit-4.pdf>.



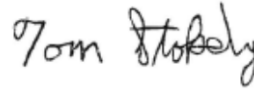
Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Lowell Ashbaugh
Conservation Chair
The Fly Fishers of Davis
ashbaugh.lowell@gmail.com



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.com)
connere@gmail.com



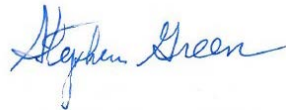
Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com




Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



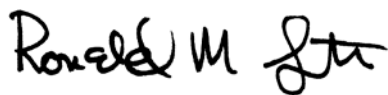
Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



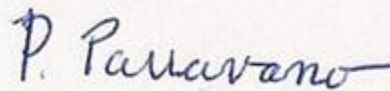
Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Advisor
Crab Boat Owners Association
papaduck8@gmail.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



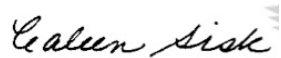
Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers International
mrockwell1945@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com

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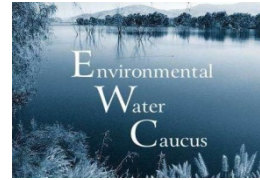
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December 10, 2019

Brenda Burman
Commissioner
U.S. Bureau of Reclamation
1849 C Street NW
Washington DC 20240-0001

Ernest Conant,
Regional Director
California-Great Basin Reg.Fed Bldg.
2800 Cottage Way
Sacramento CA 95825-1898

Re: New Information Regarding Deformities in Sacramento Splittail and Drinking Water Quality Raise Significant National Issues for Consideration in the Draft Environmental Assessment for the proposed 10-Year Agreement to Use the San Luis Drain for Discharges to the San Joaquin River and San Francisco-Bay Delta by the San Luis & Delta-Mendota Water Authority--We Seek a Public Hearing, an EIS and Extended Comment Period--2 Weeks Is Insufficient.

The undersigned organizations respectfully request an extension of the 2 week comment period ending right before Christmas Eve for the Draft Environmental Assessment (DEA) for the new 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grassland Drainage Area. Pursuant to 40 CFR § 1506.6 we seek a public hearing, an environmental impact statement and a 60 day comment period due to the national and regional significance of the proposed discharge sanctioned by this new use agreement and contract. As you know, the Inspector General Reported in November 2019¹ that the expiring use agreement has not been followed, properly managed and treatment promises were not kept. The IG's Recommendations 2-7 remain unresolved.

With the holidays approaching and the desire for many to spend time with their families and loved ones, it seems particularly onerous to provide only a two week notice period ending the day before Christmas Eve.

¹ <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luis-demonstration-treatment-plant>

Our organizations have had a long history of involvement with the Grassland Bypass Project, no official notice of the availability of the DEA was provided, and no press release was issued. The notice of availability for this DEA was posted on Reclamation's website under NEPA documents² on December 9, 2019 for a 2-week comment period ending on December 23, 2019.

The title of the DEA mentions a 10-Year Use Agreement, there is no Use Agreement included in the DEA. Further, there is no draft FONSI provided with the DEA.³ Failure to provide these essential documents for such a truncated public review period effectively precludes public comments and fails to meet Reclamation policy to make diligent efforts to include the public and provide for full the disclosure and transparency contemplated by the National Environmental Policy Act. Given the national and regional interest in the discharge of this selenium contamination gathered from outside the San Luis Unit service area, the time allotted does not comply with the spirit of 40 CFR 1506.6.

The Definition of the Project Remains Muddy with Significant Time Period Discrepancies

The DEA covers a Use Agreement for a period of 10 Years. Yet the San Luis and Delta Mendota Water Authority approved a CEQA document that authorized the use of the San Luis Drain to discharge storm water commingled with subsurface agricultural drainage from the Grassland Drainage Area for 25 Years.⁴ Further, the Central Valley Regional Water Quality Control Board approved Waste Discharge Requirements for only a storm water discharge with a mandatory 2-year permit review in December of 2021. The inconsistency of these various state agency documents, the absence of the new use agreement and the lack of a rigorously defined project in the DEA effectively precludes the public and decision maker from considering a number of "solutions" which will satisfy the project purpose and conditions.

New Information on Environmental Effects of GBP Discharges from the Federal San Luis Drain.

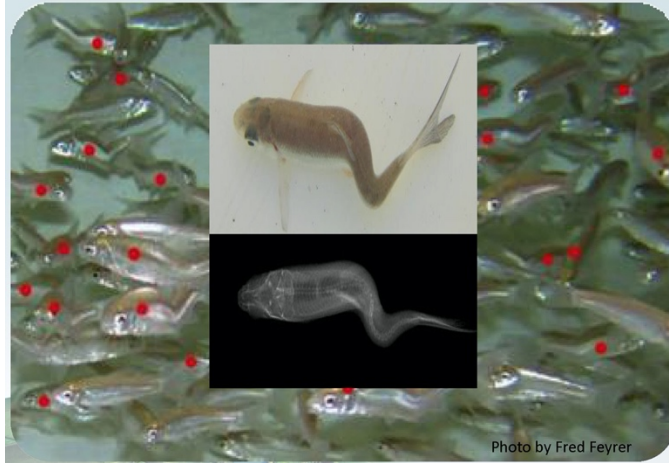
At the December 5, 2019 CV Regional Water Board Meeting, new information was provided by Board staff on selenium effects to Sacramento splittail. Worthy of note is a photo from Dr. Rachel Johnson, provided to the Regional Board and presented at the State of the Estuary Conference in 2019⁵ depicting high numbers of Sacramento splittail (photographed in the Delta with an underwater camera) with spinal deformities (marked by red dots) typical of selenium contamination:

² https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41544

³ Federal law and regulation 'require at least thirty (30) calendar days before making the decision on whether, and if so how, to proceed with a proposed action, the Responsible Official must make the EA and preliminary FONSI available for review and comment to the interested federal agencies, state and local governments, federally-recognized Indian tribes and the affected public. The Responsible Official must respond to any substantive comments received and finalize the EA and FONSI before making a decision on the proposed action. See 40 CFR § 6.203 - Public participation.

⁴ <https://ceqanet.opr.ca.gov/2007121110/6>

⁵ See Mavens Notebook summary of Dr. Johnson's presentation at the 2019 State of the Estuary Conference: <https://mavensnotebook.com/2019/12/05/state-of-estuary-standing-too-close-to-the-elephant-addressing-scales-in-restoration-and-fisheries-conservation/>



R. Johnson, 22 Oct 2019 State of the Estuary Conference

Dr. Johnson noted at the conference that, “It’s actually rare to actually see deformed animals in nature because usually something eats them, and so we wanted to take this opportunity to try and diagnose why it is that we had so many of these fish that had these deformities.” Dr. Johnson’s work on splittail has been accepted for publication in *Science of the Total Environment* and is currently undergoing peer-review prior to publication. Further we understand the Sacramento splittail has an 80% deformity rate and Se exposure stable isotope finger-printed back to San Joaquin River. These findings are of national significance and deserve a public hearing before use of the San Luis Drain is sanctioned for continued discharge of selenium, salts and other contaminants into the San Joaquin River and the San Francisco Bay-Delta Estuary.

Although the Sacramento splittail is not currently listed as threatened or endangered by the Federal or State government, they serve as an indicator species for species such as federally listed as threatened Green sturgeon⁶ which feed on the same species of clam (Asian clam) as splittail.

Furthermore, the Contra Costa Water Agency in their December testimony before the Regional Board on the GBP waste discharge permit also voiced concerns over increases in contaminants being discharged by the GBP drainers from this federal facility. Contra Costa WA pumps their drinking water from the south Delta and increases in electrical conductivity has real deleterious effects to their drinking water supply. These discharges were found in violation of State water quality standards.

⁶ <https://www.fisheries.noaa.gov/species/green-sturgeon>

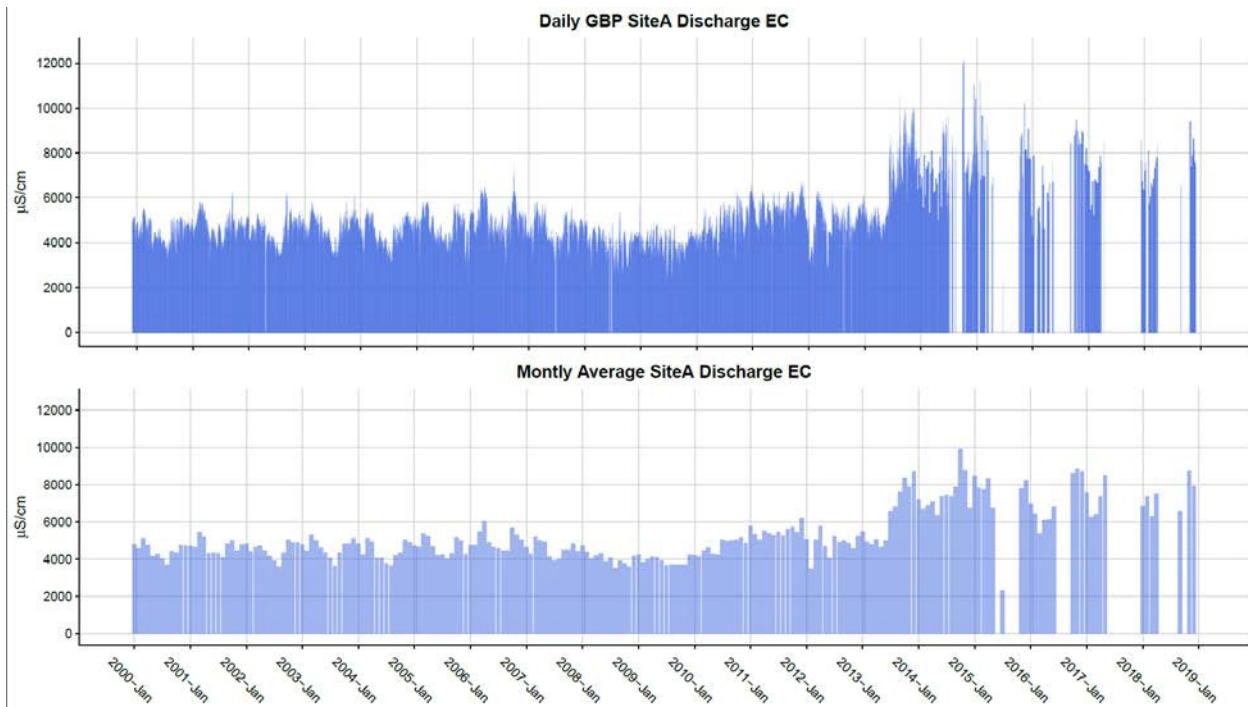


Figure 1 Electrical conductivity (EC) of discharges from Grassland Bypass Project (GBP) (2000 – 2019)

Electrical conductivity (EC) at Station R was as high as 4,000 µS/cm in 2015 and 1,700 µS/cm in 2018, exceeding the 1,600 µS/cm EC objective in the Regional Water Quality Control Board water quality standard in the Basin Plan.

Based on new information, and the need to review the Use Agreement, as well as, the DEA, we request a public hearing, a full EIS and an extension of the comment period for the Draft Environmental Assessment before this new proposal by the San Luis & Delta-Mendota Water Authority to drain lands during storm events for the next decade for discharge into the San Joaquin River and San Francisco-Bay Delta Estuary. We further request copies of the Use Agreement, draft FONSI, and all ESA consultations.

Requiring comment on an issue of such regional and national significance while people are gathering for this religious holiday with family and friends is unconscionable. As well it effectively precludes the public participation and transparency policy goals of the National Environmental Policy Act and Reclamation policies, regulations and directives.

Thank you for your consideration. If you have any questions please contact either Kathryn Phillips Director of Sierra Club California at (916) 557-1100 or Jonas Minton at (916) 626-9148

Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://www.planningandconservationleague.org)
jminton@pcl.org

Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://www.pacificcoastfishermen.org)
noah@ifrfish.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



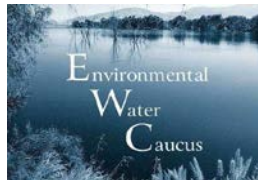
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Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS



CENTER FOR FOOD SAFETY



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180

Save Our Streams Council



November 5, 2019

Ashley Peters,
Central Valley Regional Water Quality Control Board,
11020 Sun Center Drive #200,
Rancho Cordova, CA 95670-6114.

Via Email: Ashley.Peters@waterboards.ca.gov

Re: Comments on Tentative Waste Discharge Requirements (WDRs) for Surface Water Discharges from the Grassland Bypass Project in Merced and Fresno Counties.

On behalf of the Pacific Coast Federation of Fishermen's Associations (PCFFA) and the Institute for Fisheries Resources (IFR), and the signatory organizations¹ on these comments, we

¹ Signatories Include: AquAlliance, California Water Impact Network, California Sportfishing Protection Alliance, Center for Biological Diversity, Crab Boat Owners Association, Environmental Water Caucus, Friends of the River, Planning and Conservation League, San Francisco Bay Keeper, Restore the Delta, and Sierra Club California join in this letter.

respectfully submit the following comments to the Central Valley Regional Water Quality Control Board (Regional Board) concerning the proposed Tentative WDRs (ORDER R5-2015-0094-01) for continued Surface Water Discharges from the Grasslands Bypass Project (GBP)² and implementing changes described in Notice of Availability (SCH No. 2007121110), draft Addendum to the 2009 GBP EIR/EIS and CEQA Initial Study Long-Term Storm Water Management Plan (GBP Storm Water Plan), 2020-2045.³ The Tentative WDRs would authorize continued discharges of stormwater commingled with selenium-laden agricultural drainage into the San Luis Drain and to Mud Slough (North) and the San Joaquin River from January 1, 2020 through December 31, 2045.

The GBP began in 1995 as a two-year program. Its federal use agreements have now been extended in three separate use agreements and numerous WDRs. All of the permits, environmental reviews, and findings that supported these use agreements and WDRs were predicated on zero discharge at the end of each agreement's term: first for 5 years, then 10 more years, and then 10 additional years. All that time—25 years in total—polluted discharge from the GBP was either entirely exempt from meeting protective water quality standards, or only required to meet relaxed, greatly reduced standards. Furthermore, over that 25-year-period the GBP steadily reduced both its monitoring of polluted discharges and its compliance with water quality standards.

The First Use agreement⁴ (1995) for the San Luis Drain authorized use of a 28-mile portion of the Drain by the San Luis Delta Mendota Water Authority (SLDMWA) to carry agricultural drainage water to Mud Slough. There was no stipulation to discharge stormwater. In fact, in a 1997 report titled, "A Storm Event Plan for Operating the Grassland Bypass Project"⁵, SLDMWA raised several issues regarding use of the Drain during major storm events in the GBP including:

1. *Storm water runoff carries sediment that should not be transported in the Grassland Bypass, or deposited in the San Luis Drain;*
2. *It is not possible during major storm events to separate agricultural drainage water from surface runoff and storm water flows;*

² Available at these links:

https://www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders/grassland/r5-2015-0094-01_tent_wdr.pdf

https://www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders/grassland/r5-2015-0094-01_tentwdr_noph.pdf

³ Available at these links:

http://sldmwa.org/grasslandbypass/NOA_CEQA_GBP%20Addendum%2008-14-19.pdf

<http://sldmwa.org/grasslandbypass/LTSWMP%20Initial%20Study%20080519.pdf>

<http://www.sldmwa.org/grasslandbypass/LTSWMP%20Addendum%20080519.pdf>

⁴ See <http://calsport.org/news/wp-content/uploads/GBP-First-Use-Agreement-1995.pdf>

⁵ See pages 2-3: "A Storm Event Plan for Operating the Grassland Bypass Project" by the Grassland Area Farmers and the SLDMWA, 1997.

3. *It will not be possible to divert all of the commingled surface runoff, storm water flows, and agricultural drainage water through the Grassland Bypass Channel during major storm events.*
4. *During some storm events, the instantaneous flow rate in Panoche Creek, which carries water from hills adjacent to the agricultural area can exceed 12,000 cubic feet per second, while the average daily flow rate during such events can exceed 2,000 cubic feet per second. These flows can generate more than 40,000 acre-feet of water during a two week period that includes a storm event.*

Further, both the purpose of the project and use agreement confirm the use only for agricultural drainage. For example, the Grassland drainers stated explicitly in 1997 that “[t]he Grassland Bypass Channel and the San Luis Drain were designed and constructed explicitly for the purpose of conveying agricultural drainage water. Neither facility can accommodate storm water flows nor surface runoff from major storm events.”⁶ The 1995 First Use Agreement stated clearly that “*the [SLDMWA] has requested that the UNITED STATES permit it to use a portion of the San Luis Drain consisting of approximately 28 miles from the terminus (Kesterson Reservoir) to Milepost 105.72, Check 19 (near Russell Avenue) for the discharge and transportation of a maximum flow of 150 cubic feet per second (cfs) **of drainage water** to Mud Slough (said portion hereinafter referred to as the Drain).*”⁷ Finally, NEPA documents associated with the use agreements all stated the purpose of the project was for “*a field experiment designed to evaluate approaches to agricultural drainage management. There is no commitment, at this time, to approve long-term use of the Drain.*”⁸

The water districts and other users of the drainage provided by the GBP under the its storm water plan are now proposing a fourth federal use agreement starting in January 2020 and extending through 2045, an additional 25 years. This fourth agreement and the continuation of discharges associated with it would be authorized by these proposed tentatively WDRs. The Regional Board must deny this brazen attempt to continue to circumvent legitimate water quality standards. Not only is this tentative WDR not sufficiently supported under CEQA—which requires a full EIR rather than a mere addendum in cases such as this one where the original report planned on zero discharge and had a different project purpose and definition—but enforcement of these standards is vital to native species on the verge of extinction. The tentative WDRs would allow the discharge of storm and agricultural drain water laced with selenium and other toxic drain water constituents such as salt, sulfates, boron, molybdenum, and mercury. Without strong action by the Regional Board, some of these species may not exist after 25 more years of business as usual, and migratory bird deformities would continue into the foreseeable future.

⁶ Ibid. page 12 (emphasis added).

⁷ Op. cit. First Use Agreement 1995 pages 1-2 (emphasis added).

⁸ USBR, SLDMWA, EPA & USFWS letter to Karl Longly, CVRWQCB 11-3-95 page 2
<http://calsport.org/news/wpcontent/uploads/USBR-SLDMWA-EPA-USFWS-11-3-95-Ltr-to-CRWQCB.pdf>
and Supplemental Environmental Assessment April 1991 and the FONSI dated October 18,1991.

If, on the other hand, the tentative WDRs are not approved, all discharges, including stormwater discharges, into the San Luis Drain from the GBP would be required to cease. This bold action would result in the cessation of pollution from selenium-laden agricultural drainage. The Regional Board must act now to stop further degradation to downstream beneficial uses and fulfill its 25-year-old promise to end of this pollution.

We, the signatory organizations on these comments, thus recommend that the proposed 25-year extension to use the San Luis Drain to discharge stormwater into Mud Slough (North) and the San Joaquin River be denied, and that no permit or use agreement be granted. At a minimum, a full Environmental Impact Report/Statement (EIR/EIS) must be prepared. Below, we detail our concerns in several areas and recommend what we believe is the only reliable and cost-effective solution—order the cessation of this polluted discharge.⁹

The CEQA Analysis in the 2009 GBP EIR/EIS and 2019 Addendum do not Support the Tentative WDRs.

Under CEQA a supplemental EIR is required if, as defined in CEQA Guidelines Section 15162(a)(1): (a) there have been substantial changes to the Project; (b) new significant environmental effects have been identified; or (c) there has been a substantial increase in the severity of previously identified significant effects. The 2009 EIR/EIS was based on the premise that all drainage discharges into the San Luis Drain would cease by the end of 2019. Thus, the GBP Stormwater Plan and associated Tentative WDRs include both a substantial change and environmental effects not included in the 2009 GBP EIR/EIS.

Under the proposed Tentative WDRs contaminated discharges would continue adding stormwater commingled with subsurface agricultural drainage into the San Luis Drain for an additional 25 years. This is a substantial change and should be analyzed in a full EIR/EIS. There are numerous impacts from this extension that are significant and need to be disclosed, including: (1) cumulative impacts to downstream beneficial uses; (2) the failure to meet protective water quality standards; (3) impacts to endangered and listed species; and (4) migratory bird impacts. All of these impacts warrant a full EIR/EIS analysis to adequately inform decision makers of the risks posed by continuing these discharges without proper permits and compliance with the Clean Water Act, including state and federal non-degradation policies.

The undersigned organizations have long-standing interests in the GBP because contaminants in agricultural drainage discharges have profound effects to the environment, including effects to

⁹ The San Joaquin Valley Drainage Program (SJVDP) *A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley*, also known as the “Rainbow Report” (September 1990); see also USGS *Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California* Open-File Report 2008-1210 By: Theresa S. Presser and Steven E. Schwarzbach <https://pubs.er.usgs.gov/publication/ofr20081210>; USBR Final Environmental Impact Statement for *San Luis Drainage Feature Re-evaluation* (May 2006 and Record of Decision (ROD) (March 2007) (selecting the “In-Valley/ Water Needs/ Land Retirement Alternative.”).

downstream waterways, aquatic life, and migratory birds. We hereby include our previous comments on the GBP EIR/EIS and Basin Plan Amendment by reference.¹⁰

The Tentative WDRs effectively sanction continued excessive pollution, especially during stormwater events, of Mud Slough (North), the San Joaquin River, and ultimately the Sacramento-San Joaquin Delta and San Francisco Bay, by failing to enforce science-based protective water quality standards for selenium and allowing the continued contamination of these water bodies. Excess selenium in streams kills or deforms fish and other aquatic life and is a human health concern in drinking-water supplies. Under the Tentative WDRs, selenium (and other harmful drain water pollutants, such as salt, sulfates, boron, molybdenum, and mercury) will continue to be discharged from the federally owned San Luis Drain directly into the waters of California and the United States. The failure to enforce protective selenium water quality objectives transfers pollution from Grassland drainers, through the federal San Luis Drain, to the waters of the State, and thus harms beneficial uses of these waters for our members', domestic water supplies, public health, and other public trust values. In addition, climate impacts not previously considered must be disclosed in a full EIR/EIS review.

An NPDES Permit Should be Required for GBP Stormwater and Subsurface Drainage Discharges into Surface Waters.

On September 6, 2019 the Ninth Circuit Court of Appeals ruled that commingled discharges from the GBP are not exempt from NPDES permitting requirements. *Pac. Coast Fed'n. of Fishermen's Ass'ns v. Glaser*, 937 F.3d 1191, 1199 (9th Cir. 2019). In reaching its decision, the Court issued a landmark rulings under the Clean Water Act's exemption for discharges from irrigated agriculture. First, the Court held that the Defendants had the burden of establishing that their discharges were "composed entirely of return flows from irrigated agriculture." *Id.* at 1197. Second, the Court ruled that only those discharges that are composed *entirely* of return flows from irrigated agriculture were exempt. *Id.*

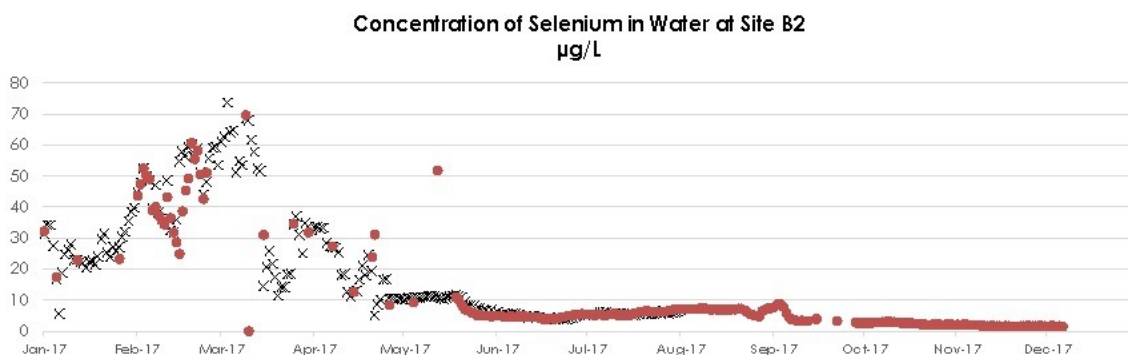
Applying these rulings to the commingled discharges of the Grasslands Bypass Project, the Court held that all of the Plaintiffs' claims should proceed. *Id.* at 1200. Because those commingled discharges were not composed entirely of return flows from irrigated agriculture, they did not fall within the exemption. In other words, the Court held that the return flow exemption from the

¹⁰ These comments are as follows: Coalition comments of environmental, fishing, and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. Available at <http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf>; Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker. June 22, 2015. Available at https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf; Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR. September 8, 2014. Available at <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbp-land-retirement.pdf>; Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project. June 30, 2014. Available at <http://calsport.org/news/wp-content/uploads/Final-coalition-comments-on-Draft-GBP-WDR-6.30.14.pdf>.

Clean Water Act's NPDES permit requirements did not apply based on the fact that non-exempt flows were commingled with discharges from irrigated agriculture.

The US Environmental Protection Agency (USEPA), and by delegation under the Clean Water Act (CWA) and California's Porter-Cologne Water Quality Control Act, California State and Regional Water Quality Control Boards, have the authority to regulate agricultural drainage under the CWA under comprehensive federal statutory authority for regulating pollutant discharges to the nation's navigable waters. The term "pollutant" under Porter-Cologne includes "agricultural waste discharged into water," and the term "navigable waters" encompasses the San Joaquin River, its principal tributaries, and inflowing ditches and drains.¹¹ Thus, discharges of agricultural drainage water to the San Joaquin River and its tributaries are subject to regulation under the CWA (Thomas and Leighton-Schwartz, 1990). The GBP Stormwater Plan should be required to obtain a NPDES permit to discharge pollution to navigable waters or to discharge commingled groundwater, surface water and agricultural drainage containing pollutants such as selenium, boron, salt, sulfate and mercury.¹²

There is significant ongoing discharge of selenium-laden drainage and contaminated groundwater from the GBP. For example, during the winter/spring of 2017, water quality monitoring data show high selenium concentrations (e.g., 20-40 µg/L) associated with high flow conditions in water entering the San Luis Drain from the GBP. The figure below shows selenium concentrations at Site B2 in the San Luis Drain during 2017.

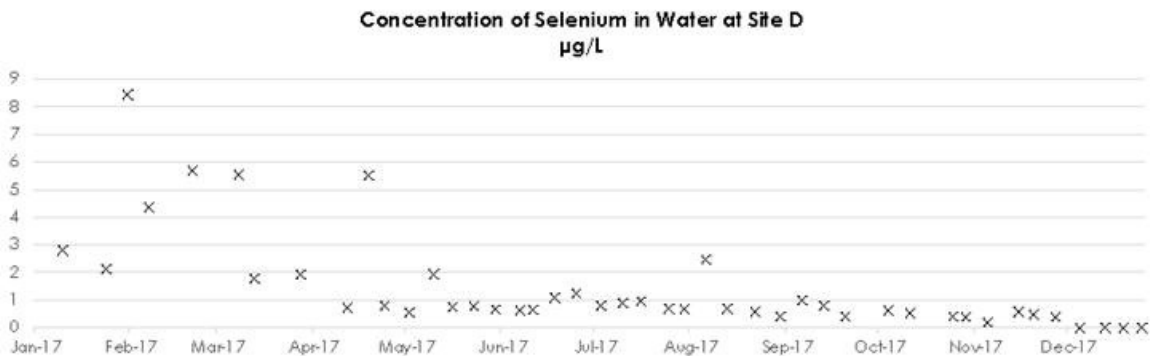


Although the San Luis Drain adds a relatively small percentage of flow to Mud Slough, it nevertheless substantially increased the selenium concentrations in Mud Slough in 2017 to

¹¹ See, e.g., Karl Phale, *Water Quality Control In California: Citizen Participation In the Administrative Process*, 1 Ecology Law Quarterly 400, 406 (1971), available at <https://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=1011&context=elq> ("Among the items defined as waste prior to the Porter-Cologne Act are agricultural drainage waters containing materials not present prior to use,...and materials used in agricultural operations which are not intentionally applied to waters, such as insecticides, herbicides, and other chemicals.")

¹² See, e.g., EPA's NPDES description on its website, available at <https://www.epa.gov/cwa-404/clean-water-act-section-402-national-pollutant-discharge-elimination-system>.

unacceptably high levels of 5-10 µg/L. Dilution is not the solution to pollution—especially in the case of selenium, which bioaccumulates in the food chain and magnifies impacts on fish, wildlife, migratory birds, and terrestrial species (Lemly and Skorupa, 2007; Skorupa 1998; USDI 1998). According to selenium expert Dr. Dennis Lemly, the 5 µg/L is a badly outdated number from the 80's and 90's, which has been shown repeatedly through field case study research to be under protective. In other words, 5 µg/L won't protect downstream fish and wildlife, including salmon.¹³



The 5 µg/L Se Water Quality Objective in the WDR for Mud Slough and the San Joaquin River from Sack Dam to Vernalis is not Protective of Downstream Beneficial Uses and Public Trust Resources.

The 5 µg/L selenium water quality objective in the Basin Plan for Mud Slough (North) and the San Joaquin River from Sack Dam to Vernalis and referenced in Table 5.2 of Attachment A in the Tentative WDRs is not protective of downstream beneficial uses including fish and wildlife resources that use those surface waterways. The USEPA in the 1990’s had proposed a 5 µg/L selenium water quality objective for California in the California Toxics Rule (CTR). Pursuant to the Endangered Species Act (ESA), and prior to the USEPA promulgating water quality objectives (including selenium) for the CTR, the USEPA was required to consult with the US Fish and Wildlife Service and the National Marine Fisheries Service (collectively, “Services”) and obtain the Services’ concurrence that none of the proposed criteria would jeopardize any ESA-listed species. Upon that review, the Services found that the 5 µg/L chronic criterion for selenium proposed by USEPA in the CTR would likely jeopardize 15 ESA-listed species

¹³ Dr. Dennis Lemly personal communication to Pacific Advocates, dated 10-26-19: “... refer to the peer-reviewed published guidelines for selenium toxicity given in my book (Lemly, A.D. 2002. *Selenium Assessment in Aquatic Ecosystems: A Guide for Hazard Evaluation and Water Quality Criteria*. Springer-Verlag, New York), and the current national regulatory criteria issued by EPA in 2016 (https://www.epa.gov/sites/production/files/2016-06/documents/se_2016_fact_sheet_final.pdf). These information sources establish water limits for protection of fish and other aquatic life, at 1-2 ug/L (my book, <1 for organic selenium, 2 for inorganic selenium; EPA = 1.5).”

(Emphasis added).¹⁴ To avoid a final “Jeopardy Opinion” from the Services, and the associated legal ramifications, the USEPA agreed to reevaluate their CWA criteria guidance for selenium by 2002 (FWS and NMFS 2000).¹⁵

From page 30 of Attachment A for the Tentative WDRs:

Table 5.2: Selenium Numerical Objectives

4-day Average	Maximum	Location
5 µg/L	20 µg/L	Mud Slough (north) and the San Joaquin River from the Mud Slough confluence to the Merced River
5 µg/L	12 µg/L	San Joaquin River, mouth of the Merced River to Vernalis

The selenium objectives for Mud Slough and the San Joaquin River based on the current state of knowledge of selenium toxicology are not protective of beneficial uses. Both the Canadian government and the USEPA have established water quality criteria to protect aquatic life that are substantially lower than the 5 µg/L Basin Plan selenium objectives for Mud Slough and the San Joaquin River. Even the new EPA criteria are unlikely to be adequately protective. A recent Canadian study¹⁶ concluded “that fish exposed to aqueous selenite concentrations at levels similar to the current CCME[Canadian Council of Ministers of the Environment] water quality guideline for the protection of aquatic life (1 µg/L) can exceed tissue guidelines for the protection of fish populations established by the USEPA and that there is potential for adverse effects particularly in developing embryos.” The authors also state: "In Canada, Se bioaccumulation exceeding the toxicity threshold for fish tissues set by the USEPA and the BC MoE (there are currently no federal tissue-based guidelines in Canada) have been documented recently in areas downstream of coal, uranium, and metal mining operations, even in cases where

¹⁴ Final Biological Opinion on the effects of the U.S. Environmental Protection Agency's "Final Rule for the Promulgation of Water Quality Standards: Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California (March 24,2000), available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0144&contentType=pdf>.

¹⁵ *Id.*

¹⁶ <https://www.ncbi.nlm.nih.gov/pubmed/31145497> *Distribution of Experimentally Added Selenium in a Boreal Lake Ecosystem Environ Toxicol Chem.* 2019 Sep;38(9):1954-1966. doi: 10.1002/etc.4508. Epub 2019 Jul 26. Pg 1955 and USGS and USEPA reported on fish sampling downstream of Libby Dam in Montana, USA, where every sample of Mountain Whitefish ovaries had Se concentrations well in excess of EPA's new (2016) ovary tissue criterion even though all water samples (along 100+ river miles of sampling) were at < 1.2 ppb Se. Also, it was confirmed that the chemical form of selenium in that stretch is predominantly selenate, the same speciation as in the San Joaquin River watershed.

See: <https://www.epa.gov/newsreleases/epa-and-partners-release-data-and-findings-kootenai-river-sampling-effort>

See: <https://www.sciencebase.gov/catalog/item/5d3b6ef1e4b01d82ce8d7aef>

aqueous Se concentrations have not exceeded the current CCME guideline of 1 ug/L (Muscatello et al. 2008; Kuchapski and Rasmussen 2015; Ponton and Hare 2015)." In addition, USGS and USEPA recently reported on fish sampling downstream of Libby Dam in Montana, USA, where every sample of Mountain Whitefish ovaries had Se concentrations well in excess of EPA's new (2016) ovary tissue criterion, even though all water samples (along 100+ river miles of sampling) were at < 1.2 ppb Se. Also, it was confirmed that the chemical form of selenium in that stretch is predominantly selenate, the same speciation as in the San Joaquin River watershed.

To comply with the Service's 2000 Biological Opinion on the CTR, USEPA in July 2016 proposed selenium water quality criteria that would be protective of federally-listed species in the San Francisco Bay Delta (Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta, State of California, Docket RIN 2040-AF61, EPA-HQ-OW-2015-0392; FRL-9946-01-OW) and in November 2018 for the rest of California (Federal Selenium Criteria for Aquatic Life and Aquatic Dependent Wildlife Applicable to California Docket RIN, 2040-AF79 EPA-HQ-OW-2018-0056 FRL-9989-46-OW). These selenium criteria established lentic and lotic water values, and bird egg and fish tissue values. However, the USEPA's November 2018 proposed rule did not include waters within known selenium-contaminated geographical areas, including tributary flows into the San Francisco Bay Delta system such as the San Joaquin River from Sack Dam to Vernalis, Mud Slough, Salt Slough, the water supply channels in the Grassland watershed, and the Grasslands Ecological Area in Fresno and Merced Counties. Instead, the USEPA's 2018 proposed rule deferred to existing State-established water quality objectives for Mud Slough (North) and the San Joaquin River from Sack Dam to Vernalis of 5 µg/L over a 4-day average (as defined in the Regional Board's June 2010 Basin Plan Amendment to address Selenium Control in the San Joaquin River Basin).

Supporting documentation for this USEPA docket for Selenium in California includes two reports by USFWS: (1) Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries, which gives a list of species considered most at risk for selenium exposure in CA;¹⁷ and (2) Species at Risk from Selenium Exposure in the San Francisco Estuary.¹⁸ The species identified at most risk for selenium exposure in the San Joaquin Valley and San Francisco Estuary were denoted as:

- Mammals: Buena Vista Lake Ornate Shrew;
- Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
- Reptiles: Giant Garter Snake;

¹⁷ Available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0144&contentType=pdf>.

¹⁸ Available at <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0265&contentType=pdf>.

Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

The Tentative WDRs require compliance with the selenium water quality objectives specified in the 2010 Basin Plan Amendment (5 µg/L, 4-day average). However, this proposal is lax, allowing for high spikes of selenium contaminants that will bio-accumulate throughout the ecosystem. The GBP Stormwater Plan and Tentative WDRs include mitigation measures that establish a Mud Slough (North) water quality “goal” of 3 µg/L Se, over a 4-day average. For every 3 months that the GBP Drainers meet this 3 µg/L performance goal, one exceedance of 5 µg/L, 4-day average is allowed. These goals and objectives will result in harm to fish and aquatic-dependent wildlife as denoted in the Service’s 2000 Biological Opinion on the CTR. We recommend that state and federal fish and wildlife agencies be consulted on the effects of implementation of the Tentative WDRs, including relaxed water quality standards that are not protective of migratory birds and endangered anadromous fish populations.

Short term spikes of selenium in a waterway can have longer lasting effects in an ecosystem. Beckon (2016) noted that when a bioaccumulative substance such as selenium is introduced into or removed from the environment, the processes by which it is assimilated into upper trophic levels of the ecosystem may be complex and prolonged. These processes include several levels of trophic transfer, each entailing the time required to consume food, assimilate the substance of interest, and the time span during which the organism continues to survive before being eaten by a member of the next higher trophic level. Beckon noted that for some species of piscivorous fish the lag time for selenium exposure to bioaccumulate in the upper trophic level of fish is over 1 year from the initial exposure. Thus, short-term exceedances of the 5 µg/L selenium objective can continue to have deleterious effects to the upper trophic level species several months to over a year after the event.

Our organizations have submitted several comment letters on protective selenium objectives in California.¹⁹ In March 2019, PCFFA and others provided comments to the USEPA on their proposed selenium criteria for California.²⁰ We recommended that a chronic, legally binding selenium objective of no greater than 2 µg/L (4-day average) be included in the Tentative WDRs for receiving waters of stormwater/drainage discharges. That comports with the recommendations of several experts that the criterion should be 2 µg/L or less (DuBowy 1989; Lemly and Skorupa 2007; Peterson and Nebeker 1992; Swift 2002). Exceeding this water criterion should trigger additional biological monitoring to determine if the tissue criteria for selenium proposed by USEPA has also been exceeded. Allowing higher levels would require re-initiation of consultation under the state and federal endangered species acts.

¹⁹ See, e.g., calsport.org/news/wp-content/uploads/EPA-Selenium-Cmt-LTR-Re-Docket-No.-EPA-HQ-OW-2004-0019.pdf, and [http://calsport.org/news/wp-content/uploads/Technical-Review-2004-EPA-Draft-Tissue-BasedSelenium-Criterion.pdf](https://calsport.org/news/wp-content/uploads/Technical-Review-2004-EPA-Draft-Tissue-BasedSelenium-Criterion.pdf).

²⁰ Coalition comments of environmental, fishing and environmental justice organizations oppose U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. Available at [http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf](https://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf).

A Comprehensive Cumulative Effects Analysis on Downstream Impacts of the GBP Stormwater Plan in an EIR/EIS is Needed Before a WDR Can Be Issued.

The GBP Stormwater Plan will allow continued discharges of a blend of stormwater, polluted groundwater, and drainage to Mud Slough (North) and the San Joaquin River. This plan should be analyzed in a full EIR/EIS and the cumulative impacts to downstream anadromous fish, wildlife, and terrestrial species should be included in that analysis. Impacts to the Delta Estuary and its species from the proposed action, as well as other actions, are profound. Continued operation of the CVP and SWP is likely to jeopardize the continued existence of endangered species in the Delta, while stormwater runoff and subsurface agricultural drainage from GBP and nearby CVP-irrigated lands contaminates the San Joaquin River and hence the Delta with selenium and other toxic constituents.²¹

Further, in a letter from National Marine Fisheries Service (NMFS) to the SWRCB regarding the San Joaquin River Selenium Control Plan Basin Plan Amendment (dated September 22, 2010), NMFS states that selenium contamination in the San Joaquin River is problematic in restoring spring and fall-run Chinook salmon to the upper reach of the San Joaquin River. The NMFS letter further noted that selenium in the San Joaquin River could negatively affect Central Valley steelhead and the Southern distinct population segment of the North American green sturgeon.²²

Studies by the US Geological Survey have documented elevated levels of selenium in the food chain and in green sturgeon. Since these impacts are potentially significant, an EIS must be prepared²³ along with a complete CEQA analysis to accurately inform decision-makers before allowing these pollutants to spread downstream.

Greater outflow from the San Joaquin River as a result of changing CVP and SWP operations in the Delta could result in even further transport of selenium and sulfate from agricultural drainage discharges into the Delta (Lucas and Stewart 2007). Also, note the Lucas and Stewart (2007) discussion on seasonal trends of bivalve selenium concentrations in the North Delta and its relationship to the San Joaquin River: *“Several explanations for the temporal trends in bivalve Se concentrations (which did not exist in the 1980’s) are possible. One possibility is that refinery inputs of selenium have been replaced by San Joaquin River inputs. Models indicate that if SJR inflows to the Bay increase, as they may have in recent years with barrier management,*

²¹ See testimony from Restore the Delta on Salinity and Selenium Science and Modeling for the Bay/Delta Estuary. Testimony on Recent Salinity and Selenium Science and Modeling for the Bay/Delta Estuary Submitted by Tim Stroshane, Senior Research Associate, California Water Impact Network (CWIN), August 17, 2012. Available at https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/RestoretheDelta/part2/RTD_161.pdf.

²² Available at https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/howard_brown.pdf

²³ See 40 C.F.R. § 1508.27(b)(9).

particulate Se concentrations in the Bay could double, even with no increase in irrigation drainage inputs to the SJR. The fall increase in Se in C. amurensis also occurs during the time period when the ratio of SJR/Sac River inflow is highest. Further changes in water management could exacerbate these trends...”.

Stormwater runoff from GBP and its upstream watershed can also contain elevated concentrations of mercury. Results from the CalFed Mercury study found elevated levels of mercury in fish from the lower San Joaquin River and Mud Slough (Davis et al. 2000; Slotton et al. 2000). A significant finding of the CalFed Mercury Study in the San Joaquin Basin was that Mud Slough contributes about 50% of the methylated mercury at Vernalis (legal boundary of the Delta), but only 10% of the water volume during the September to March non-irrigation season (Stephenson et. al., 2005).

Sulfate loading in the San Joaquin River from the GBP discharged in concert with Delta operations would likely result in downstream environmental impacts that should be considered in a full EIR/EIS. Sulfate reducing bacteria are the primary agents responsible for the methylation of mercury in aquatic ecosystems. Wood et al. (2006) found that sulfate concentrations are about seven times higher in the San Joaquin River than in the Sacramento River, and that addition of sulfate is predicted to stimulate methylmercury production when it is limiting. Two factors influencing sulfate concentrations in the Bay-Delta are electrical conductivity (EC) and the ratio of San Joaquin River to Sacramento River water.

The WDR Should Consider Effects GBP Discharges on Compliance With USEPAs Proposed Selenium Criteria for The Bay-Delta Estuary

On July 15, 2016, the USEPA proposed selenium water quality criteria applicable to the San Francisco Bay and Delta to ensure that the criteria are set at levels that protect aquatic life and aquatic-dependent wildlife, including federally listed threatened and endangered species. Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta, State of California, Docket RIN 2040–AF61, EPA–HQ–OW–2015–0392; FRL–9946–01–OW.²⁴ The USEPA proposed rule established selenium criteria based on fish tissue values, prey (clam) tissue values, and dissolved and particulate water column values. As USEPA noted in their technical support document for the proposed selenium criteria, “Since the most significant exposure pathway of selenium to species of concern in the San Francisco Bay and Delta is through diet, the currently applicable criteria for selenium from the NTR [5 µg/L] no longer adequately protect species in the estuary.”

The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta including the Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta are listed as

²⁴ Available at <https://www.federalregister.gov/documents/2016/07/15/2016-16266/water-quality-standards-establishment-of-revised-numeric-criteria-for-selenium-for-the-san-francisco>

impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).²⁵ Sources of selenium contamination include agricultural drainage from the Central Valley and effluent discharges from oil refineries (Linares et al 2015; Presser and Luoma 2010). Several endemic species are listed under the ESA as threatened or endangered, including green sturgeon, Chinook salmon, steelhead trout, delta smelt, and the California Ridgway's rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters. The USEPA noted on page 46036 of the Federal Register Notice 81(36) that "[t]he analyses to develop the fish tissue and the avian egg tissue benchmarks used in the modeling, and the modeling results used to derive the proposed water column criteria, indicate the health of these species would be negatively impacted from exposure to selenium water column concentrations above 0.2 µg /L, which would be allowed to occur under the existing NTR selenium criterion of 5.0 µg /L. Accordingly, EPA finds that it is necessary to propose revised and more protective criteria for selenium in order to help ensure the continued protection of these vulnerable species and associated designated uses." [The chart below presents in chart-form the USGS findings.²⁶

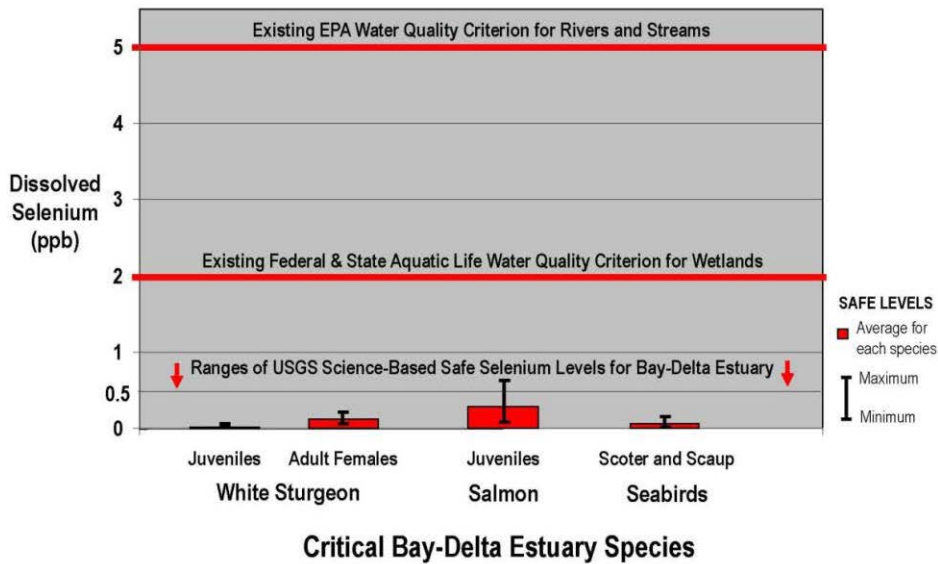
²⁵ Available at

https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

²⁶ The above graph prepared by CSPA & CWIN is directly based on the results from a U.S. Geological Survey (USGS) study. http://www.epa.gov/region9/water/ctr/selenium-modeling_admin-report.pdf. The USGS study evaluated a series of selenium exposure scenarios using a set of specific guidelines and modeling choices from the range of temporal hydrodynamic conditions, geographic locations, food webs, and allowable dissolved, particulate, and prey Se concentrations (which we have referred to as "safe levels"). According to the USGS, "[t]he specificity of these scenarios demonstrates that enough is known about the biotransfer of Se and the interconnectedness of habitats and species to set a range of limits and establish an understanding of the conditions, biological responses, and ecological risks critical to management of the Bay-Delta." The following scenarios were evaluated by USGS for a range of hydrologic conditions and residence times (See Tables 17, 18 and 19 in the USGS report): (1) predicted allowed dissolved Se concentrations for Bay-Delta transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>C. amurensis>sturgeon food web; (2) predicted allowed dissolved Se concentrations for Bay-Delta transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>C. amurensis>clam-eating bird species food web; and (3) predicted allowed dissolved Se concentrations for landward transects at different effect guidelines and associated levels of protection (USFWS, 2009b) for a suspended particulate material>aquatic insect>juvenile salmon food web. The summary graphic of this data shows the results for critical Bay-Delta species, aggregated across all combinations of target tissues (eg. Whole body, eggs, or diets) that have known levels of concerns, as summarized by the U.S. Fish and Wildlife Service. Results are also combined across all hydrologic conditions for each species. The ranges of "allowable" or safe levels of dissolved selenium clearly show that, although EPA will need to specify exact safety levels, flow conditions, and species, new standards for the Bay-Delta will need to be substantially less than 0.5 parts per billion dissolved selenium to be protective.

Existing Selenium Water-Quality Standards Do Not Protect Bay-Delta Species:

A new USGS study, which will be used by EPA to revise standards, shows that much lower levels of selenium will be required to protect critical species.



Our organizations submitted comments to USEPA on the proposed selenium water quality and tissue criteria for the Bay Delta supporting more protective water quality criteria and hereby incorporate those comments by reference.²⁷ The Regional Board should consider how the selenium discharges allowed in the Tentative WDRs for the next 25 years from the GBP will affect the Bay-Delta ecosystem and could affect compliance with EPA’s proposed water quality criteria for San Francisco Bay and Delta. The 5.0 µg /L Basin Plan selenium objective for Mud Slough and the San Joaquin River will result in non-compliance with proposed water quality criteria and cause deleterious effects to fish and wildlife in the Bay-Delta.

²⁷ Coalition comments of environmental, fishing and environmental justice organizations on EPA’s Water Quality Standards for the Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta. October 28, 2016. Available at <https://www.regulations.gov/document?D=EPA-HQ-OW-2015-0392-0246>.

Table 2. Proposed Selenium Water Quality Criteria for the San Francisco Bay and Delta

Media Type	Tissue		Water Column ¹		
			Dissolved		Particulate
Criteria	Fish Whole Body or Muscle	Clam	Chronic	Intermittent Exposure ²	Chronic
Magnitude	8.5 µg/g dw whole body or 11.3 µg/g dw muscle	15 µg/g dw	0.2 µg/L	$WQC_{int} = \frac{0.2 \mu\text{g/L} - C_{bkgrnd}(1 - f_{int})}{f_{int}}$	1 µg/g dw
Duration	Instantaneous measurement	Instantaneous measurement	30 days	Number of days/month with an elevated concentration	30 days
Frequency	Not to be exceeded	Not to be exceeded	Not more than once in three years	Not more than once in three years	Not more than once in three years

¹ Dissolved and particulate water column values are based on total selenium (includes all oxidation states, i.e., selenite, selenate, organic selenium and any other forms) in water.

² Where C_{bkgrnd} is the average background selenium concentration in µg/L, and f_{int} is the fraction of any 30-day period during which elevated selenium concentrations occur, with f_{int} assigned a value ≥ 0.033 (corresponding to one day).

The WDRs Should Include Biological Monitoring Requirements, Performance Standards, and Enforcement and Mitigation Provisions for Disposal of Agricultural Drainage at the SJRIP Reuse Area and Stormwater Detention Basins.

The GBP Stormwater Plan Addendum includes a proposed expansion of the existing drainage reuse area from 6,100 acres to 7,550 acres. The addition of acreage was not analyzed in the 2009 EIR/EIS. The increase is outside the scope and project definition in the CEQA and NEPA analysis. One significant environmental impact at the SJRIP is ponding of seleniferous drainage water within the fields of the reuse area. The Stormwater Plan Addendum includes mention of a contingency plan in the event of inadvertent flooding, but only a reference to the contingency plan, not the plan itself, is included in the Addendum. Bird use, already showing impact under the current acreage, would increase in the vicinity of the SJRIP with the addition of drainwater detention basins.

The GBP SJRIP reuse area already poses exposure risks to wildlife from use and additional selenium exposure. The use of regulating ponds to help control flow as a part of the engineered reuse system and ponding during stormwater events in the GBP area also creates a potential wildlife exposure risk similar to those originally realized at Kesterson National Wildlife Refuge (Presser and Ohlendorf, 1987).²⁸

The GBP has been monitoring and reporting annual bird use from April thru June at the SJRIP drainage reuse area since 2008. Many of those reports are posted on the SFEI website. However,

²⁸ Available at <https://pubs.usgs.gov/of/2008/1210/> _ Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California By Theresa S. Presser and Steven E. Schwarzbach U.S. Geological Survey Open-File Report 2008-1210 version 1.0.

no reports have been posted since the 2015 report. We note that additional reports were made available during the public comment period at a third party website.²⁹ Yet, the Tentative WDRs do not include any requirement to continue biological monitoring at the SJRIP.

The 2017 wildlife monitoring report for the GBP drainage reuse area (SJRIP) documented that 50 avian species were observed at the drainage reuse area between April 13 and June 21, 2017. Eighteen species either were observed nesting or were suspected of nesting, including Swainson’s hawk, a species listed by the State of California as a threatened. Twelve of the species observed—spotted sandpiper, least sandpiper, whimbrel, western wood-peewee, willow flycatcher, American pipit, savannah sparrow, White-crowned sparrow, common yellowthroat, yellow warbler, Wilson’s warbler, and western tanager—were present only as spring migrants.³⁰

Further, the 2017 SJRIP Wildlife Monitoring Report noted that the mitigation site for the SJRIP, which was supposed to provide compensation for avian exposure to pollutants at the SJRIP, documented extremely elevated selenium concentrations in some bird eggs collected there. This suggests that the mitigation site is not providing compensation benefit for the SJRIP and also highlights the breadth of selenium contamination and wildlife exposure in this area.³¹

Table 5. Selenium Concentrations in Recurvirostrid Eggs from the Mitigation Site in 2017

ID Number	Field Number ¹	Date	Embryo ²		Embryo Age (days)	Selenium (ppm, dry wt) ³	Log Base 10	Anti-Log
			Condition	Status				
Black-Necked Stilt								
PM-01	MS-01	June 9	U	U	1	3.74	0.5729	
PM-02	MS-02	June 9	L	N	13	4.52	0.6551	
PM-03	MS-03	June 9	U	U	1	5.54	0.7435	
American Avocet								
PM-04	MA-01	June 9	L	N	9	51.1	1.7081	
PM-05	MA-02	June 9	U	U	1	8.7	0.9395	
Arithmetic/geometric mean						14.7	0.9238	8.4
Standard deviation						20.4	0.4591	2.9
Standard error							0.2053	1.6
Lower limit of 95% confidence interval							0.5214	3.3
Upper limit of 95% confidence interval							1.3263	21.2

¹ See Appendix H.

² L = live; N = normal; U = unknown.

³ ppm, dry wt = parts per million dry weight.

The GBP Stormwater Plan Addendum includes use of an unspecified acreage of existing ponds and the addition of up to 200 acres of stormwater detention basins (regulating reservoirs) to store

²⁹ Available at <http://www.summerseng.com/grasslandbypassproject.htm>

³⁰ Available at <http://www.restorethedelta.org/wp-content/uploads/PCL-et.-al-Cmt-Letter-GBP-Stormwater-Plan-CEQA-09-09-2019.pdf>

³¹ *Id.* at page 20.

and regulate disposal or distribution of stormwater. Such features are practically indistinguishable from evaporation ponds. Proposed use of such “regulating ponds” to help control flow as a part of the engineered reuse system and ponding during flood events in the GBP area also creates an additional wildlife exposure risk similar to those originally realized at Kesterson National Wildlife Refuge (Presser and Ohlendorf, 1987). Ponding of stormwater and agricultural drainage will support an aquatic food chain and be an attractive hazard to birds within a very short period of time.

The GBP Addendum notes that the filling of these stormwater detention basins will begin with the first significant storm (typically December), and basins will be emptied by May. Therefore, stormwater commingled with drainage water will be stored in basins for up to 6 months. If these basins hold water longer than 30 days, a state water permit is required (CCR, Title 23, Sec. 657-658). As described in Skorupa et al (2004), low winter temperatures substantively increase the toxicity of dietary selenium to birds, fish, and mammals. And the SJRIP wildlife monitoring reports do document use of the drainage reuse area by a large number of avian species (50 distinct species in 2017), including twelve species that are spring migrants.

Selenium poses a hazard to fish and wildlife because of its toxicity at environmentally relevant concentrations and its tendency to accumulate in food chains (Skorupa, 1998). The San Joaquin Valley provides critically important habitat for wintering waterfowl on the Pacific Flyway. Eight to twelve million ducks and geese, along with hundreds of thousands of shorebirds and other marsh birds, annually winter or pass through the valley. The disastrous history of the ecological impacts of disposal of selenium at Kesterson National Wildlife Refuge within the valley is well documented (e.g., Presser and Ohlendorf, 1987; SJVDP, 1990a, b). Additionally, from 1986 to 1993, the National Irrigation Water-Quality Program (NIWQP) of the U.S. Department of the Interior (USDOI) studied whether contamination was induced by irrigation drainage in 26 areas of the western United States. This program developed guidelines to interpret effects on biota of selenium (USDOI, 1998). These guidelines, along with revisions based on more recent studies and modeling, can be used to interpret and guide management and mitigation of the risk of selenium in food chains and wildlife.³²

The Regional Board mandated monitoring requirements and mitigation for drainage evaporation ponds in the Tulare Basin as part of a lengthy process. First a Cumulative Impacts Report on drainage evaporation ponds was completed in November 1992. The Cumulative Impacts Report concluded that site-specific EIRs were needed to clarify the extent of avian impacts due to individual pond operations. Consultants hired by the evaporation pond operators began preparation of site-specific EIRs that were termed “Site-Specific Biological Impact Analysis” or “Technical Reports.” The site-specific Technical Reports, in general, indicated that pond operations place avian species at risk from four general types of impacts; avian disease, salinity, physical hazards, and selenium. Following public review of the documents, the Technical Reports, in combination with the cumulative impact report, were used by the Regional Board to prepare tentative WDRs. In August and September of 1993, the WDRs were the subject of petitions to the State Water Board (State Board) by the United States Fish and Wildlife Service (USFWS), Patrick Porgans and Lloyd Carter, and The Bay Institute of San Francisco. In March

³² U.S. Geological Survey Professional Paper 1646, available at <https://pubs.usgs.gov/pp/p1646/>.

1996, the State Board adopted Order No. WQ 96-07, which remanded a portion of the waste discharge requirements and the EIRs, including the Tulare Lake Drainage District's, to the Central Valley Water Board for reconsideration and directed the Central Valley Water Board to "consider any relevant information in its CEQA compliance documents." The dischargers who use the San Luis Drain, in conjunction with the California DFW and the United States Fish and Wildlife Service, prepared and agreed to protocols for avoidance (hazing) procedures and for assessing mitigation for unavoidable losses to breeding and non-breeding avian species.³³

The Regional Board should include biological monitoring requirements, performance standards, and enforcement and mitigation provisions in the Tentative WDRs for disposal of agricultural drainage at the SJRIP reuse area and stormwater detention basins as was done for Tulare Basin evaporation ponds. Such requirements should include measures to ensure that the stormwater detention basins are not an attractive nuisance resulting in harm to migratory birds. We strongly recommend that the Regional Board consult with selenium experts in the US Fish and Wildlife Service and California Department of Fish and Wildlife to help develop monitoring requirements, performance criteria, and mitigation protocols to protect migratory birds.

The Tentative WDRs Should Require Resumption of Monitoring in Salt Slough and South Grasslands Wetland Channels to Ensure that the 2 µg/L Selenium Objective and TMDLs for Selenium are Being Met.

The monitoring and reporting program that was revised by the Regional Board in 2015³⁴ is inadequate to determine the level of pollution being discharged by the GBP and adjacent agricultural lands, and the harm it is causing to the environment. We have provided comments three times on the inadequacies of the Revised Monitoring and Reporting Program for the GBP. We hereby incorporate by reference our coalition letters of August 11, 2011, April 22, 2013, November 26, 2013, and June 22, 2015. We also refer to comments submitted to the Regional Board by USFWS on the Revised Monitoring and Reporting Program for the GBP dated June 22, 2015 and June 25, 2015.³⁵ The USFWS recommended that the Regional Board reinstate weekly water quality monitoring for selenium at GBP Stations J, K, and L2 as exceedances of 2 µg/L are still occurring in those wetland channels, those channels are still listed on the State's 303(d) list

³³ Available at https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/kings/r5-2015-0134.pdf.

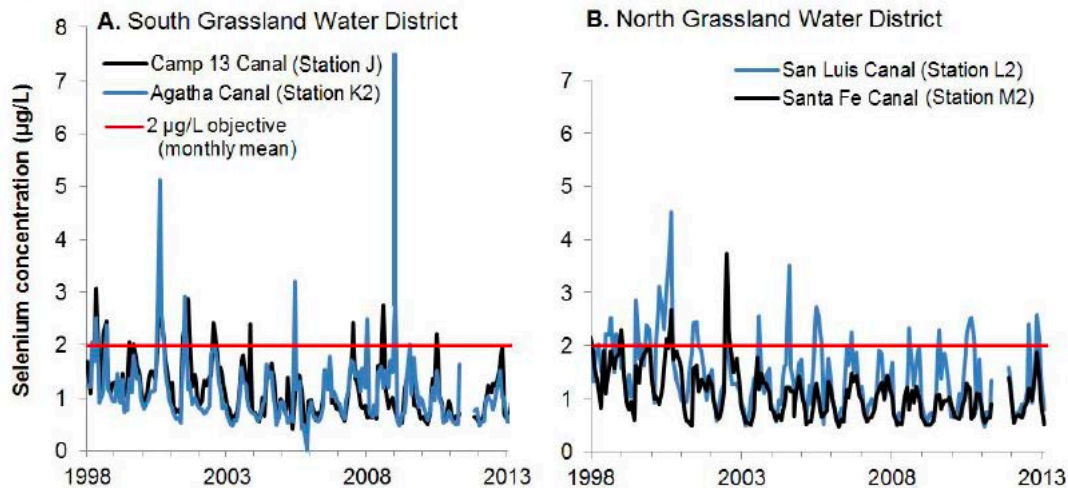
³⁴ Available at https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/fresno/r5-2015-0094.pdf.

³⁵ Available at https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_usfws.pdf See this link for a copy of the USFWS letter to Ms. Margaret Wong Regional Water Quality Control Board, Central Valley Region: USFWS Comments on the May 2015 Draft Waste Discharge Requirements for the Surface Water Discharges from the Grassland Bypass Project and the Discharges to Groundwater from the Growers in the Grassland Drainage Area. <http://calsport.org/news/wp-content/uploads/Exhibit-5.pdf>

as impaired for selenium,³⁶ and elevated selenium in those channels could result in harm to aquatic-dependent fish and wildlife resources.

As part of Regional Board Order R5-2015-0094, Waste Discharge Requirements for the GBP (2015 WDR), sampling frequencies for Mud Slough, Grasslands wetland channels, and Salt Slough were reduced or completely eliminated. Stations A, B, C, I2, F, J, K, L/L2, M/M2, G and H have all been eliminated from required monitoring. We can see no technical justification or rationale for this reduction in monitoring for a project that has exceeded water quality objectives and standards for more than 20 years. The Grasslands Marshes (wetland supply channels) remain on the 303(d) list as impaired for selenium, so reducing water quality monitoring in these channels to only during stormwater events is inexplicable. As denoted in Figure 12 of Attachment A to the Tentative WDRs, significant spikes of selenium above water quality objectives in the Grasslands wetland channels were still being documented up through 2013 when monitoring in those channels ended.

Figure 12: Selenium Concentrations in Wetland Supply Channels



In 2002 the Regional Board issued a report reviewing selenium concentrations in the Grasslands wetland water supply channels (Eppinger and Chilcott 2002). This report documented sources of selenium contamination in these channels that are not being addressed by the GBP:

Two areas have been identified where agricultural subsurface drainage can enter wetland water supply canals from farmland not contained in the DPA [Grasslands Drainage Area]. One area is west of the wetland water supply channels and historically drained into the Almond Drive Drain.

³⁶ Available at

https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/01657.shtml#34338.

Since Water Year 1999, these discharges have been collected in the CCID Main Drain and diverted into the CCID Main Canal downstream of internal supply channels. Data for Water Years 1999 and 2000 is not available for the Almond Drain site.

The second area where agricultural subsurface drainage can enter wetland water supply canals from outside the DPA is a triangle-shaped area of approximately 7,000 acres south of the Poso Drain (also known as the Rice Drain) and north of the DPA. This area historically drained into the Poso Drain, entering South Grassland Water District from the east. Three sites on the Poso (Rice) Drain were monitored for selenium during Water Years 1999 and 2000. Selenium concentrations at all three sites were above 2 ug/L a majority of the time, though a change in tail water management after June 1999 has apparently helped to reduce and stabilize concentrations...

During Water Year 1999, selenium concentrations in the Poso Drain were highly variable with concentrations at the upstream Russell Boulevard site ranging from <2 ug/L to 39 ug/L and concentrations at the downstream site (Mallard Road) ranging from <2 ug/L to 24 ug/L...After June 1999, more tail water was discharged through the Rice [Poso] Drain at Russell...Mean selenium concentrations continued to remain above 2 ug/L at all the Rice Drain sites.”

The 2009 EIS/EIR for the GBP noted the following with respect to these lands outside of the DPA that continue to discharge drainage directly into the Grassland wetland supply channels:

The GDA does not include the lands that are described, and they are not under the jurisdiction of the Grassland Basin Drainers (GBD). Additionally, the GBD have no authority to compel these lands to become part of the GBP. However, the GBD will work with the landowners in the areas described to encourage management of drain waters that may contain selenium that is entering wetland supply channels and specifically will work with the 1,100 acres of lands that are identified as lands that ... could be annexed to the GDA.

Unfortunately, nothing has been done to bring these lands into the jurisdiction of the GBP and they are not included in the Tentative WDRs. With the exception of stormwater events, these sources of drainage-water contamination in wetland supply channels are currently not being regulated or monitored.

In addition, our organizations specifically protested the change in the Hills Ferry monitoring site (Site H) to China Island (Site R). There is a comprehensive database with documented selenium water quality violations at Hills Ferry. Site R appears closer to the mouth of the Merced River than Site H, allowing for greater dilution and consequentially Site R under represents the contaminant threat in the San Joaquin River upstream of the Merced River.

We also opposed adoption of the monitoring and reporting program in the 2015 WDR and recommended a more robust monitoring plan similar to the 2001 GBP monitoring requirements. Reductions in monitoring frequency and locations in the 2015 reporting program will prevent the collection of data necessary to protect public trust values, endangered species, and to evaluate compliance with water quality standards. Here we reference and reiterate our previous comments and recommend a vigorous monitoring program that does not hide or understate the discharge of

selenium and other toxins through stormwater discharges into Mud Slough and the San Joaquin River.

We further recommend that monitoring and reporting for total mercury and methyl-mercury concentrations in water and biotic tissue be required at all sampling locations of the GBP to establish a mass-balance of sources of mercury in this watershed.

Treatment Methods Have Not Operated Effectively.

The 2009 EIR/EIS for the GBP included treatment as a significant component of the plan to reduce selenium in discharges to the San Luis Drain. The treatment plant has yet to become operational.³⁷ The 2009 GBP EIR/EIS included a bio-treatment plant to reduce the selenium load being discharged, and to achieve the zero discharge of subsurface agricultural drainage after 2019. There is no mention of treatment in the current GBP Stormwater Plan. More than thirty million dollars has been invested in a demonstration treatment plant that still is not functioning and about which a federal audit found questionable expenditures.³⁸

Long Term Viability and Legality of GBP Drainers' Proposed Actions.

The proposed 15-year program raises significant questions regarding the long-term viability of the actions proposed in the GBP Stormwater Plan. The 2009 EIR/EIS relied on unproven treatment technologies to treat and reduce the volume of drainage from the GBP that would need to be disposed of. These treatment technologies have yet to prove reliable or cost effective. Without treatment, it is unclear how drainage volumes and selenium loads will be managed at the SJRIP. Such management is not analyzed in any current CEQA or NEPA document. There is no current monitoring data that shows that the SJRIP remains viable now. Nor will future monitoring data or performance standards show, after 15 additional years of irrigation with selenium and salt-laden drainage, such viability. Without accurate data, the reuse area remains a mystery along with how long the facility can be used before too much salt accumulation prevents future agricultural drainage use. There is no analysis of where the selenium and salt that is accumulated in the SJRIP will ultimately be disposed. All of these contamination and discharge issues need to be evaluated in a full EIR/EIS before a WDR can be considered. Dubbed a treatment area, the SJRIP is looking more and more like an unpermitted selenium and salt disposal facility.

Reuse of polluted drainage in the GBP's SJRIP drainage reuse area does not eliminate the loading of wastes. It simply stockpiles wastes on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into salted up wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to permanent fallowing of more and more land. These impacts, along with impacts to the river and estuary, have not been analyzed and comprehensive data concerning these impacts has not been disclosed. No analysis

³⁷ [Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.](#)

³⁸ [Available at https://www.doioig.gov/reports/bureau-reclamation%E2%80%99s-cooperative-agreement-no-r16ac00087panoche-drainage-district](https://www.doioig.gov/reports/bureau-reclamation%E2%80%99s-cooperative-agreement-no-r16ac00087panoche-drainage-district)

is provided regarding the cumulative impacts to downstream beneficial uses of WDR that continue to sanction polluted discharges or of the potential spread of these contaminants throughout the Delta Estuary.

Land Retirement Should be Considered as a Viable Alternative.

Our organizations have previously submitted comments to the Regional Board about the success of land retirement in relation to the GBP’s drainage volume load reductions.³⁹ The USBR’s 2004 Broadview Water Contract Assignment Draft Environmental Assessment cites Summer’s Engineering as predicting a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year from the cessation of irrigation on 9,200 acres of agricultural land in Broadview Water District as per Table 4-1 below (USBR 2004). This amounts to a per acre reduction of 0.28 AF of drainage, 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of boron.

**TABLE 4-1
DRAINAGE AND WATER QUALITY EFFECTS OF PROPOSED ACTION ON THE
SAN JOAQUIN RIVER**

	Existing Conditions	Under Proposed Action Conditions	Estimated Reduction Attributable to Proposed Action
BWD Drainage to San Joaquin River (afy)	3,700	1,100	2,600
BWD Estimated Salt Production (tons/yr)	24,300	7,300	17,000
BWD Estimated Selenium Production (lbs/yr)	2,140	640	1,500
BWD Estimated Boron Production (lbs/yr)	74,000	22,000	52,000

Source: Summers Engineering, 2003

Land retirement likely accounted for most of the reductions in selenium, and the majority of reductions in drainage volume, boron, and salt claimed by the Grasslands Bypass Project in the 2009 EIR/EIS.

The USEPA, in a letter regarding the Bay Delta Conservation Plan,⁴⁰ strongly recommended the USBR’s Land Retirement Program be revived to save water and prevent further selenium contamination and impacts to endangered species (page 13):

³⁹ See Coalition letter to CVRWQCB on Selenium Basin Plan Amendment, April 26, 2010, p 15-16; available at http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf, and Coalition letter to Karl Longley on Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements: available at <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbpland-retirement.pdf>.

⁴⁰ Available at <http://calsport.org/news/wp-content/uploads/bay-delta-conservation-plan-deis.pdf>.

Recommendations: *To mitigate for the project's impacts to selenium levels in the estuary as a result of the BDCP operations, consider reviving and funding the Bureau of Reclamation's Land Retirement Program⁴⁷ to remove from cultivation and irrigation large areas of selenium laden lands on the West side of the San Joaquin Valley. This would save irrigation water, reduce discharges of selenium into the San Joaquin River basin, and advance attainment of selenium reduction targets⁴⁸ set by EPA and the Central Valley Regional Water Quality Control Board. Evaluate the extent to which restoration of these "retired" lands to the native plant community could also contribute to the recovery of threatened and endangered plants and animals listed by FWS. Consider analyzing the cost/benefit of implementing treatment technologies vs. land retirement. Although cost/benefit analyses are not required under NEPA, such an analysis may be useful to decision makers and the public in this case."*

Further, the USBR's San Luis Drainage Feature Re-Evaluation (SLDFRE) Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit. Three land alternatives were evaluated in the SLDFRE EIS, 306,000 acres, 194,000 acres and 100,000 acres, respectively. The Final EIS found that the only environmentally and economically preferred alternative was to retire 306,000 acres (In-Valley/Drainage Impaired Area Land Retirement).⁴¹ It's clear from the NED findings in Table N-10 below that additional land retirement would provide increased net economic benefits.

**Table N-10
Benefit/Cost Summary
Changes Relative to the No Action Alternative (\$/year in 2050)**

Subarea	In-Valley Disposal	Out-of-Valley Disposal	In-Valley/ Groundwater Quality Land Retirement	In-Valley/ Water Needs Land Retirement	In-Valley/ Drainage-Impaired Area Land Retirement
Total NED Benefit	\$37,962,000	\$38,430,000	\$31,164,000	\$20,629,000	\$9,931,000
Total NED Cost	51,225,000	51,370,000	46,767,000	30,778,000	6,288,000
Net NED Benefit	-\$13,263,000	-\$12,940,000	-\$15,603,000	-\$10,149,000	\$3,643,000

Notes:

Values represent net NED benefits relative to No Action.

Values rounded to nearest \$1,000. Totals may not add due to rounding.

Moreover, the US Fish and Wildlife Service, in their Fish and Wildlife Coordination Act Report (FWCAR) for SLDFRE, recommended that all of the northerly area within the San Luis Unit (GBP Drainage Area) be retired as well,⁴² though USBR did not consider that alternative. The Service concluded on page 67 of the FWCAR that, “[t]o avoid and minimize risks and effects to fish and wildlife resources in the San Joaquin Valley and Pacific Flyway, the Service recommends land retirement on all drainage impaired lands in the SLU. This approach would

⁴¹ SLDFRE Final EIS, Appendix N, Table N-10, page N-17, accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2240

⁴² SLDFRE Final EIS, Appendix M, USFWS FWCAR, accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236

maximize the elimination of drainage at its source, and therefore avoidance of adverse fish and wildlife effects.”

By ignoring permanent land retirement and the associated benefits of reducing water exports to these toxic soils, the GBP Stormwater Plan Addendum and associated Tentative WDRs will continue to kick the can down the road and concentrate and store salt, selenium, boron and other toxic substances in the shallow aquifers of the Grasslands area. This creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River, and the Bay-Delta estuary, especially in wetter years.

Conclusion

We urge that all polluted discharges of agricultural drainwater and stormwater cease as required under the current GBP WDRs. We recommend land retirement and curtailing the importation of additional water supplies that mobilize these contaminants on the west side of the Southern San Joaquin Valley. Despite repeated promises, no viable treatment has been developed in the more than two decades. Before proceeding to load even more contaminants on downstream beneficial uses, we recommend no new WDRs for the GBP authorizing further discharges of either stormwater, agricultural drainage, or contaminated groundwater be permitted until a full EIS/EIR be completed. That EIS/EIR should include:

- A National Pollutant Discharge System Permit prior to any additional use of the federal San Luis drain for discharge of contaminants from the west side into the San Joaquin River and Delta Estuary;
- A comprehensive cumulative effects analysis of stormwater and drainage disposal into Mud Slough and the San Joaquin River and Delta Estuary;
- A chronic, legally binding selenium objective of no greater than 2 µg/L (4-day average) for receiving waters of stormwater/drainage discharges;
- No exceedance of the 2 µg/L selenium water criterion should be allowed. If it is exceeded, enforcement mechanisms should trigger all discharges to cease and require additional biological monitoring to determine if there are downstream effects to meeting tissue criteria for selenium proposed by USEPA in 2016 (for the Bay Delta);
- An analysis of effects to wildlife, including factors such as winter stress, of disposal of selenium in the SJRIP and stormwater detention basins;
- Environmental commitments that include biological monitoring, performance standards, consequences if those performance standards are exceeded, and mitigation provisions for disposal of agricultural drainage at the SJRIP reuse area and stormwater detention basins;
- A description of the status and viability of drainage treatment at the SJRIP;
- A description and evaluation of the long-term viability of drainage disposal strategies at the SJRIP and a description of where salt, selenium, and other contaminants accumulate and are ultimately disposed of. This should not become an unregulated dumping ground for west side contaminants.

Finally, Congress in its authorization of the San Luis Unit in 1960 never envisioned use of the San Luis Drain for stormwater discharge. Congress provided its authorization under specified

conditions, including approval by the State of California⁴³ for “...provision for constructing the San Luis interceptor drain to the Delta designed to meet the drainage requirements of the San Luis unit....” *Senate Report No 154, page 2, San Luis Unit, Central Valley Project, California, April 8, 1959.*⁴⁴ This brings into question whether the “Drain” can be legally used for storm water discharge without Congressional approval.

The use of the federal San Luis Drain for stormwater also raises consistency questions with existing State Board orders. The California State Water Resources Control Board (SWRCB 1985), following the Kesterson debacle, issued its Order WQ 85-1 in February 1985. The SWRCB found that agricultural drainage and wastewater reaching Kesterson Reservoir “is creating and threatening to create conditions of pollution and nuisance” (Emphasis added). The Order then warned, “[i]f the Bureau closes Kesterson Reservoir and continues to supply irrigation water to Westlands Water District without implementing an adequate disposal option, continued irrigation in the affected area of Westlands Water District could constitute an unreasonable use of water” (Emphasis added). We urge the Regional Board to not repeat the mistakes made at Kesterson Reservoir in the 1980’s. The continued irrigation of these toxic soils constitutes an unreasonable use of water and continued and future disposal of agricultural drainage in ponds, on land, and in surface waters will cause significant harm to public trust resources and violates non-degradation policies.

Thank you for your consideration,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](#)
jminton@pcl.org



Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen’s Asso.](#)
noah@ifrfish.org



John McManus
President
Golden State Salmon Association
john@goldengatesalmon.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org

⁴³ See PL86-488 San Luis Act June 3, 1960: Proviso: (2) received satisfactory assurance from the State of California that it will make provision for a master drainage outlet and disposal channel for the San Joaquin Valley,which will adequately serve, by connection therewith, the drainage system for the San Luis unit or has made provision for constructing the San Luis interceptor drain to the delta designed to meet the drainage requirements of the San Luis unit as generally outlined in the report of the Department of the Interior, entitled "San Luis Unit, Central Valley Project," dated December 17, 1956. The State of California has not made such a provision and Congress never consider the use of the drain for stormwater.

⁴⁴ See H. Rpt 399, available at <http://calsport.org/news/wp-content/uploads/Exhibit-3.pdf> S. Rpt 154...<http://calsport.org/news/wp-content/uploads/Exhibit-4.pdf>.

Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com

Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com

Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com

Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net

Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org

Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org

M. Benjamin Eichenberg
Staff Attorney
San Francisco Bay Keeper
ben@baykeeper.org

Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com

Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net

Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net

Larry Collins
President
Crab Boat Owners Association
papaduck8@gmail.com

Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers International
mrockwell1945@gmail.com

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



Adam Keats
Senior Attorney
Center for Food Safety
AKeats@CenterforFoodSafety.org



Lowell Ashbaugh
Conservation Chair
The Fly Fishers of Davis
ashbaugh.lowell@gmail.com

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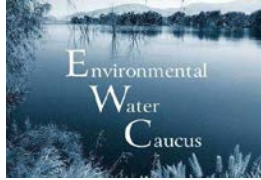
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CA Save Our Streams Council



September 9, 2019

Joseph C. McGahan, Drainage Coordinator
San Luis & Delta-Mendota Water Authority
P.O. Box 2157
Los Banos, CA 93635

Sue McConnell, PG
Irrigated Lands Regulatory Program
Central Valley Water Board
11020 Sun Center Dr #200
Rancho Cordova, CA 95670-6114

Rain L. Emerson, M.S.
Environmental Compliance Branch Chief
Bureau of Reclamation, South-Central California Area Office
1243 N Street, Fresno, CA 93721

Via Email

Re: Coalition Comments on Grassland Bypass Project Long-Term Storm Water Management Plan EIR Addendum and Initial Study--A Full EIR-EIS is Required.

Thank you for the opportunity to provide public input concerning the proposed Grasslands

Bypass Project Long-Term Storm Water Management Plan, 2020 – 2035 (GBP Stormwater Plan) as described in Notice of Availability (SCH No. 2007121110), draft Addendum to the 2009 GBP EIR/EIS and CEQA Initial Study.¹

The GBP began in 1995 as a two-year program, and its Federal use agreements for the San Luis Drain have been extended now through Three Use Agreements. All of these permits and environmental reviews and findings were predicated on zero discharge at the end of each period. First for 5 years, then 10 more and then 10 more. All that time--25 years--the polluted discharge was exempted from meeting protective water quality standards or only required to meet relaxed standards. Furthermore, over that 25 years the project steadily reduced both monitoring of the discharge and compliance with water quality standards. The Grassland Drainers under the GBP Storm Water Plan are now proposing a 4th Federal Use Agreement starting in January 2020. Enough is enough. Too much time has already passed without adequate progress on meeting water quality standards. Species are hanging by a thread and migratory bird deformities continue. If the 4th Federal Use Agreement is not approved by December 31, 2019, all discharges (including stormwater) into the San Luis Drain from the GBP are required to cease, and this is what should happen. The cessation of these selenium laden pollutants has been promised for the last 25 years and must stop. Further, providing an addendum rather than a full EIR/EIS to accurately inform decision makers does not comply with CEQA and NEPA requirements.

The First Use agreement² (1995) for the San Luis Drain authorized use of a 28-mile portion of the Drain by the San Luis Delta Mendota Water Authority (SLDMWA) to carry agricultural drainage water to Mud Slough. There was no stipulation to discharge stormwater. In fact, in a 1997 report titled, “A Storm Event Plan for Operating the Grassland Bypass Project”³ by the Grassland Area Farmers and the SLDMWA, several issues were identified regarding major storm events in the GBP including:

1. *Storm water runoff carries sediment that should not be transported in the Grassland Bypass, or deposited in the San Luis Drain;*
2. *It is not possible during major storm events to separate agricultural drainage water from surface runoff and storm water flows;*
3. *It will not be possible to divert all of the commingled surface runoff, storm water flows, and agricultural drainage water through the Grassland Bypass Channel during major storm events.*
4. *During some storm events, the instantaneous flow rate in Panoche Creek, which carries water from hills adjacent to the agricultural area can exceed 12,000 cubic feet per second, while the average daily flow rate during such events can exceed 2,000 cubic feet*

¹ Available at these links: http://sldmwa.org/grasslandbypass/NOA_CEQA_GBP%20Addendum%2008-14-19.pdf
<http://sldmwa.org/grasslandbypass/LTSWMP%20Initial%20Study%20080519.pdf>
<http://www.sldmwa.org/grasslandbypass/LTSWMP%20Addendum%20080519.pdf>

² See <http://calsport.org/news/wp-content/uploads/GBP-First-Use-Agreement-1995.pdf>

³ See pages 2-3: "A Storm Event Plan for Operating the Grassland Bypass Project" by the Grassland Area Farmers and the SLDMWA, 1997.

per second. These flows can generate more than 40,0000 acre-feet of water during a two-week period that includes a storm event.

Further, both the purpose of the project and use agreement confirm the use only for agricultural drainage. For example, the Grassland drainers stated explicitly in 1997, "*The Grassland Bypass Channel and the San Luis Drain were designed and constructed explicitly for the purpose of conveying agricultural drainage water. Neither facility can accommodate storm water flows nor surface runoff from major storm events.*"⁴ The 1995 First Use Agreement stated clearly, "*The AUTHORITY has requested that the UNITED STATES permit it to use a portion of the San Luis Drain consisting of approximately 28 miles from the terminus (Kesterson Reservoir) to Milepost 105.72, Check 19 (near Russell Avenue) for the discharge and transportation of a maximum flow of 150 cubic feet per second (cfs) of drainage water to Mud Slough (said portion hereinafter referred to as the Drain)*" highlight added.⁵ Finally the NEPA documents all stated the purpose of the project was for "*a field experiment designed to evaluate approaches to agricultural drainage management. There is no commitment, at this time, to approve long-term use of the Drain.*"⁶

These issues of permitting continued discharge of pollutants from the Federal San Luis Drain are significant and should not be handled by an Addendum to the 2009 GBP EIR/EIS that planned on zero discharge to the San Luis Drain after 2019.

We, the signatory organizations on these comments, recommend that the proposed 15-year extension to use the San Luis Drain to discharge stormwater into Mud Slough (North) and the San Joaquin River from Sack Dam to the Merced River be denied and that no permit or use agreement be granted. At a minimum a full Environmental Impact Report/Statement (EIR/EIS) must be completed. The CEQA addendum process being proposed would allow storm water and agricultural drain water laced with selenium (and other toxic drainwater constituents such as salt, sulfates, boron, and mercury) through the federal San Luis Drain to Mud Slough and the San Joaquin River and the Delta Estuary. Below, we detail our concerns in several areas and recommend what we believe is the only reliable and cost effective public solution--order the cessation of this polluted discharge and retire these drainage impaired lands as determined in federal study after study.⁷

⁴ Ibid. page 12.

⁵ Op. cit. First Use Agreement 1995 pages 1-2.

⁶ USBR,SLDMWA,EPA& USFWS letter to Karl Longly, CVRWQCB 11-3-95 pg 2 <http://calsport.org/news/wp-content/uploads/USBR-SLDMWA-EPA-USFWS-11-3-95-Ltr-to-CRWQCB.pdf> and Supplemental Environmental Assessment April 1991 and the FONSI dated October 18,1991.

⁷ The San Joaquin Valley Drainage Program (SJVDP) *A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley*, also known as the "Rainbow Report" (September 1990) Also see USGS *Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California* Open-File Report 2008-1210 By: Theresa S. Presser and Steven E. Schwarzbach

The CEQA/NEPA analysis in the 2009 GBP EIR/EIS does not support an “Addendum”

Under CEQA Guidelines section 15164, an Addendum presents changes to an EIR that are not significant enough to require a supplemental EIR. A supplemental EIR is required if, as defined in Section 15162(a)(1), (a) there have been substantial changes to the Project; (b) new significant environmental effects have been identified; or (c) there has been a substantial increase in the severity of previously identified significant effects. The GBP Stormwater Plan is a substantial change from the 2009 GBP EIR/EIS. In the 2009 EIR/EIS it was assumed that all drainage discharges into the San Luis Drain would cease by the end of 2019.

Under the proposed GBP Stormwater Plan selenium contaminated discharges would continue adding additional stormwater commingled with subsurface agricultural drainage into the San Luis Drain for an additional 15 years. This is a substantial change and should be analyzed in a full EIR/EIS. Further, there are numerous impacts that are significant and need to be disclosed, including: 1) cumulative impacts to downstream beneficial uses 2) the failure to meet protective water quality standards 3) impacts to endangered and listed species and 4) migratory bird impacts. All of these impacts warrant a full EIR/EIS analysis to adequately inform decision makers of the risks posed by continuing these discharges without proper permits and compliance with the Clean Water Act, including state and federal non-degradation policies.

The undersigned organizations, have a long-standing interest in the GBP because contaminants in agricultural drainage discharges have profound effects to the environment, including effects to downstream waterways, aquatic life, and migratory birds. We include our previous comments on the GBP EIR/EIS and Basin Plan Amendment by reference.⁸

<https://pubs.er.usgs.gov/publication/ofr20081210> Also see USBR Final Environmental Impact Statement in May 2006 and signed the Record of Decision (ROD) for the *San Luis Drainage Feature Re-evaluation EIS* in March 2007, selecting the “In-Valley/ Water Needs/ Land Retirement Alternative.”

⁸ Coalition comments of environmental, fishing and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019.

<http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQ-OW-2018-00....pdf>

Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker, June 22, 2015

https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf

Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR, September 8, 2014

<http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbp-land-retirement.pdf>

Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project, June 30, 2014. <http://calsport.org/news/wp-content/uploads/Final-coalition-comments-on-Draft-GBP-WDR-6.30.14.pdf>

The proposed drainers' GBP Stormwater Plan effectively sanctions continued excessive pollution, especially during stormwater events, of Mud Slough (North), the San Joaquin River, and ultimately the Sacramento-San Joaquin Delta, by failing to enforce science-based protective water quality standards for selenium and allowing the continued contamination of these water bodies. Excess selenium in streams kills or deforms fish and other aquatic life and is a human-health concern in drinking-water supplies. Under the proposed Stormwater Plan, selenium (and other drainwater constituents, such as salt, sulfates, boron, and mercury) will continue to be discharged from the federally owned San Luis Drain directly into the waters of the state and nation. The failure to enforce protective selenium water quality objectives transfers pollution from these Grassland drainers through this federal drain to the waters of the state, harming beneficial uses of these waters for our members' commercial beneficial use, the domestic water supply, public health, and other public trust values. In addition, impacts of climate change which were not considered in previous environmental assessments in concert with implementation of the GBP Stormwater Plan must be disclosed in a full EIR/EIS review.

The GBP Drainers propose to continue to use the federally owned San Luis Drain from 2020 to 2035 to convey stormwater commingled with contaminated agricultural drainage water to the San Joaquin River via Mud Slough (North). The GBP Stormwater Plan includes a number of management actions and commitments that will not be sufficient to protect downstream beneficial uses..

Coalition Comments: Grasslands Bypass Project -- Violations of the Endangered Species Act and Reduced Monitoring Threaten Endangered Species and Public Health, November 27, 2013 <http://calsport.org/news/wp-content/uploads/2013/12/Coalition-Letter-on-GBP-ESA-Violations-Monitoring-Reductions-LTR.Corrected-.pdf>

Coalition Comments: Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project. August 11, 2011 <http://calsport.org/news/wp-content/uploads/2011/09/Opposition-To-Grassland-Bypass-Monitoring-Reductions.pdf>

CSPA, CWIN and AquAlliance submit Comments to State Water Board Regarding Grassland Bypass Project and Basin Plan Amendment. September 22, 2010. <http://calsport.org/news/cspa-cwin-and-aqualliance-submit-comments-to-state-water-board-regarding-grassland-bypass-project-and-basin-plan-amendment/>

Sierra Club et. al. Comments: Grassland Bypass Project & San Joaquin River Selenium Basin Plan Amendments September 22, 2010. https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/jim_metropulos.pdf

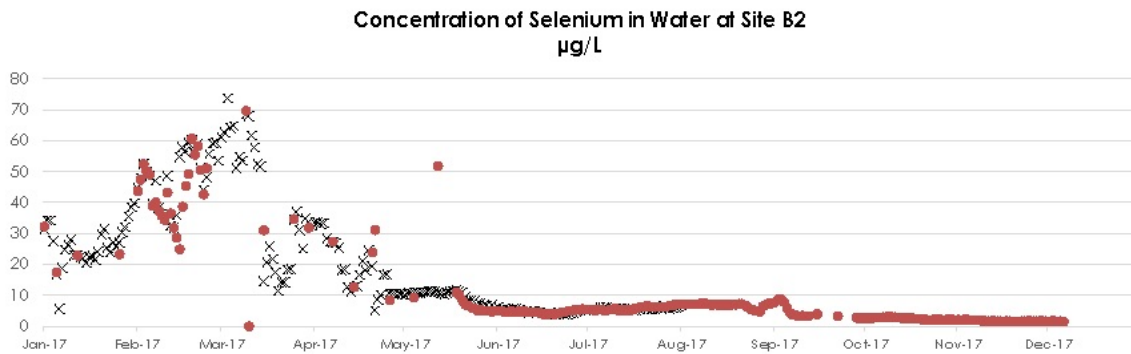
Comments of California Sportfishing Protection Alliance and California Water Impact Network on the draft environmental impact report for the Irrigated Lands Regulatory Program and related documents. Also attached are several comments prepared by three expert consultants September 27, 2010 <http://calsport.org/doc-library/pdfs/207.pdf>

Environmental Coalition Comments on Draft Staff Report for Grasslands Bypass Project Basin Plan Selenium Amendments to The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, April 26, 2010 https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf

A National Pollutant Discharge Elimination System (NPDES) permit must be required.

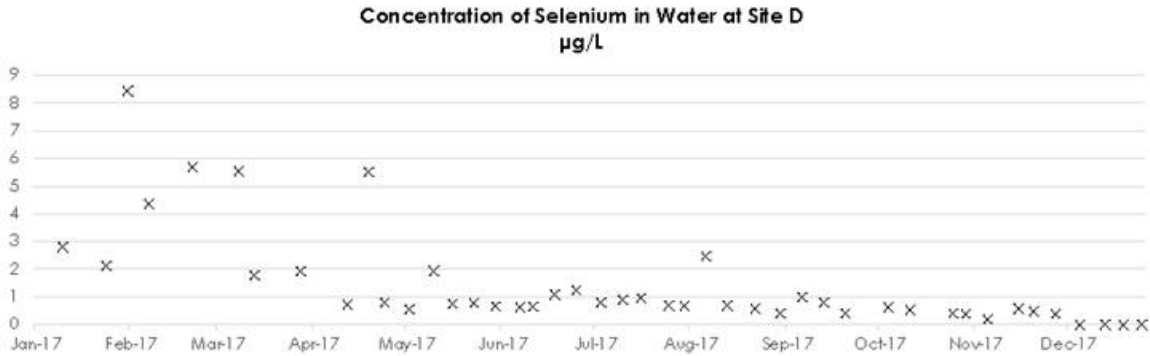
The US EPA and by delegation California State and Regional Boards have the authority to regulate agricultural drainage under the Clean Water Act (CWA), having comprehensive federal statutory authority for regulating pollutant discharges to the nation’s navigable waters. The term “pollutant” includes “agricultural waste discharged into water” and the term “navigable waters” encompasses the San Joaquin River, its principal tributaries, and arguably inflowing ditches and drains. Thus, discharges of agricultural drainage water to the San Joaquin River and its tributaries is subject to regulation under the CWA (Thomas and Leighton-Schwartz, 1990). The GBP Stormwater Plan should be required to obtain a NPDES permit to discharge pollution to navigable waters or to discharge commingled groundwater, surface water and agricultural drainage containing pollutants such as selenium, boron, salt, sulfate and mercury.⁹

Significant discharges of selenium-laden drainage and contaminated groundwater still is occurring from the GBP. For example, during the winter/spring of 2017, water quality monitoring data clearly show high selenium concentrations (e.g., 20-40 µg/L) associated with high flow conditions in water entering the San Luis Drain from the GBP. The figure below shows selenium concentrations at Site B2 in the San Luis Drain during 2017.



Although the San Luis Drain flow adds a relatively small percentage of flow to Mud Slough, it nevertheless substantially increased the selenium concentrations in Mud Slough in 2017 to unacceptably high levels of 5-10 µg/L. Dilution is not the solution to pollution—especially in the case of selenium, which bioaccumulates in the food chain and magnifies impacts on fish, wildlife, migratory birds and terrestrial species (Lemly and Skorupa, 2007; Skorupa 1998; USDI 1998).

⁹ <https://www.epa.gov/cwa-404/clean-water-act-section-402-national-pollutant-discharge-elimination-system>



A comprehensive cumulative effects analysis on downstream impacts of the GBP Stormwater Plan in an EIR/EIS is needed.

The GBP Stormwater Plan will allow continued discharges of a blend of stormwater, polluted groundwater and drainage to Mud Slough (North) and the San Joaquin River. This plan should be analyzed in a full EIR/EIS and the cumulative impacts to downstream anadromous fish, wildlife, and terrestrial species should be included in that analysis. Impacts to the Delta Estuary and its species from the proposed action, as well as other actions, are profound. Continued operation of the CVP and SWP is likely to jeopardize the continued existence of endangered species in the Delta, and stormwater runoff and subsurface agricultural drainage from GBP and nearby CVP-irrigated lands contaminates the San Joaquin River and hence the Delta with selenium and other toxic constituents. See testimony from Restore the Delta on Salinity and Selenium Science and Modeling for the Bay/Delta Estuary.¹⁰

Further, in a letter from National Marine Fisheries Service (NMFS) to the SWRCB on the San Joaquin River Selenium Control Plan Basin Plan Amendment (dated September 22, 2010), NMFS states that selenium contamination in the San Joaquin River is problematic in restoring spring and fall-run Chinook salmon to the upper reach of the San Joaquin River. The NMFS letter further noted that selenium in the San Joaquin River could negatively affect Central Valley steelhead and the Southern distinct population segment of the North American green sturgeon¹¹.

Studies by the US Geological Survey have documented elevated levels of selenium in the food chain and green sturgeon. Since these impacts are potentially significant, an EIS must be prepared¹² along with a complete CEQA analysis to accurately inform decision-makers before allowing these pollutants to be spread downstream.

¹⁰ Testimony on Recent Salinity and Selenium Science and Modeling for the Bay/Delta Estuary Submitted by Tim Strohane Senior Research Associate California Water Impact Network (CWIN) August 17, 2012
https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/RestoretheDelta/part2/RTD_161.pdf

¹¹https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/howard_brown.pdf

¹² See 40 C.F.R. § 1508.27(b)(9)

Greater outflow of the San Joaquin River associated with CVP and SWP operations in the Delta could result in even further transport of selenium and sulfate from agricultural drainage discharges in the San Joaquin River and into the Delta (Lucas and Stewart 2007). Also, note the Lucas and Stewart (2007) discussion on seasonal trends of bivalve selenium concentrations in the North Delta and its relationship to the San Joaquin River, “*Several explanations for the temporal trends in bivalve Se concentrations (which did not exist in the 1980’s) are possible. One possibility is that refinery inputs of selenium have been replaced by San Joaquin River inputs. Models indicate that if SJR inflows to the Bay increase, as they may have in recent years with barrier management, particulate Se concentrations in the Bay could double, even with no increase in irrigation drainage inputs to the SJR. The fall increase in Se in C. amurensis also occurs during the time period when the ratio of SJR/Sac River inflow is highest. Further changes in water management could exacerbate these trends...*”.

Stormwater runoff from GBP and its upstream watershed can also contain elevated concentrations of mercury. Results from the CalFed Mercury study found elevated levels of mercury in fish from the lower San Joaquin River and Mud Slough (Davis et al. 2000; Slotton et al. 2000). A significant finding of the CalFed Mercury Study in the San Joaquin Basin was that Mud Slough contributes about 50% of the methylated mercury at Vernalis (legal boundary of the Delta), but only 10% of the water volume during the non-irrigation season (September to March) (Stephenson et. al., 2005).

Sulfate loading in the San Joaquin River from the GBP discharges in concert with Delta operations could result in downstream environmental impacts that should be considered in a full EIR/EIS. Sulfate reducing bacteria are the primary agents responsible for the methylation of mercury in aquatic ecosystems. Wood et al. (2006) found that sulfate concentrations are about seven times higher in the San Joaquin River than in the Sacramento River, and that addition of sulfate is predicted to stimulate methylmercury production when it is limiting. Two factors influencing sulfate concentrations in the Bay-Delta are the electrical conductivity (EC) and the ratio of San Joaquin River to Sacramento River water.

The 5 ppb Se water quality performance goal in Mud Slough and San Joaquin River upstream of Merced is not protective of downstream beneficial uses and public trust resources.

Pursuant to the Endangered Species Act (ESA) of 1973 (as amended), and prior to the USEPA promulgating water quality objectives (including selenium) for the State of California in the California Toxics Rule (CTR), the USEPA was required to consult with the US Fish and Wildlife Service and the National Marine Fisheries Service (Services) and obtain the Services’ concurrence that none of the proposed criteria would jeopardize any ESA-listed species. Upon that review, the Services found that the 5 µg/L chronic criterion for selenium proposed by USEPA in the CTR would likely jeopardize 15 ESA-listed species (Emphasis added). To avoid a final “Jeopardy Opinion” from the Services, and the associated legal ramifications, the USEPA agreed to reevaluate their CWA criteria guidance for selenium by 2002 (FWS and NMFS 2000).¹³

¹³ <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0009&contentType=pdf>

To comply with the Service’s 2000 Biological Opinion on the CTR, USEPA in November 2018 proposed new water quality objectives for California (lentic and lotic water, and fish tissue) that would be protective of listed species: Federal Selenium Criteria for Aquatic Life and Aquatic-Dependent Wildlife Applicable to California Docket RIN, 2040-AF79 EPA-HQ-OW-2018-0056 FRL-9989-46-OW. The USEPA's proposed rule did not include waters within known selenium-contaminated geographical areas, including tributary flows into the San Francisco Bay Delta system such as, the San Joaquin River from Sack Dam to Vernalis, Mud Slough, Salt Slough, along with the water supply channels in the Grassland watershed, and the Grasslands Ecological Area in Fresno and Merced Counties. Instead, the USEPA proposed rule defers to existing State established water quality objectives for Mud Slough (North) and the San Joaquin River upstream of the Merced River of 5 µg/L 4-day average (as defined in the Regional Board’s June 2010 Basin Plan Amendment to address Selenium Control in the San Joaquin River Basin¹⁴).

Supporting documentation for this USEPA Docket for Selenium in California includes 2 reports by USFWS: Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries, for a list of species considered most at risk for selenium exposure in CA¹⁵ and Species at Risk from Selenium Exposure in the San Francisco Estuary¹⁶. The species identified at most risk for selenium exposure in the San Joaquin Valley and San Francisco Estuary were denoted as:

- Mammals: Buena Vista Lake Ornate Shrew;
- Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
- Reptiles: Giant Garter Snake;
- Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

The proposed GBP Stormwater Plan is seeking to comply with the selenium water quality objectives specified in the 2010 Basin Plan Amendment (5 µg/L, 4-day average), but the proposal is lax, allowing for high spikes of selenium contaminants that will bio-accumulate throughout the ecosystem. The Stormwater plan includes mitigation measures that establish a Mud Slough (North) water quality “goal” of 3 µg/L Se, 4-day average. For every 3 months that meet this 3 µg/L performance goal, one exceedance of 5 µg/L 4-day average is allowed. These goals and objectives would likely result in harm to aquatic fish and wildlife as denoted in the Service’s 2000 Biological Opinion on the CTR. We recommend that State and Federal Fish and Wildlife agencies be consulted on the effects of implementation of the GBP Stormwater Plan and relaxed standards that are not protective of migratory birds and endangered anadromous fish populations.

¹⁴ https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/sac_sj_basins_salinity_staffrpt.pdf

¹⁵ <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0144&contentType=pdf>

¹⁶ <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0265&contentType=pdf>

Our organizations have submitted several comment letters on protective selenium objectives in California.¹⁷ In March 2019, PCFFA and others provided comments to the USEPA on their proposed selenium criteria for California.¹⁸ We recommended that a chronic, legally binding selenium objective of no greater than 2 µg/L (4-day average) be included in the GBP Stormwater Plan for receiving waters of stormwater/drainage discharges. That comports with the recommendations of several experts that the criterion should be 2 µg/L or less (DuBowy 1989; Lemly and Skorupa 2007; Peterson and Nebeker 1992; Swift 2002). Exceeding the water criterion should trigger additional biological monitoring to determine if the tissue criteria for selenium proposed by USEPA has also been exceeded.

The Proposed and Existing Monitoring and Reporting Program for GBP are not sufficient to assess environmental impacts and protect beneficial uses.

The monitoring and reporting program that was revised by the Regional Board in 2015¹⁹ is inadequate to determine the level of pollution being discharged by the GBP and adjacent agricultural lands, and the harm it is causing to the environment. We have provided comments three times on the inadequacies of the Revised Monitoring and Reporting Program for the GBP. We hereby incorporate by reference our coalition letters of August 11, 2011, April 22, 2013, and November 26, 2013, and June 22, 2015. We also refer to comments submitted to the Regional Board by USFWS on the Revised Monitoring and Reporting Program for the GBP dated June 22, 2015 and June 25, 2015.²⁰ The USFWS recommended that the Regional Board reinstate weekly water quality monitoring for selenium at GBP Stations J, K, and L2 as exceedences of 2 µg/L are still occurring in those wetland channels, those channels are listed on the State's 303(d) list as impaired for selenium, and elevated selenium in those channels could be resulting in harm to federally listed species.

As part of Regional Board **ORDER R5-2015-0094**, Waste Discharge Requirements for the GBP (2015 WDR), sampling frequencies for Mud Slough, Grasslands wetland channels, and Salt Slough were reduced or completely eliminated. Stations A, B, C, I2, F, J, K, L/L2, M/M2, G and H have all been eliminated from required monitoring. We can see no technical justification or rationale for this reduction in monitoring for a project that has exceeded water quality objectives

¹⁷ <http://calsport.org/news/wp-content/uploads/EPA-Selenium-Cmt-LTR-Re-Docket-No.-EPA-HQ-OW-2004-0019.pdf> and <http://calsport.org/news/wp-content/uploads/Technical-Review-2004-EPAs-Draft-Tissue-Based-Selenium-Criterion.pdf>

¹⁸ Coalition comments of environmental, fishing and environmental justice organizations oppose U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. <http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQ-OW-2018-00....pdf>

¹⁹ https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/fresno/r5-2015-0094.pdf

²⁰ https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_usfws.pdf See this link for a copy of the USFWS letter to Ms. Margaret Wong Regional Water Quality Control Board, Central Valley Region: USFWS Comments on the May 2015 Draft Waste Discharge Requirements for the Surface Water Discharges from the Grassland Bypass Project and the Discharges to Groundwater from the Growers in the Grassland Drainage Area @ <http://calsport.org/news/wp-content/uploads/Exhibit-5.pdf>

and standards for more than 20 years. Significant spikes of selenium and other drain water pollutants are not being monitored under the existing monitoring and reporting requirements.

In addition, we specifically protested the change in the Hills Ferry monitoring site (Site H) to China Island (Site R). There is a comprehensive database with documented selenium water quality violations at Hills Ferry. Site R appears closer to the mouth of the Merced River than Site H, allowing for greater dilution and underrepresenting the contaminant threat in the San Joaquin River upstream of the Merced River.

We also opposed adoption of the monitoring and reporting program in the 2015 WDR and recommended a more robust monitoring plan similar to the 2001 GBP monitoring requirements. The reduction in monitoring frequency and locations will prevent the collection of necessary data sufficient to protect public trust values, endangered species and evaluate compliance with water quality standards. Here we reference and reiterate our previous comments and recommend a vigorous monitoring program that does not hide or understate the discharge of selenium and other toxins through stormwater discharges into Mud Slough and the San Joaquin River.

We further recommend that monitoring and reporting for total mercury and methyl-mercury concentrations in water and biotic tissue be required at all sampling locations of the GBP to establish a mass-balance of sources of mercury in this watershed.

The Stormwater Detention Basins - Another Kesterson in the Making - Effects to Wildlife Are Not Disclosed.

The proposed GBP Stormwater Plan includes use of an unspecified acreage of existing ponds and the addition of up to 200 acres of stormwater detention basins (regulating reservoirs) to store and regulate disposal or distribution of stormwater. How is such a basin different from an evaporation pond? Proposed use of regulating ponds to help control flow as a part of the engineered reuse system and ponding during flood events in the GBP area also may create a potential wildlife exposure risk similar to those originally realized at Kesterson National Wildlife Refuge (Presser and Ohlendorf, 1987). Ponding of stormwater and agricultural drainage will support an aquatic food chain and be attractive hazard to birds within a short period of time.

Selenium poses a hazard to fish and wildlife because of its toxicity at environmentally relevant concentrations and its tendency to accumulate in food chains (Skorupa, 1998). The San Joaquin Valley provides critically important habitat for wintering waterfowl of the Pacific Flyway. Eight to twelve million ducks and geese, along with hundreds of thousands of shorebirds and other marsh birds annually winter or pass through the valley. The history of the ecological impacts of disposal of selenium at Kesterson National Wildlife Refuge within the valley is well documented (e.g., Presser and Ohlendorf, 1987; SJVDP, 1990a, b). Additionally, from 1986 to 1993, the National Irrigation Water-Quality Program (NIWQP) of the U.S. Department of the Interior (USDOI) studied whether contamination was induced by irrigation drainage in 26 areas of the western United States. This program developed guidelines to interpret effects on biota of selenium (USDOI, 1998). These guidelines, along with revisions based on more recent studies and modeling, can be used to interpret and guide management and mitigation of the risk of

selenium in food chains and wildlife.²¹ The GBP reuse areas present opportunities for wildlife use and selenium exposure. Proposed use of regulating ponds to help control flow as a part of the engineered reuse system and ponding during stormwater events in the GBP area also may create a potential wildlife exposure risk similar to those originally realized at Kesterson National Wildlife Refuge²² (Presser and Ohlendorf, 1987).

The GBP has been monitoring and reporting annual bird use from April thru June at the SJRIP drainage reuse area since 2008. Many of those reports are posted on the SFEI website, however, no reports have been posted since the 2015 report. We note that additional reports were made available during the public comment period at this website.²³

The 2017 wildlife monitoring report for the GBP drainage reuse area (SJRIP) documented 50 avian species were observed at the drainage reuse area between April 13 and June 21, 2017. Eighteen species either were observed nesting or were suspected of nesting, including Swainson's hawk, a species listed by the State of California as a threatened. Twelve of the species observed—spotted sandpiper, least sandpiper, whimbrel, western wood-peewee, willow flycatcher, American pipit, savannah sparrow, White-crowned sparrow, common yellowthroat, yellow warbler, Wilson's warbler, and western tanager—were present only as spring Migrants.²⁴

The draft Addendum notes that the filling of these stormwater detention basins will begin with the first significant storm (typically December), and basins will be emptied by May. So, the potential is that stormwater commingled with drainage water will be stored in basins for up to 6 months! If these basins will hold water longer than 30 days, a state water permit is required (CCR, Title 23, Sec. 657-658). As described in Skorupa et al (2004), low winter temperatures substantively increase the toxicity of dietary selenium to birds, fish, and mammals. And the SJRIP wildlife monitoring reports do document use of the drainage reuse area by a large number of avian species (50 in 2017), including twelve species that are spring migrants. We recommend, therefore, that effects of disposal of selenium in the SJRIP and stormwater detention basins consider the effects of winter stress to birds in an EIR/EIS analysis.

Expansion of the SJRIP Drainage Reuse Area--An Unpermitted Selenium Disposal Site Masquerading as a Treatment Facility.

The GBP Stormwater Plan Addendum includes a proposed expansion of the existing drainage reuse area from 6,100 acres analyzed in the 2009 EIR/EIS to 7,550 acres of reuse area and increase in acreage of 1,450 acres. A significant environmental concern at the SJRIP is ponding of seleniferous drainage water within the fields of the reuse area. The addendum includes mention of a contingency plan in the event of inadvertent flooding, but only a reference to the

²¹ <https://pubs.usgs.gov/pp/p1646/>

²² <https://pubs.usgs.gov/of/2008/1210/>

²³ <http://www.summerseng.com/grasslandbypassproject.htm>

²⁴ <https://drive.google.com/file/d/1mudCtShFmoQ-RW0YJaVF2-oia2TIXqn5/view>

plan is included in the Addendum. It should be noted that bird use could increase in the vicinity of the SJRIP with the addition of drainwater detention basins.

Further, the 2017 SJRIP Wildlife Monitoring Report noted that the mitigation site for the SJRIP, which was supposed to provide compensation for avian exposure at the SJRIP, documented extremely elevated selenium concentrations in some bird eggs collected there. This suggests that the mitigation site is not providing compensation benefit for the SJRIP and also highlights the breadth of selenium contamination and wildlife exposure in this area.²⁵

Table 5. Selenium Concentrations in Recurvirostrid Eggs from the Mitigation Site in 2017

ID Number	Field Number ¹	Date	Embryo ²		Embryo Age (days)	Selenium (ppm, dry wt) ³	Log	
			Condition	Status			Base 10	Anti-Log
Black-Necked Stilt								
PM-01	MS-01	June 9	U	U	1	3.74	0.5729	
PM-02	MS-02	June 9	L	N	13	4.52	0.6551	
PM-03	MS-03	June 9	U	U	1	5.54	0.7435	
American Avocet								
PM-04	MA-01	June 9	L	N	9	51.1	1.7081	
PM-05	MA-02	June 9	U	U	1	8.7	0.9395	
Arithmetic/geometric mean						14.7	0.9238	8.4
Standard deviation						20.4	0.4591	2.9
Standard error							0.2053	1.6
Lower limit of 95% confidence interval							0.5214	3.3
Upper limit of 95% confidence interval							1.3263	21.2

¹ See Appendix H.

² L = live; N = normal; U = unknown.

³ ppm, dry wt = parts per million dry weight.

Treatment Methods Have Not Operated Effectively.

The 2009 EIR/EIS for the GBP included treatment as a significant component of the plan to reduce selenium in discharges to the San Luis Drain. What is the status of the treatment plant? The 2009 GBP EIR/EIS included a bio-treatment plant to reduce the selenium load being discharged, and to achieve the zero discharge of subsurface agricultural drainage after 2019. There is no mention of treatment in the GBP Stormwater Plan. More than thirty million dollars has been invested in a demonstration treatment plant that still is not functioning and where a federal audit found questionable expenditures.²⁶

²⁵ *Ibid.* page 20.

²⁶ <https://www.doioig.gov/reports/bureau-reclamation%E2%80%99s-cooperative-agreement-no-r16ac00087-panoche-drainage-district>

Long term viability and legality of GBP Drainers' Proposed Actions.

Given that the latest plan for adding the discharge polluted storm water is a 15-year program, it raises questions regarding the long-term viability of the actions proposed in the GBP Stormwater Plan. The 2009 EIR/EIS relied on unproven treatment technologies to treat and reduce the volume of drainage from the GBP that would need to be disposed of. These treatment technologies have yet to prove reliable or cost effective. Without treatment, how will drainage volumes and selenium loads be managed at the SJRIP? Can the SJRIP remain viable after 15 additional years of irrigation with selenium and salt-laden drainage? What is the life of the reuse area before too much salt accumulation prevents future agricultural use? Where is the selenium and salt that is accumulated in the SJRIP ultimately disposed of? All of these questions need to be evaluated in a full EIR/EIS. Dubbed a treatment area, the SJRIP is looking more and more like an unpermitted selenium and salt disposal facility.

Reuse of polluted drainage in the GBP's SJRIP drainage reuse area won't eliminate the loading of wastes. It is simply stockpiling wastes on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to having to permanently fallow more and more land.

Land Retirement should be considered as a viable alternative.

Our organizations have previously submitted comments to the Regional Water Board about the success of land retirement in relation to the GBP's drainage volume load reductions.²⁷ The USBR's 2004 Broadview Water Contract Assignment Draft Environmental Assessment cites Summer's Engineering as predicting a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year from the cessation of irrigation on 9,200 acres of agricultural land in Broadview Water District as per Table 4-1 below (USBR 2004). This amounts to a per acre reduction of 0.28 AF of drainage, 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of boron.

²⁷ See Coalition letter to CVRWQCB on Selenium Basin Plan Amendment, April 26, 2010, p 15-16; http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr.pdf and Coalition letter to Karl Longley on Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements: <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbp-land-retirement.pdf>

**TABLE 4-1
DRAINAGE AND WATER QUALITY EFFECTS OF PROPOSED ACTION ON THE
SAN JOAQUIN RIVER**

	Existing Conditions	Under Proposed Action Conditions	Estimated Reduction Attributable to Proposed Action
BWD Drainage to San Joaquin River (afy)	3,700	1,100	2,600
BWD Estimated Salt Production (tons/yr)	24,300	7,300	17,000
BWD Estimated Selenium Production (lbs/yr)	2,140	640	1,500
BWD Estimated Boron Production (lbs/yr)	74,000	22,000	52,000

Source: Summers Engineering, 2003

Land retirement likely accounted for most of the reductions in selenium, and the majority of reductions in drainage volume, boron and salt claimed by the Grasslands Bypass Project in the 2009 EIR/EIS.

The US EPA, in a letter regarding the Bay Delta Conservation Plan,²⁸ strongly recommended the USBR's Land Retirement Program be revived to save water and prevent further selenium contamination and impacts to endangered species (page 13):

***Recommendations:** To mitigate for the project's impacts to selenium levels in the estuary as a result of the BDCP operations, consider reviving and funding the Bureau of Reclamation's Land Retirement Program¹⁷ to remove from cultivation and irrigation large areas of selenium laden lands on the West side of the San Joaquin Valley. This would save irrigation water, reduce discharges of selenium into the San Joaquin River basin, and advance attainment of selenium reduction targets¹⁸ set by EPA and the Central Valley Regional Water Quality Control Board. Evaluate the extent to which restoration of these "retired" lands to the native plant community could also contribute to the recovery of threatened and endangered plants and animals listed by FWS. Consider analyzing the cost/benefit of implementing treatment technologies vs. land retirement. Although cost/benefit analyses are not required under NEPA, such an analysis may be useful to decision makers and the public in this case."*

Further, the USBR's the San Luis Drainage Feature Re-Evaluation (SLDFRE) Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit. Three land alternatives were evaluated in the SLDFRE EIS, 306,000 acres, 194,000 acres and 100,000 acres respectively. The Final EIS found that the only environmentally and economically preferred alternative was to retire 306,000 acres (In-Valley/Drainage Impaired Area Land Retirement).²⁹ It's clear from the NED findings in Table N-10 below that additional land retirement would provide increased net economic benefits.

²⁸ <http://calsport.org/news/wp-content/uploads/bay-delta-conservation-plan-deis.pdf>

²⁹ SLDFRE Final EIS, Appendix N, Table N-10, page N-17, accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2240

**Table N-10
Benefit/Cost Summary
Changes Relative to the No Action Alternative (\$/year in 2050)**

Subarea	In-Valley Disposal	Out-of-Valley Disposal	In-Valley/ Groundwater Quality Land Retirement	In-Valley/ Water Needs Land Retirement	In-Valley/ Drainage-Impaired Area Land Retirement
Total NED Benefit	\$37,962,000	\$38,430,000	\$31,164,000	\$20,629,000	\$9,931,000
Total NED Cost	51,225,000	51,370,000	46,767,000	30,778,000	6,288,000
Net NED Benefit	-\$13,263,000	-\$12,940,000	-\$15,603,000	-\$10,149,000	\$3,643,000

Notes:

Values represent net NED benefits relative to No Action.

Values rounded to nearest \$1,000. Totals may not add due to rounding.

Moreover, the US Fish and Wildlife Service, in their Fish and Wildlife Coordination Act Report (FWCAR) for SLDFRE, recommended that all of the northerly area within the San Luis Unit (GBP Drainage Area) be retired as well,³⁰ but USBR did not consider that alternative. The Service concluded on page 67 of the FWCAR, *“To avoid and minimize risks and effects to fish and wildlife resources in the San Joaquin Valley and Pacific Flyway, the Service recommends land retirement on all drainage impaired lands in the SLU. This approach would maximize the elimination of drainage at its source, and therefore avoidance of adverse fish and wildlife effects.”*

By ignoring permanent land retirement, the GBP Stormwater Plan Addendum will continue to kick the can down the road and concentrate and store salt, selenium, boron and other toxic substances in the shallow aquifers of the Grasslands area. This creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River and the Bay-Delta estuary, especially in wetter years.

Conclusion

We urge all polluted discharges of agricultural drainwater and stormwater cease as required under the current federal Use Agreement and Water Board WDR. We recommend land retirement and curtailing the importation of additional water supplies that mobilizes these contaminants on the west side of the Southern San Joaquin Valley. Despite repeated promises, no viable treatment has been developed in the more than two decades of myriad attempts. Before proceeding to load even more contaminants on downstream beneficial uses, we recommend no new use agreement be granted and before any further discharges of either stormwater, agricultural drainage or contaminated groundwater are permitted, that a full EIS/EIR be completed. Before the proposed drainers' GBP Stormwater Plan is considered, a complete environmental analysis is needed. The EIS/EIR should include:

³⁰ SLDFRE Final EIS, Appendix M, USFWS FWCAR accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236

- A National Pollutant Discharge System Permit prior to any additional use of the federal San Luis drain for discharge of contaminants from the west side into the San Joaquin River and Delta Estuary;
- A comprehensive cumulative effects analysis of stormwater and drainage disposal into Mud Slough and the San Joaquin River and Delta Estuary;
- A chronic, legally binding selenium objective of no greater than 2 µg/L (4-day average) is established for receiving waters of stormwater/drainage discharges;
- No exceedance of the 2 µg/L selenium water criterion which if exceeded should trigger all discharges to cease and additional biological monitoring to determine if the tissue criteria for selenium proposed by USEPA in November 2018 has also been exceeded;
- An analysis of effects of disposal of selenium in the SJRIP and stormwater detention basins to wildlife including factors such as winter stress;
- A description of the status and viability of drainage treatment at the SJRIP;
- A description and evaluation of the long-term viability of drainage disposal strategies at the SJRIP and describe where is the salt, selenium and other contaminants that accumulate are ultimately disposed. This should not become an unregulated dumping ground for west side contaminants.

Finally, Congress in its authorization of the San Luis Unit in 1960, never envisioned use of the San Luis Drain for stormwater discharge. As stated Congress provided a under specified conditions including approval by the State of California³¹ for “...*provision for constructing the San Luis interceptor drain to the Delta designed to meet the drainage requirements of the San Luis unit...*”, *Senate Report No 154, page 2, San Luis Unit, Central Valley Project, California, April 8, 1959.*³² This brings into question whether the "Drain" can be legally used for storm water discharge without Congressional approval.

The use of the federal San Luis Drain for stormwater also raises consistency questions with existing State Board orders. The California State Water Resources Control Board (SWRCB), following the Kesterson debacle, issued its Order WQ 85-1 in February 1985. The SWRCB found that agricultural drainage and wastewater reaching Kesterson Reservoir “is creating and threatening to create conditions of pollution and nuisance” (Emphasis added). The Order then warned “If the Bureau closes Kesterson Reservoir and continues to supply irrigation water to Westlands Water District without implementing an adequate disposal option, continued irrigation in the affected area of Westlands Water District could constitute an unreasonable use of water”

³¹ See PL86-488 San Luis Act June 3, 1960: Proviso: (2) *received satisfactory assurance from the State of California that it will make provision for a master drainage outlet and disposal channel for the San Joaquin Valley,which will adequately serve, by connection therewith, the drainage system for the San Luis unit or has made provision for constructing the San Luis interceptor drain to the delta designed to meet the drainage requirements of the San Luis unit as generally outlined in the report of the Department of the Interior, entitled "San Luis Unit, Central Valley Project," dated December 17, 1956.* The State of California has not made such a provision and Congress never consider the use of the drain for stormwater.

³² See H. Rpt 399...<http://calsport.org/news/wp-content/uploads/Exhibit-3.pdf>
S. Rpt 154...<http://calsport.org/news/wp-content/uploads/Exhibit-4.pdf>

(Emphasis added). We urge the project proponents and State and Federal permitting agencies to not repeat the mistakes made at Kesterson Reservoir in the 1980's. The continued irrigation of these toxic soils constitutes an unreasonable use of water and continued and future disposal of agricultural drainage in ponds, land, and in surface waters will cause significant harm to public trust resources and violates non-degradation policies.

Thank you for your consideration,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
noah@ifrfish.org



John Buse
Senior Counsel, Legal Director
Center for Biological Diversity
jbuse@biologicaldiversity.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



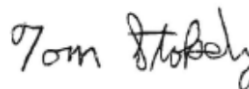
Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Espe Vielma
Executive Director
Environmental Justice Coalition for Water
espe@ejcw.org



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



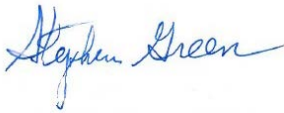
Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



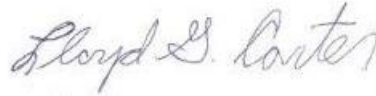
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



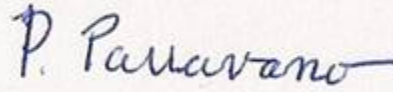
Eric Wesselman
Executive Director
Friends of the River
Eric@friendsoftheriver.org



Larry Collins
President
Crab Boat Owners Association
papaduck8@gmail.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers International
mrockwell1945@gmail.com

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



Adam Keats
Senior Attorney
Center for Food Safety
AKeats@CenterforFoodSafety.org

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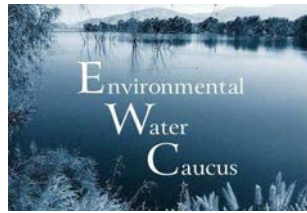
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CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180



CA Save Our Streams Council



March 28, 2019

Ms. Julianne McLaughlin
Office of Water, Standards and Health
Protection Division
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460
mclaughlin.julianne@epa.gov

Ms. Diane E. Fleck, P.E., Esq.
Water Division (WTR-2-1)
U.S. Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105
Fleck.Diane@EPA.gov

Via Email: OW-Docket@epa.gov

RE: Attention Docket No. EPA-HQ-OW-2018-0056-0421

EPA-HQ-OW-2018-0056 Docket Name: Federal Selenium Criteria for Aquatic Life and Aquatic-Dependent Wildlife Applicable to California, **Docket RIN,** 2040-AF79 EPA-HQ-OW-2018-0056 FRL-9989-46-OW.

Thank you for the opportunity to comment on the Federal Selenium Criteria for Aquatic Life and Aquatic-Dependent Wildlife Applicable to California. The undersigned groups, representing fishing, tribes, low-income communities and communities of color, business and conservation organizations agree with the scientific view supported by federal government scientists that *“Few environmental contaminants have the potential to impact aquatic resources on such a broad scale, and even fewer*

exhibit the complex aquatic cycling pathways and range of toxic effects that are characteristic of selenium (Lemly and Smith 1987; Lemly 2004).” Thus, adopting protective water quality criteria for selenium is essential not only for various aquatic species, through various lifecycles, during various seasons, but also for the protection of terrestrial wildlife that feed on these aquatic resources. Unfortunately the proposed criteria for selenium are not protective of aquatic resources or the food chain that depends upon this habitat.

EPA is proposing water quality criteria applicable to fresh waters under the state of California's jurisdiction to protect aquatic life and aquatic-dependent wildlife from exposure to selenium. We have comments on three main aspects of the proposed criteria:

1. **Arbitrary Geographic Restrictions & Procedural Confusion over 303(d) Water Bodies:** EPA's proposed rule does not include waters within known selenium-contaminated geographical areas, including tributary flows into the San Francisco Bay Delta system such as, the San Joaquin River from Sack Dam to Vernalis, Mud Slough, Salt Slough, along with the water supply channels in the Grassland watershed, and the Grasslands Ecological Area in Fresno and Merced Counties. Also excluded are the surface waters that are tributaries to the Salton Sea in Imperial County. EPA is exercising its authority under section 303 (c)(4) of the Clean Water Act to apply the proposed standards across the entire state. Excluding these geographical areas and allowing State criteria that exceed protective levels is arbitrary and fails to meet the legal protection requirements under the Clean Water Act. Further there are a number of procedural questions associated with the application of proposed criteria to the existing and proposed 303 (d) list of selenium impaired water bodies.
2. **Application to Canals and Sloughs:** It is unclear how the proposed criteria will apply to freshwater canals and sloughs, which raises significant procedural compliance questions with regard to protecting aquatic species, endangered species, fish and wildlife.
3. **Derivation and Implementation:** There are a number of specific technical issues and questions with how the criteria were derived and the procedures for their implementation.

More detailed discussions of each of these aspects are provided below.

1. Broad geographical areas of California are impacted by selenium contamination, but the proposed Criteria will not be applied to those areas.

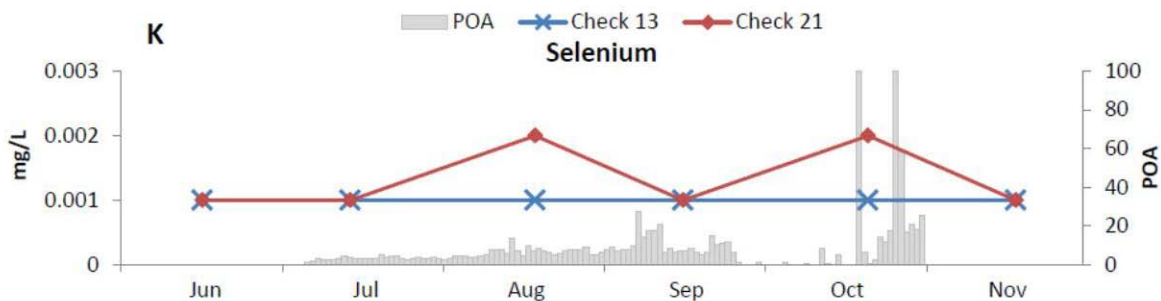
Under the Clean Water Act, 303 (d), a TMDL is a plan to restore and protect water quality based on applicable standards and criteria. They are not self-implementing. California is geographically diverse and there are many regions in California where fresh water streams are impaired by selenium. Selenium is a mineral essential for reproductive health and immune system function in humans, fish and wildlife. The safety margin, however, between nutritionally optimal and detrimental amounts is very narrow. Further complicating adherence to the CWA requirements to restore and protect water quality in aquatic ecosystems, selenium bio-accumulates in food webs at concentrations that can impair reproduction in sensitive fish and birds. Typically water quality criteria require protection of beneficial uses and prohibit the discharge of toxic substances at levels that will bio-accumulate in aquatic resources to levels which are harmful to human health or where concentrations in the water column, sediments or biota adversely affect beneficial uses. Like the San Francisco Bay Delta Estuary, the Newport Bay contamination by selenium is fed by the discharges of selenium from freshwater tributaries, including San Diego Creek, Santa Ana Delhi Channel and Big Canyon Wash. The insufficiently protective criteria proposed will not protect the beneficial uses of these watersheds where the bioaccumulation will compound exposure and reproductive impacts. Similarly the avian populations relying on the Salton Sea also will not be protected.

2. How the new standards will apply to freshwater canals and sloughs is unclear and raises significant procedural compliance questions with regard to protecting aquatic species, endangered species, fish and wildlife.

More than three decades ago, federal scientists discovered the cause of a massive die-off of fish and birds at the Kesterson National Wildlife Refuge in Merced County, 10 miles north of Los Banos. Selenium, a trace element abundant in the soils of the western San Joaquin Valley, had been dissolved by irrigation in the Westlands Water District and then funneled in drainage water from the fields to evaporation ponds at Kesterson through a cement-lined drainage ditch called the San Luis Drain. As the selenium moved up the Kesterson food chain, it became more lethal until it caused the deaths of thousands of migratory birds and near total reproductive failure in some avian species. The current criteria propose to exempt this area and how canals that receive selenium contaminated discharges will be regulated to protect aquatic resources, endangered species, fish and wildlife are not clear.

For example, Westland Water District currently under state rules is allowed to discharged selenium contaminated water into the California Aqueduct. Downstream uses of the water include the Kern National Wildlife refuge and critical habitat for the federally listed Buena Vista Lake Ornate Shrew. The MCL of 50 µg/l is not sufficient to protect the BVLO Shrew. How the new criteria will or will not apply to this freshwater canal and other canals receiving selenium contaminated discharges, such as the Agatha Canal in South Grasslands is not clear. These canals also serve as critical habitat for endangered species such as the Giant Garter Snake and breeding for the least Bell's vireo. Data from the California Department of Water Resources¹ indicates discharges of selenium contaminated water into the California Aqueduct exceed even the proposed lack standards and yet monitoring and enforcement under the proposed criteria is not clear. Here is DWR's monitoring chart of Westlands' selenium discharges:

Water Quality Assessment of Non-Project Turn-ins to the California Aqueduct, 2015



Notes:

mg/L = milligrams per liter, POA = percentage-of-Aqueduct, µg/L = micrograms per liter, µS/cm = microSiemens per centimeter
 POAs of 100 percent during October represent days when Dos Amigos Pumping Plant (DPP) was inactive.

Procedural issues and the implementation process with regard to 303 (d) lists of selenium impaired water bodies.

Congress adopted the Clean Water Act (“CWA”) “to restore and maintain the chemical,

¹ <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Water-Quality/Documents/Water-Quality-Assessment-of-NonProject-Turnins-to-the-California-Aqueduct-2015.pdf?la=en&hash=7031838ED764C76616255C5FA38150659FEC5C94>

physical and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251(a). Under CWA section 303(d) (33 U.S.C. § 1313(d)), California is required to report to the U.S. Environmental Protection Agency (“EPA”) on the quality of the waters of the United States within California’s boundaries every two years. Known as the “section 303(d) list,” this report identifies water bodies not meeting federal water quality standards and the specific water quality parameters that are not being met. 40 C.F.R. § 130.7(d).

Of particular concern is how and whether water quality criteria for selenium will be enforced with regard to specific 303(d) geographical areas where selenium criteria have been relaxed, resulting in incorrect TMDLs, or where selenium is contaminating freshwater and yet no 303(d) TMDL has been adopted. For example, insufficiently protective selenium criteria for the San Joaquin River and western valley agricultural drainage, which apparently would not be covered by the proposed criteria, has led to elevated selenium loads to the Bay-Delta estuary. The excessive selenium loads threaten to drive another nail in the coffin of California’s sport and commercial fisheries, the ecosystems that support them, and the public trust resources these communities rely upon for swimming, recreation, and other beneficial uses.

Threats from selenium in the San Joaquin River to the Delta’s health have grown over the past five decades. The environmental devastation caused by water exports and contaminants has pushed the Delta’s imperiled fisheries to the brink of extinction. Several species of fish endemic to the Delta have already gone extinct; just twelve indigenous species remain. Critical habitat for the endangered Sacramento River winter run chinook salmon, Central Valley steelhead and spring run chinook, the Delta smelt, and the Southern Distinct Population Segment (“DPS”) of the Northern American green sturgeon suffers progressively accelerating degradation. Excluding these receiving waters, such as the San Joaquin River and the Delta, from the proposed Selenium Criteria will compound impacts to these threatened and endangered species.

Furthermore, the federal CVPIA and 2006 bay-delta plan’s salmon-doubling objective is ignored. The proposed Criteria do not explain how exempting this geographical area and freshwater canals, streams, and rivers that feed the estuary that are also exempted and contain elevated levels of selenium will be protective of these endangered species, habitat and aquatic resources. EPA merely exempts and does not consider the proposed “freshwater” criteria to large selenium impaired tributaries to the San Francisco Bay-Sacramento-San Joaquin Delta Estuary. And yet, the selenium discharges to the freshwaters of the San Joaquin River and other sources do impact fish, wildlife and aquatic life that feed and migrate through the estuary to the rivers and streams or feed on these freshwater sources and the estuary. The cumulative or compounded impact of a relaxed freshwater standard will be felt throughout the watershed.

Specific Comments on Derivation and Application of the proposed Criteria:

Our comments are inserted in bold red italics within the following excerpts from the draft criteria document (page 101):

Part 6 AQUATIC AND AQUATIC-DEPENDENT WILDLIFE CRITERIA FOR SELENIUM IN CALIFORNIA’S FRESH WATERS

The available data indicate that aquatic life and aquatic-dependent wildlife would **not** be protected from the toxic effects of selenium by applying the following criteria, recognizing that fish tissue elements and bird egg elements supersede the translated site-specific water elements (except in special situations, see footnote 4 in Table 6-1) and that the fish egg-ovary elements supersede all other fish tissue elements:

Comments on application of Criteria (1-5 below):

- a) Considering the following criteria, 1-5 in the draft document, EPA has not adequately specified how the criteria would be applied in different site and data availability situations. For***

example, would it be acceptable for approach 4 (translation method to yield site-specific water criteria) to be the final determinant of the criterion for a site without ever confirming actual tissue values for critical species at a site?

- b) As the selenium criteria-setting process adds scientifically needed improvements it gets more complex. EPA should provide a more explicit decision analysis process, including requirements for data collection, for implementing the new criteria.*

1. The concentration of selenium in bird eggs does not exceed 11.2 mg/kg, dry weight;
2. The concentration of selenium in the eggs or ovaries of fish does not exceed 15.1 mg/kg, dry weight;
3. The concentration of selenium (a) in whole body of fish does not exceed 8.5 mg/kg dry weight, or (b) in muscle tissue of fish (skinless, boneless fillet) does not exceed 11.3 mg/kg dry weight;

Comments on 1-3: The above tissue criteria, the foundation of the proposed approach, are not adequately protective:

- a) They are based on a limited number of EC10 values screened from the literature for various species and locations, and then these values are averaged. This averaging generally tends to bias the estimated value to the high side. Given the unknown significance for different species and conditions at sites not yet studied, and to which the criteria will be applied, there should be a more conservative approach. We suggest using the 10th percentile of the available EC10 values for each of the three tissue types. A less conservative option, but one in line with that used in similar situations in “Translation of Selenium Tissue Criterion Elements to Site-Specific Water Column Criterion Elements for California”, would be the 20th percentile.*
- b) Previous reviews of similar tissue-based criteria (2016 National Selenium Criteria) by FWS disagreed with EPA’s selection and screening of appropriate EC10 values from the literature and argued that the tissue criteria values were, as a result, too high. In addition, review by USGS was critical of the methodology. We suggest that, before finalizing the subject criteria, that a consensus be achieved and documented among the relevant scientists from EPA, FWS, and USGS. This is critically important because these tissue values and how they are applied will be the foundation of most regulatory decisions.*
- c) EPA’s proposed tissue-based selenium criteria for aquatic life and aquatic-dependent wildlife are internally inconsistent and therefore scientifically indefensible. For example, the proposed fish whole-body criterion is 8.5 ppm Se (dry weight basis) and the proposed avian egg criterion is 11.2 ppm Se (dry weight basis) (USEPA 2018). Both values are intended to control toxicity among fish and birds to an EC-10 level or lower. However, based on the invertebrate food web to fish trophic transfer factors (TTFs) presented in Table 5-2 (USEPA 2018), allowing fish whole-body tissue to rise as high as 8.5 ppm would be the same as allowing the invertebrate food web to rise as high as 3.2 to 12.5 ppm Se (corresponding to the highest TTF of 2.67 and lowest TTF of 0.68 in Table 5-2). The median TTF of 1.205 would correspond to allowing food web contamination up to 6.7 ppm. Based on Ohlendorf’s (2003) dietary toxicity response curve for mallards (breeding female mallards feed nearly exclusively on the aquatic invertebrate food web due to the high protein requirements necessary for ovulation), a dietary exposure of 6.7 ppm is approximately the EC-30 for mallard egg viability (or an egg selenium concentration of about 19 ppm, based on Ohlendorf’s (2003) egg toxicity response curve), which, of course, is almost twice the intended upper allowable limit of 11.2 ppm. Apparently, a whole-body fish tissue criterion consistent with keeping avian eggs below 11.2 ppm selenium would have to be 5.9 ppm or lower (the value that would keep the invertebrate food web at or below the dietary EC-10 for mallards of 4.9 ppm, at the median TTF of 1.205).*
- d) The proposed avian egg criterion of 11.2 ppm selenium is inherently under-protective because it is derived from only one short segment of the avian reproductive cycle (egg incubation). Once an avian egg hatches in selenium contaminated environments, which is the only way one*

could describe an environment that produces avian eggs exceeding 5 ppm (Janz et al. 2010), the hatchling continues to be exposed to elevated Se in its diet. Studies at Kesterson Reservoir demonstrated that by far the largest source of selenium-induced avian reproductive toxicity occurred post-hatch, as opposed to during egg incubation (Ohlendorf et al. 1986; Williams et al. 1989). Marn (2003) found increasing post-hatch mortality rates matching increasing selenium exposures among avocets, even in environments that didn't reach the egg selenium threshold for depressed egg hatchability in avocets (i.e., at the EC-0 for eggs).

- e) For precocial shorebirds, it is well established that growth rates in the first few days after hatch correlate strongly with a hatchling's ability to avoid predation, and other sources of mortality. It is also known that in-ovo selenium exposure reduces initial post-hatch growth rates in avocets, so there is a clear mechanism to explain Marn's results and those of Williams et al. An EC-10 for toxicity to avian eggs is much more than an EC-10 for the entire avian reproductive cycle, and EPA's proposed criterion to protect aquatic-dependent wildlife does not account for that.*

4. The 30-day average concentration of selenium in water does not exceed more than once in three years on average the value derived on a site-specific basis using the methodology described in *Translation of Selenium Tissue Criterion Elements to Site-Specific Water Column Criterion Elements for California*.

- a) Valid translation of tissue concentrations to water column criteria via the Translation Model requires accurate and representative TTF values. For example, using the median TTF from Table 5-2 in the proposed document is equivalent to settling for criteria that are approximately 50% protective. At a more appropriate 90% protection level (using the 10th percentile TTF from Table 5-2, or 0.85) the whole-body fish tissue criterion would have to be set at 4.2 ppm to be consistent with keeping avian eggs at or below 11.2 ppm.*
- b) Water column criterion values determined by the proposed site specific method will unavoidably have a very high range of uncertainty among different sites, depending on such factors as which species are present at each site, data on site characteristics, and so forth. Because of this and the newness of this approach for producing regulatory criteria with few or no direct measurements, we suggest that the first phase of implementation of the proposed criteria require direct measurements according to the sampling plan described in *Translation of Selenium Tissue Criterion Elements to Site-Specific Water Column Criterion Elements for California*. This approach will develop a database that can be analyzed for method validation and improvement. The present draft is not clear on such requirements. Though the sampling plan is described in the "Translation Document", there appears to be no requirement that it be followed or when it should be implemented. Following the recommended sampling plan should be required.*
- c) We note that both the 30-day average and the once-in-three-year exceedance are, for the most part, arbitrary metrics for decision making. Given the uncertainties inherent in these values and their importance in determining compliance, we recommend a more conservative and protective approach of a 14-day average in any particular year. As part of implementing the final criteria, whatever metrics are selected should be explicitly monitored and validated as site-specific applications of the criteria accumulate. This approach would allow the metrics to be defensibly updated as data dictate.*

5. The intermittent concentration of selenium in either a lentic or lotic water, as appropriate, does not exceed $WQC_{int} = WQC_{30-day} - C_{bkgrnd}(1-f_{int})f_{int}$ more than once in three years on average.

- a) As noted above for the 30-day average water concentration, the intermittent criterion is, for the most part, an arbitrary metric for decision making. Given the uncertainties inherent in these*

values and their importance in determining compliance, we recommend a more conservative and protective approach of a 4-day average in any particular year. This would be consistent with EPA's practice for determining Chronic Continuous Criteria.

- b) As part of implementing the final criteria, whatever metrics are selected should be explicitly monitored and validated as site-specific applications of the criteria accumulate. This approach would allow the metrics to be defensibly updated as data dictate.*

In closing, we urge USEPA to work directly with the scientific experts from their sister Federal agencies in order to develop selenium criteria that will protect our public resources. Our plea is that the scientists from USFWS, NMFS, USFS, and USGS be brought directly into the Criteria setting process with EPA scientists to ensure a consensus-based criteria that all federal resource agencies will support. USEPA needs to ensure that the selenium criteria adopted will in fact comply with the Clean Water Act, Endangered Species Act, Migratory Bird Treaty Act, Fish and Wildlife Coordination Act and Tribal fishing rights.

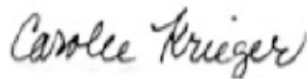
Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](#)
jminton@pcl.org



John Buse
Senior Counsel, Legal Director
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



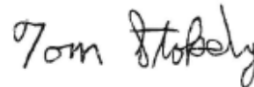
Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](#)
noah@ifrfish.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



Colin Bailey
Executive Director
Environmental Justice Coalition for Water
colin@ejcw.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



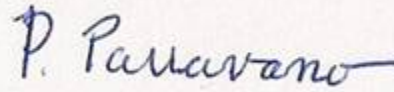
Eric Wesselman
Executive Director
Friends of the River
Eric@friendsoftheriver.org



Larry Collins
President
Crab Boat Owners Association
papaduck8@gmail.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net

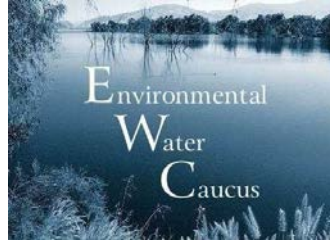


Caleen Sisk
Chief and Spiritual Leader of the
Winnemem Wintu Tribe
caleenwintu@gmail.com

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NORTH
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CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180



CA Save Our Streams Council

March 26, 2015

Bruce Lawrence
Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Comments on the Draft Environmental Assessment Westlands Water District Groundwater Warren Act Contract EA-15-001 & FONSI-15-001

Dear Mr. Lawrence:

Thank you for the recent 15 day extension to the 15 day window of opportunity to comment on the DEA and FONSI to allow Reclamation to enter into a five-year Warren Act Contract with Westlands Water District. Under the terms of the contract, Westlands Water District would introduce up to 30,000 acre-feet per year (AF/y) of potentially highly contaminated non-Central Valley Project (CVP) water into the California Aqueduct-San Luis Canal, in years in which Westlands Water District's CVP allocation is 20% or less. Reclamation proposes to issue a combined 25-year authorization for all discharge points involved in the Proposed Action. Further the proposed federal action anticipates permitting Westlands Water District if it is unable to make use of water introduced into the facilities within the designated window, to carry the water over for some indefinite period of time. The amount of water from each source would vary, but the total quantity introduced under the Proposed Action would not exceed a combined volume of 30,000 AF in a given year.¹

The draft EA and FONSI are not adequate and do not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment. Reasonable alternatives which could reduce the environmental impacts of the project have not been considered. The information, data, analyses, and cumulative impacts should be included and an EIS completed for recirculation before a finding of no significant impact can be made. Finally there is insufficient analysis of the cumulative impact of discharging these contaminants into drinking water and wildlife refuge supplies.

Without analysis or data, the DEA determines there will be no impact to the environment, no effect to endangered species, and that there is full compliance with the Migratory Bird Treaty Act and the Fish and Wildlife Coordination Act. No consultation with the United States Fish and Wildlife Service has been initiated despite endangered species such as the giant garter snake, mountain plover, delta smelt, Sacramento splittail along with vernal pool ecological species found in locations of the proposed pumping, extraction and discharge along with other impacted species. All impacts to endangered species are summarily dismissed without data, surveys or analysis. The Bureau of Reclamation does not provide the basis for the determination that there is no need for further consultation regarding critical habitat, impacts to threatened and endangered species, or a need to provide any data to support the conclusions in the document.

The proposed Westlands 5-year contract and 25 year authorization is not included in the DEA, so an informed decision and analysis is precluded. As EPA noted in 2010, and attached to these comments for reference, the proposed discharge of contaminated groundwater from Westlands with potentially high salt, boron, chromium, arsenic, and other metals would be subject to NPDES permitting requirements pursuant to the federal Clean Water Act. Further EPA noted, *“Permits will need to be designed to ensure the discharges do not cause or contribute to exceedences of applicable State water quality standards or degradation of designated beneficial uses.”* No compliance with the federal Clean Water Act is provided in the DEA. Thus the public is precluded from analyzing the permit and conditions to ensure protection and non degradation of water supplies under the NPDES permit and potential mitigation measures. The proposed discharges including various metals and selenium bio-accumulate in the food chain thus amplifying the impacts.²

Insufficient monitoring is required to ensure non-degradation state and federal water quality standards are upheld. Further the DEA does not require sufficient monitoring and reporting from the various Westland ground water laterals that will be discharging for some 25 years under a discharge permit that is not disclosed to the public. Monitoring is needed to ensure levels of pollutants discharged do not harm and degrade water supplies, endangered species or migratory birds. The full spectrum of contaminants that need to be monitored and reported are not included. What is provided appears to be limited to salts and volumes. Existing drinking water standards are not sufficient to protect fish, wildlife and migratory birds especially with regard to contaminants such as selenium, mercury or others that magnify in the food chain causing death and deformities. Impacts to downstream refuge water supplies like the 10,618 acre Kern National Wildlife Refuge that receives water from the California Aqueduct is not considered. Recent monitoring reports from California Department of Water Resources (DWR) show high levels of salts, heavy metals, arsenic, chromium etc.³

As noted in the DEA, Westlands Water District is in an area with historical, as well as, recent subsidence (see Figure 3-3). DEA @pg 16. Increases in subsidence, impacts to the California Aqueduct, and long term cumulative impacts are brushed aside without analysis, data or consideration of alternatives. These impacts and costs are likely to be significant. USGS recently reported, *“Extensive groundwater pumping from San Joaquin Valley aquifers is increasing the rate of land subsidence, or sinking. This large-scale and rapid subsidence has the potential to cause serious damage to the water delivery infrastructure that brings water from the north of the valley to the south where it helps feed thirsty cropland and cities. According to a new report by the U.S. Geological Survey the subsidence is occurring in such a way that there may be significant operational and structural challenges that need to be overcome to ensure reliable water delivery.”*⁴

Cumulative impacts from other exchanges also are not disclosed or analyzed. We adopt by reference our comments from previous exchanges and transfers and previous scoping comments that are attached.⁵ In addition to the continued extraction of water from already over drafted groundwater basins, the impacts from discharging this groundwater on WWD’s toxic soils on the west side of the San Joaquin Valley are not disclosed nor mitigated. These discharges are known to create life threatening impacts to migratory birds, wildlife and fish, magnifying up the food chain as these pollutants accumulate. These impacts are merely brushed aside. No monitoring or reporting is required. No data is provided to support the DEA conclusions of no impact. Alternatives are woefully deficient.

The draft EIS does not adequately assess the potentially significant environmental impacts from the project. There are reasonably available alternatives that have not been considered and should be analyzed in order to reduce the potentially significant environmental impacts. Absent from the document is any assessment of the cumulative impacts including third party impacts and impacts to fish, wildlife and water quality. Required permits and compliance with the Clean Water Act to allow discharge of contaminants into the waters of the state and nation have not been provided. The document needs to be withdrawn. A full EIS is needed.

Thank you for the opportunity to comment. Please add our names to USBR’s electronic notification lists for environmental documents regarding the Central Valley Project water supplies or contracts.

Sincerely,



Conner Everts
Co-Facilitator
Environmental Water Caucus
connere@gmail.com




Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Jonas Minton
Senior Policy Advisor
Planning and Conservation League
jminton@pcl.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



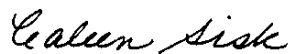
Zeke Grader
Executive Director
Pacific Coast Federation of Fishermen's Asso.
zgrader@ifrfish.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



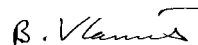
Caleen Sisk
Chief of the
Winnemem Wintu Tribe
caleenwintu@gmail.com



Larry Collins
President
Crab Boat Owners Asso.
lcollins@sfcabboat.com



C. Mark Rockwell
Endangered Species Coalition
mrockwell@stopextinction.org



Barbara Vlamis
Executive Director
AquaAlliance
barbarav@aqualliance.net

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

Attachments: 2010 Scoping Comment Letter and 2010 EPA Scoping Comment letter
Endnotes:

¹ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=21022

² <http://www.water.ca.gov/swp/waterquality/PumpIns/index.cfm> Water Quality data for 2008 pumping for WWD showed elevated levels of boron, salts, arsenic, and selenium.

³ See <http://www.water.ca.gov/swp/waterquality/PumpIns/index.cfm>

⁴ See <http://www.usgs.gov/newsroom/article.asp?ID=3731#.VRRBAKMtHVQ>

⁵ See comments provided http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=14341
“Resnicks’ Westside Mutual Water District member lands in Westlands Water District to the AEWSD service area and Westside Exchange Program are not disclosed nor analyzed. Nor are the impacts to Madera County from the potential groundwater transfers likely contemplated under the proposed action. The existing Exchange Program involves delivery of Arvin’s supplies to Westside member lands as exchange water, based on a 1 for 1 or “bucket for bucket” basis, up to 50,000 acre feet (AF).”

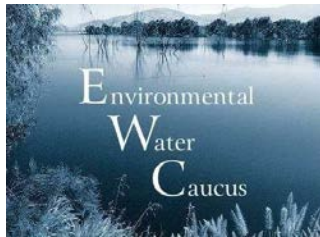
See also July 3 2012, Environmental Advocates comments provided and adopted here by reference on Draft DEIS/EIR for proposed new transfer program that would provide for the transfer and/or exchange of up to 150,000 acre-feet of water from the San Joaquin River Exchange Contractors Water Authority [SJEC] to several potential users—Westlands Water District, SWP Contractors, Kern Water Bank and other users for over 25 years—2014-2038.

See 30,000 acre feet of groundwater proposed to be transferred to Westlands et. al. from the Mendota Pool
<http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=49107>

See also North Valley Regional Recycled Water Program-- <http://www.nvrrecycledwater.org/description.asp>
The NVRWP could produce and deliver up to 32,900 acre-feet per year of tertiary-treated recycled water to the drought-impacted west side. This water can be used to irrigate food crops, public and privately owned landscaping, and for industrial uses. This basin transfer would alter San Joaquin River Flows and flows to refuges, and the South Delta Bay Estuary. The project would deliver up to 59,000 acre feet per year (AFY) of recycled water produced by the cities of Modesto and Turlock via the Delta-Mendota Canal (DMC), a feature of the Central Valley Project owned by Reclamation. Instead of discharging fresh treated water into the San Joaquin River, recycled water would be conveyed from Modesto and Turlock through pipelines from their wastewater treatment facilities, crossing the San Joaquin River, ending at the DMC.



NORTH
COAST
RIVERS
ALLIANCE



CA Save Our Streams Council



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180



June 13, 2014

Via Email: ow-docket@epa.gov

EPA Water Docket,
Environmental Protection Agency, Mailcode: 2822-IT,
1200 Pennsylvania Ave. NW.,
Washington, DC 20460.

RE: Attention Docket No. EPA-HQ-OW-2004-0019

Thank you for the opportunity to comment on the "Draft Aquatic Life Ambient Water Quality Criterion for Selenium – Freshwater". The undersigned groups representing fishing, tribes, low-income communities and communities of color, business and

conservation organizations agree with the scientific view supported by federal government scientists that “*Few environmental contaminants have the potential to impact aquatic resources on such a broad scale, and even fewer exhibit the complex aquatic cycling pathways and range of toxic effects that are characteristic of selenium (Lemly and Smith 1987; Lemly 2004).*” Thus, adopting a protective water quality standard is essential not only for various aquatic species, through various lifecycles, during various seasons, but also for the protection of terrestrial wildlife that feed on these aquatic resources. Unfortunately the proposed criterion for selenium is not protective of aquatic resources or the food chain that depends upon this habitat.

Low income communities, communities of color and nonprofit organizations struggling to protect waterways would be disproportionately impacted. The added costs of testing the new complex fish tissue testing proposals could have a significant impact on the ability of communities to protect the health of their cherished waterways. The complexity of this implementing the proposed Draft Criterion will also make it more difficult and expensive to implement for state agencies, industries, and concerned citizens.

As briefly summarized below, the Draft Criterion does not address previous concerns and required corrections outlined by other federal agencies—U.S. Fish and Wildlife Service, U.S. Forest Service, and U.S. Geological Survey—and, therefore, is not adequately protective of either aquatic life or the birds and other animals that feed on aquatic life.

Previous comments by scientists from other agencies are summarized in two documents, which are attached:

EPA’s Draft Tissue-Based Selenium Criterion: A Technical Review
(Presented to U.S. Environmental Protection Agency, June 16, 2004)
Joseph P. Skorupa, USFWS, Theresa S. Presser, USGS; Steven J. Hamilton, USGS; A. Dennis Lemly, USFS; Brad E. Sample, CH2M HILL

Technical Issues Affecting the Implementation of US Environmental Protection Agency’s Proposed Fish Tissue–Based Aquatic Criterion for Selenium
A Dennis Lemly and Joseph P Skorupa: Integrated Environmental Assessment and Management — Volume 3, Number 4—pp. 552–558 (552 _ 2007 SETAC)

These documents make many key points about errors and needed changes that have not been properly addressed in the updated Draft Criterion, but among the most critical and fundamental flaws are:

1. The central component of the Draft Criterion is a whole-body fish tissue concentration of 8.1 mg/kg. This value is not adequately protective of aquatic resources. As documented in detail in Reference 1, “The public-service scientific community has identified 4-6 µg/g whole-body selenium in fish as the appropriately protective guidance for more than a decade (1, 4, 21, 39, 49).”
2. The inappropriately high tissue criterion leads to water criteria that are also too high and will not adequately protect aquatic resources. The proposed water criterion of 4.8

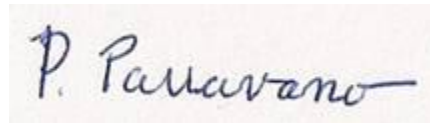
ug/L as a monthly average in lotic systems is much more permissive than the 5 ug/L as a 4-day average.

3. The Draft Criterion is not protective of Endangered Species. In previous review, USFWS and NMFS determined that the existing 5 ug/L chronic criterion for selenium would likely jeopardize 15 ESA-listed species. To avoid a final "Jeopardy Opinion" from the Services, and the associated legal ramifications, the USEPA agreed to reevaluate their CWA criteria guidance for selenium (FWS and NMFS 2000). Clearly, the new draft criterion of 4.8 ug/L over a much longer averaging period (30 days instead of 4 days) does not address these concerns.

We urge USEPA to work directly with the scientific experts from their sister Federal agencies in order to develop selenium criteria that will protect our public resources. Our plea is that the scientists from USFWS, NMFS, USFS, and USGS be brought directly into the Criterion setting process with EPA scientists to ensure a consensus-based criterion that all federal resource agencies will support. USEPA needs to ensure that the selenium criteria adopted will in fact comply with the Endangered Species Act, Migratory Bird Treaty Act and any peer review has the benefit of all sister federal agencies' thorough review.

Finally we urge USEPA to extend the comment period. Thirty days to review 600 pages of highly technical information is insufficient. Failing to provide sufficient time to review especially the scientific basis of the proposed standards will result in future unacceptable delays as states and other agencies attempt to comply and meet the requirements of the Endangered Species Act, Fish and Wildlife Coordination Act, Migratory Bird Treaty Act and Tribal fishing rights.

Sincerely,



Pietro Parravano
President
Institute for Fisheries Resources
parravano@ifrfish.org



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso
zgrader@ifrfish.org



Rebecca Crebbin-Coates
Water Campaign Manager
Planning and Conservation League
rebecca@pcl.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org




Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@gmail.com



Colin Bailey, J.D
Executive Director
Environmental Justice Coalition for Water
colin@ejcw.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis
Executive Director
AquAlliance
barbarav@aqualliance.net



Lowell Ashbaugh
Conservation VP, NCCFFF
Northern CA Council of Fed. of Fly Fishers
ashbaugh.lowell@gmail.com



Barbara Barrigan-Parrilla
Campaign Director
Restore the Delta
Barbara@restorethedelta.org



Dr. Mark Rockwell
California State Representative
Endangered Species Coalition
mrockwell@endangered.org

John McManus
Executive Director
Golden Gate Salmon Asso.
john@goldengatesalmon.org

Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

Attachments:

1. Technical Issues Affecting the Implementation of US Environmental Protection Agency's Proposed Fish Tissue-Based Aquatic Criterion for Selenium

A. Dennis Lemly and Joseph P Skorupa

Integrated Environmental Assessment and Management — Volume 3, Number 4—pp. 552-558 _ 2007 SETA

2. EPA's Draft Tissue-Based Selenium Criterion: A Technical Review 2004

Joseph P. Skorupa* United States Fish and Wildlife Service; Theresa S. Presser, United States Geological Survey; Steven J. Hamilton, United States Geological Survey; A. Dennis Lemly, United States Forest Service Southern Research Station

Technical Issues Affecting the Implementation of US Environmental Protection Agency's Proposed Fish Tissue-Based Aquatic Criterion for Selenium

A Dennis Lemly*† and Joseph P Skorupa‡

†US Forest Service, Southern Research Station, Fisheries Research Unit, 1650 Ramble Road, Blacksburg, Virginia 24060

‡US Fish and Wildlife Service, Division of Environmental Quality, 4401 North Fairfax Drive, Room 322, Arlington, Virginia 22203

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ABSTRACT

The US Environmental Protection Agency is developing a national water quality criterion for selenium that is based on concentrations of the element in fish tissue. Although this approach offers advantages over the current water-based regulations, it also presents new challenges with respect to implementation. A comprehensive protocol that answers the “what, where, and when” is essential with the new tissue-based approach in order to ensure proper acquisition of data that apply to the criterion. Dischargers will need to understand selenium transport, cycling, and bioaccumulation in order to effectively monitor for the criterion and, if necessary, develop site-specific standards. This paper discusses 11 key issues that affect the implementation of a tissue-based criterion, ranging from the selection of fish species to the importance of hydrological units in the sampling design. It also outlines a strategy that incorporates both water column and tissue-based approaches. A national generic safety-net water criterion could be combined with a fish tissue-based criterion for site-specific implementation. For the majority of waters nationwide, National Pollution Discharge Elimination System permitting and other activities associated with the Clean Water Act could continue without the increased expense of sampling and interpreting biological materials. Dischargers would do biotic sampling intermittently (not a routine monitoring burden) on fish tissue relative to the fish tissue criterion. Only when the fish tissue criterion is exceeded would a full site-specific analysis including development of intermedia translation factors be necessary.

Keywords: Selenium water quality criteria Federal regulatory guidelines National Pollution Discharge Elimination System permits US Environmental Protection Agency fish tissue criterion

INTRODUCTION

Selenium occurs naturally in aquatic ecosystems and is a necessary micronutrient in the diet of fish and birds at low (0.1–0.5 µg/g dry weight) concentrations (Gatlin and Wilson 1984; Hodson and Hilton 1983; Klasing 1998). However, at concentrations only 7 to 30 times those required (i.e., >3 µg/g dry weight), selenium becomes a potent poison (Lemly 1993a; Hamilton 2004). A variety of waste materials from industry, agriculture, mining, and petrochemical operations can increase the amount of selenium in aquatic habitats (Lemly 2004). Once waterborne concentrations become elevated, selenium can bioaccumulate in the food chain and reach levels that are toxic to fish and wildlife (Hamilton 2004). Real-world selenium studies show that impacts may be rapid and severe, with teratogenic deformities and reproductive failure affecting entire fish communities and local populations of aquatic birds (Ohlendorf et al. 1988; Skorupa 1998; Lemly 2002a). Few environmental contaminants have the potential to impact aquatic resources on such a broad scale, and even fewer exhibit the complex aquatic cycling pathways and range of toxic effects that are characteristic of selenium (Lemly and Smith 1987; Lemly 2004). Not surprisingly, selenium is a substance of considerable interest to water quality regulators.

The core regulatory guidelines for aquatic selenium pollution in the United States are the Aquatic Life Water

Quality Criteria derived by the US Environmental Protection Agency (USEPA) pursuant to the Clean Water Act (CWA) of 1977 (as amended). Because selenium is highly bioaccumulative and its toxicity to fish and birds occurs primarily via dietary exposure, it is the long-term chronic criterion that is virtually always the controlling standard from a risk management perspective. The USEPA last promulgated an updated national chronic criterion for selenium in 1987, some 20 y ago, setting the criterion at 5 µg Se/L on an acid-soluble basis (USEPA 1987). Since that time, serious weaknesses in the national criterion have been revealed. For example, several reviewers of more recent selenium literature suggested that the criterion should be 2 µg/L or less (DuBowy 1989; Peterson and Nebeker 1992; Swift 2002). A key turning point came in 1997 when the USEPA published a proposed set of water quality criteria for aquatic pollutants known as the California Toxics Rule, aka CTR (USEPA 1997). Pursuant to the Endangered Species Act (ESA) of 1973 (as amended), and prior to the USEPA promulgating the CTR, the USEPA was required to consult with the US Fish and Wildlife Service and the National Marine Fisheries Service (Services) and obtain the Services' concurrence that none of the proposed criteria would jeopardize any ESA-listed species. Upon review, the Services found that the 5 µg/L chronic criterion for selenium would likely jeopardize 15 ESA-listed species. To avoid a final “Jeopardy Opinion” from the Services, and the associated legal ramifications, the USEPA agreed to reevaluate their CWA criteria guidance for selenium by 2002 (FWS and NMFS 2000).

* To whom correspondence may be addressed: dlemly@fs.fed.us

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Reevaluating the selenium criteria guidance in the context of an ESA consultation with the Services raised new technical challenges for the USEPA. To address the highly bioaccumulative nature of selenium, and concordant with expert consensus (USEPA 1998; Hamilton 2002; Sappington 2002; Reiley et al. 2003), the USEPA moved away from a water-based chronic criterion and began to develop a fish tissue-based concentration limit. In March 2002, the USEPA completed the draft update document for selenium (USEPA 2002) which was peer reviewed and revised over the course of the next 2 y (USEPA 2004a), and then released in the Federal Register soliciting public comment in December 2004 (USEPA 2004b). One important shortcoming evident in the Federal Register notice as well as the final draft criteria document is a lack of implementation guidance for the proposed chronic criterion. Several of the peer reviews emphasized the complexity of the implementation issues and recommended that the final criteria document include guidance on implementation (Canton et al. 2002). The Federal Register notice and 2004 draft document refer to historical publications that discuss procedures for implementing water-based criteria (i.e., Stephan et al. 1985; USEPA 1987), but do not provide guidance to “fit” the new tissue-based criterion to the real world. This paper bridges that gap by identifying the key factors that will affect the implementation of the USEPA’s proposed tissue-based criterion for selenium.

Technical issues

Fish species selection—When selecting species to monitor for regulation of selenium discharges, it is important not only to consider the chemical sensitivity, but also to be mindful of the candidate species’ life history aspects, which contribute to their exposure and vulnerability. For example, the type of diet (e.g., detritivore, omnivore, insectivore, piscivore, planktivore) may greatly influence the intake of selenium and thus result in different tissue concentrations among the species available for sampling (Lemly 1985). Species with long life cycles and low reproductive rates are often more vulnerable to increases in mortality than species with short life cycles and high reproductive rates (Matthews 1998; Meyers et al. 1999). The selection of species will thus affect assessment of cumulative impacts from reduced reproduction (i.e., the compounded effect of eliminating potential reproductive individuals from subsequent generations). These characteristics are particularly important when assessing the potential adverse effects of selenium to threatened and endangered aquatic species. For the initial monitoring effort it would be prudent to sample multiple trophic levels and different life stages (juvenile and adult) in order to ensure that the range of tissue selenium concentrations present in the aquatic system is identified. This range-finding would be useful for selecting species and life stages for sampling in subsequent monitoring efforts.

Age of the fish—The USEPA’s proposed tissue-based criterion of 7.91 $\mu\text{g/g}$ is founded on the whole-body concentration of selenium in juvenile bluegill associated with winter mortality. The controlling study for the criterion indicated a steep rise in selenium-related mortality following the onset of cold water temperature, and characterized the condition as Winter Stress Syndrome (Lemly 1993b). Cold water temperature caused young bluegill to reduce their food intake sharply and, consequently, their selenium intake. However, loss of lipids and lower body weights created an

offsetting rise in selenium concentrations. The result was that a whole-body tissue concentration of selenium approaching 5.8 $\mu\text{g/g}$ —although considerably lower than the proposed criterion value and innocuous in summer—became a grave risk in winter conditions. The USEPA draft document acknowledged the potential for summer selenium concentrations to become toxic in cold weather and recommended different summer and fall screening values of whole-body selenium to act as a trigger point for identifying risks of subsequent mortality. However, the draft document proposes to monitor adult fish as a check on whether exposure during those seasons may exceed the proposed criterion value in winter. Using adult fish is not appropriate for 2 reasons. First, the dietary habits, and therefore exposure to selenium, are very different between the adults and juveniles of many fish species. This means that tissue concentrations in adults will not necessarily reflect those in juveniles. Second, the threat of Winter Stress Syndrome is much greater for young fish. Adults of species such as bluegill continue to feed even in cold weather and do not exhibit lipid depletion and reduced body weight to the same degree as juveniles (Lemly and Esch 1984; Lemly 1996). Selenium-related winter mortality would be expected in juvenile fish but not adult fish (Lemly 1993b). Therefore, for many species the tissue concentrations of selenium in adult fish will not represent responses of juvenile fish to Winter Stress Syndrome.

Survivor bias—When dealing with a mortality endpoint and the sampling of surviving fish, it is difficult to get an accurate measure of tissue selenium due to “survivor-bias” (Seiler et al. 2003), which is a skewing of the random pool of individuals (and thus selenium concentrations) from which to sample by eliminating those who have died. The criterion value would be expected to kill at least 20% of juvenile fish (USEPA’s expressed level of acceptable mortality), thereby biasing the pool of surviving fish available for tissue monitoring (i.e., introducing survivor-bias). To address survivor-bias, the USEPA draft document suggested monitoring adult fish tissues because their survival will not be affected by the criterion value concentration (USEPA 2004b). However, as discussed previously, using adult fish would introduce age-related bias into the risk assessment.

Fishless waters—Implementing a fish tissue-based chronic criterion is problematic for fishless waters. This may seem to be a trivial issue because if there are no fish, why the concern? However, hydrological linkages between fishless waters and other aquatic systems that support fish make them inseparable with respect to selenium transport, bioaccumulation, and exposure (Lemly 1999). Thus, it is essential to apply the criterion to fishless waters in order to assess overall risks to aquatic life. The USEPA suggests the possibility of applying the criterion to invertebrate tissue where invertebrate samples are obtained in place of fish samples (USEPA 2004b). However, in fishless waters invertebrates would not be eaten by fish, but rather, would become food for aquatic-dependent wildlife, especially aquatic birds (Lemly and Smith 1987). Although the intent of the proposed criterion was not to protect wildlife (USEPA 2004b), more work may be needed to determine the effect of proposed selenium thresholds on wildlife that feed on aquatic invertebrates.

Sample locations—In order to accurately assess selenium risks, the locations where samples are to be collected need to be well defined in the context of selenium exposure. For example, selenium discharges can create a delta or zone of

highly contaminated sediments and food sources that may result in higher local concentrations in fish than in samples taken from outlying areas (Lemly 1985). Monitoring exclusively in this zone would not yield a representative assessment of tissue concentrations for the entire aquatic system under consideration. Conversely, avoiding these areas would bias the monitoring results in favor of low tissue concentrations. Locations with organic-rich sediments may accumulate selenium to a greater extent than inorganic sediments (Lemly and Smith 1987), resulting in higher food-chain bioaccumulation and exposure of fish in those areas. There can also be substantial differences in exposure between lotic and lentic habitats (Lemly and Smith 1987; Lemly 2002b). The major habitat types, sediment characteristics, and flow conditions must all be considered when the sampling protocol is designed.

Appropriate tissue—The proposed chronic criterion value of 7.91 µg/g selenium on a whole-body fish tissue basis was developed from the USEPA's interpretation of an overwintering survival endpoint (Lemly 1993b). However, reproductive impacts manifested through the selenium accumulated in ovaries and eggs are normally considered to be the most sensitive fish and wildlife biological effects endpoints for selenium (USEPA 2004a). Therefore, it is necessary to evaluate what the proposed criterion would imply for gravid ovaries and eggs of fish. A regression to relate selenium in bluegill ovaries to selenium in bluegill whole-body tissue was presented in the Draft Criteria Document (USEPA 2004a: appendix H) to translate fish exposure data from studies of fish ovaries to a whole-body tissue basis so all species chronic values can be reported as whole-body tissue equivalents. The use of eggs and ovaries may be necessary in situations where winter stress is not pertinent to water bodies, such as in climatologically mild regions or for coldwater species of fish (Moller 2002; Mebane 2005). In these situations, the ovary or egg endpoint will be necessary because the temperature-related stress response and the concomitant loss of body weight and apparent rise in whole-body tissue concentrations of selenium would not be expected to occur. Thus, it is necessary to clearly articulate what tissue is appropriate for monitoring to ensure that the species and community of fish under consideration are being appropriately sampled to identify risks to reproductive endpoints.

Site-specific bioaccumulation factors—A tissue-based criterion will be problematic for the development of a permit limit for new discharges regulated under the National Pollution Discharge Elimination System (NPDES). The USEPA notes that "where translation from the tissue benchmark to a water concentration is needed, a bioaccumulation factor (BAF), which may vary substantially from site to site, would need to be established" (USEPA 2004b). Difficult technical obstacles exist for determining representative BAFs required for site-specific selenium standards. First, it is essential to know the maximum fish tissue selenium concentrations in order to derive a protective water concentration. This necessitates a rigorous, structured sampling program (see sections on averages and minimum datasets). Second, the BAF is not a fixed number that can be applied universally, even to a single body of water. This value is usually dependent upon the concentration of selenium in the water column—sometimes proportional to concentration and sometimes inversely proportional (Lemly 1985, 1997a; McGeer et al. 2003)—and varies with the temporal, spatial, and biogeochemical

factors affecting water column and food-chain concentrations (Lemly and Smith 1987; Presser and Ohlendorf 1987). In anticipation of the USEPA's tissue criterion, attempts have been made to develop statistical models that estimate safe water concentrations using bioaccumulation and tissue residue data (Toll et al. 2005). The models did not perform acceptably for lotic habitats (Brix et al. 2005), which is a serious limitation because most NPDES permits are for discharges into lotic waters. Therefore, the BAF issue has not been satisfactorily addressed in the context of the CWA. More effort will be needed to develop accurate, site-specific BAFs that will allow the proposed fish tissue criterion to be translated into acceptable water quality-based limits.

Averages and exceedances—The implementation guidance for the USEPA's current water-based selenium regulations allows the criterion for chronic exposure to be exceeded periodically (once every 3 y, on average) as long as the 4-d average concentration does not exceed the criterion value (USEPA 1987). During exceedances, the permissible ambient (ecosystem-wide) concentration can be up to 4 times the chronic criterion value. This approach, which is based on a generic model for contaminant exposure-response, was rationalized by Stephan et al. (1985) as being the USEPA's best judgment of ecosystem recovery time for certain waterborne pollutants. Conversely, Lemly (1998) pointed out that because of bioaccumulation in aquatic food chains and exposure of fish and wildlife through the diet, averaging periods and excursions above the criterion value should not be allowed for selenium. The USEPA's proposed tissue-based approach will address the flaws associated with water sampling because a tissue measure will effectively integrate waterborne and food-chain exposure. Nevertheless, the flaws pertaining to averages and exceedances may still occur if the basic toxicological premise underlying Lemly's 1998 critique is not accounted for. In the only other instance where the USEPA has developed a fish tissue criterion (mercury), averaging of measurements is permitted (USEPA 2006).

Regardless of whether selenium is measured in water or fish tissue, the numbers used to assess compliance with a criterion or to conduct a risk-hazard-impact assessment must be the maximum concentrations found. In the real world, maximum concentrations are the driving force behind selenium bioaccumulation and toxic effects, not averages. This is an important principle and it is consistent with the toxicity profile for selenium that has emerged from 3 decades of laboratory studies and field case histories of selenium pollution in the United States and elsewhere (Skorupa 1998; Lemly 2002a; Hamilton 2004; Holm et al. 2005; Muscatello et al. 2006). To illustrate the principle consider this hypothetical example: The criterion (toxic threshold) is 200, one-half of the fish sampled contain 300 and the other half contain 50. If simple averaging were used, the result would be 175, which is well within acceptable limits for the criterion, yet one-half of the fish exceed the toxic threshold by 50%. This approach would constitute a fatal flaw, literally, if applied to selenium because exceeding the tissue toxicity threshold by 50% can result in up to 60% teratogenic deformities and mortality (Wooock et al. 1987; Cleveland et al. 1993; Coyle et al. 1993; Lemly 1993b, 1993c, 1997a; Holm et al. 2005; Muscatello et al. 2006). Averaging will bias monitoring data by generating a low number and incorrectly suggesting that toxic hazard is lower than it actually is. There should be no provision for spatial or temporal averaging of

concentrations, nor averaging among the various fish species that may be sampled. Similarly, there should be no provision to allow tissue concentrations to periodically exceed the criterion value. The concentration–toxicity curve for selenium is very steep, and a small exceedance could cause an exponential increase in death of young fish (Lemly 1997b; Holm et al. 2003). Moreover, the USEPA's criterion value (7.91 µg/g) represents greater than a reduction of 20% in the response observed in controls (EC20) toxicity level (USEPA 2004a). Therefore, finding even a single fish exceeding the criterion value implies substantial impacts and should trigger additional monitoring, particularly if the initial sample size is small.

Dilution or mixing zones—EPA guidance for water-based pollutants designates dilution areas and mixing zones as locations that are exempt from the chronic criterion (Stephan et al. 1985). This approach presents ecological problems when applied in lentic and wetland systems where the “dilution area” may constitute the entire body of open water, making it impossible to reasonably designate a finite mixing zone. In lotic and riverine habitats the mixing zone may vary seasonally, extending for vastly greater distances during dry periods. Because of the tendency of selenium to bioaccumulate in food organisms the mixing zone can become an area of extremely high exposure for fish and wildlife (Lemly 2002b). In these situations, inclusion of dilution and mixing zones would be needed for accuracy when determining site-specific BAFs, developing NPDES permit limits, and evaluating compliance with the chronic criterion. In the only other instance where USEPA has developed a fish tissue criterion (mercury), dischargers may exclude mixing zones if they implement the criterion as a water-based limit calculated using BAFs (USEPA 2006). However, no specific guidance is given on where to sample fish, thus it is possible for a dilution area or mixing zone to be completely excluded from the monitoring protocol.

Hydrological units—It is important to understand the hydrological unit principle and why it should be used to shape the selenium sampling protocol (Lemly 1999). With regard to selenium hazard assessment, a hydrological unit is not based on the US Geological Survey standard of delineation, i.e., the 2,150 cataloging units (Seaber et al. 1987). Rather, a unit consists of the area affected by selenium input sufficient to elevate waterborne selenium concentrations above reference levels typical for the location. This means that a unit extends from source to attenuation or removal, and it may or may not follow well-defined watershed boundaries (Lemly 1999). Individual units may be very small or quite large depending on the concentration of selenium input, biogeochemical cycling, and climate. The hydrological pathways that transport selenium across the landscape, as well as the presence of different habitat types (wetlands, streams, rivers, lakes, impoundments) within many watershed basins have important implications for the sampling regime. Hydrological connections provide a mechanism for selenium discharges to permeate a wide range of habitat types and environmental conditions. These conditions will temper the cycling and biological uptake of selenium (Lemly and Smith 1987). Thus, what may appear to be safe concentrations in water and fish tissue sampled from an area of low bioaccumulation may not accurately reflect what is occurring in nearby, hydrologically connected habitats where bioaccumulation is greater. Failure to include all of the

interconnected parts of the hydrological unit in the sampling protocol can result in an incomplete estimate of selenium concentrations and associated risk (Lemly 2002b).

Minimum datasets—Successfully identifying the maximum tissue concentrations of selenium, which is key to environmentally sound risk analysis (Lemly 2002b), depends on taking a sufficient number of samples, but the standard for sufficiency for a given fish species, location, or time depends on a host of factors related to selenium cycling and bioaccumulation as well as demographics of the fish population. These factors confound efforts to prescribe a minimum dataset for broad application, but some initial guidelines can be formulated from existing research and datasets (e.g., Lemly 1985; Schmitt and Brumbaugh 1990; Lemly 1997a; Seiler and Skorupa 2001; Seiler et al. 2003). A reasonable target with respect to monitoring for ecotoxicological applications such as the USEPA criterion would be to capture the upper 95th percentile concentration (Meador 2006). As a general rule, the larger the sample pool the better. It is highly desirable to attain the 95th percentile since the USEPA's criterion is an EC20 rather than a lowest-observed-effect concentration or no-observed-effect concentration (USEPA 2004a). Large datasets will also strengthen the statistical power of model analyses that use BAFs to estimate safe waterborne concentrations (Toll et al. 2005).

Suggested approach

Many of the technical difficulties associated with implementing the new criterion could be avoided if a mixed strategy were employed. A national generic safety-net water criterion of 2 µg/L, as has been recommended (DuBowy 1989; Peterson and Nebeker 1992; Swift 2002), could be combined with the tissue criterion for site-specific implementation. The majority of waters nationwide fall below this safety-net concentration (e.g., Apodaca et al. 2006; USGS 2007), thus NPDES permitting and other CWA activities could continue without increased expense of biotic sampling and translation of those sample results back to a water basis. Dischargers could be required to do biotic sampling intermittently (not a routine monitoring burden) on fish tissue to assess compliance with the criterion. Only when the fish tissue criterion was exceeded would a full site-specific analysis including development of intermedia translation factors be necessary. Exceedance of the water criterion would trigger additional biological monitoring to determine if the tissue criterion was also exceeded (Fig. 1). The tissue-based criterion would be used in the CWA Section 303(d) process to list impaired waters and to develop a Selenium Management Plan (SMP), which could involve using BAFs to derive a water-based concentration limit, establishing total maximum daily loads, and prescribing waste load reduction goals. Other advantages of a mixed strategy are to allow collection of data which may alleviate uncertainties, both with tissue criteria values and difficulties implementing the criteria.

A mixed strategy would have to be developed more fully but we believe the concept has merit, and that the literature contains useful information for the USEPA to draw upon. For example, Lemly (2002b:chapter 7) presents a procedure for deriving site-specific chronic criteria for selenium. The method uses water and tissue concentrations, diagnostic residues, and biological effects to set local criteria for hydrological units. Hamilton (2002) reported that a mixed strategy was being employed for mercury criteria in Australia and

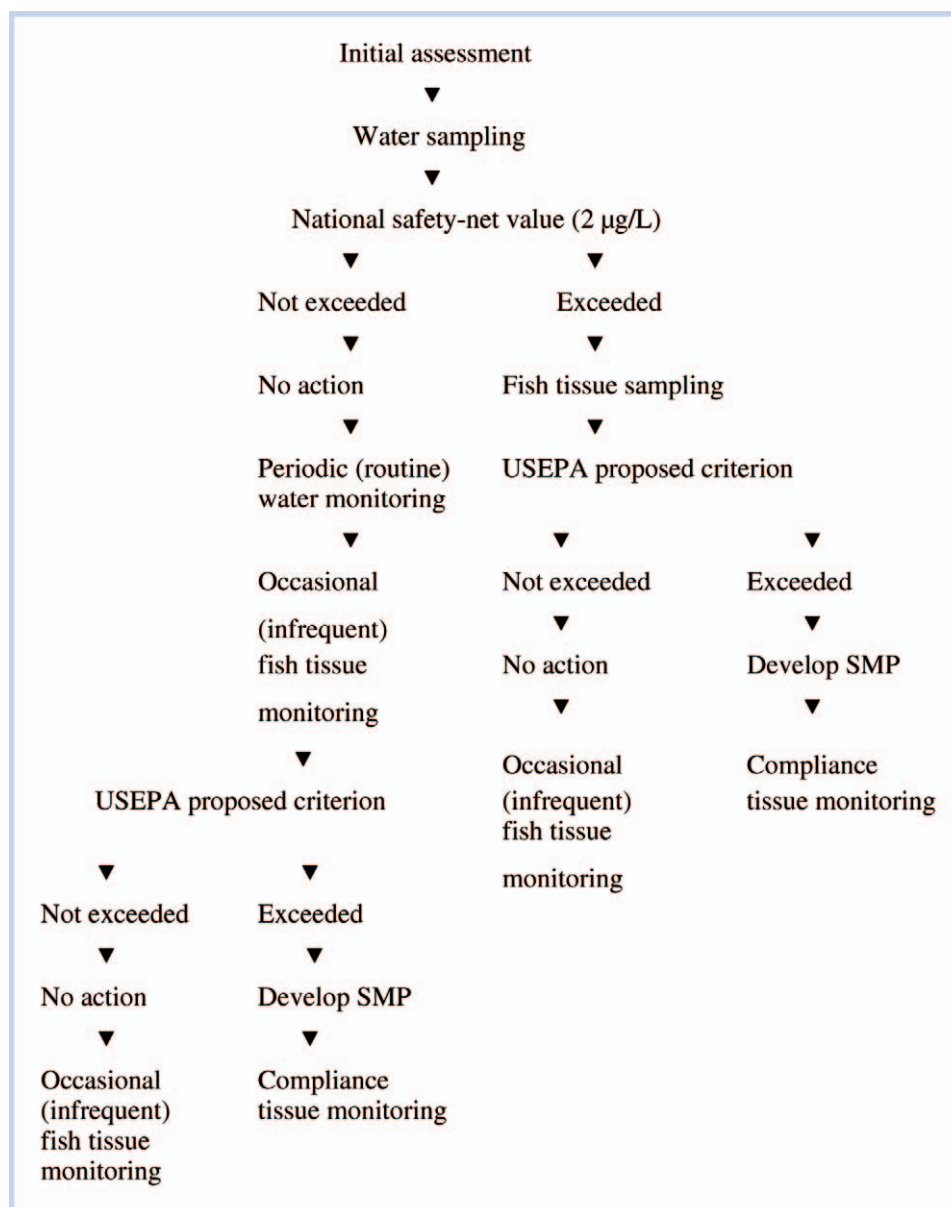


Figure 1. Mixed strategy for implementing a tissue-based aquatic criterion for selenium.

Canada. Because mercury, like selenium, is a highly bioaccumulative pollutant, valuable information may also be gained from the Australian and Canadian experiences. However, we caution against the adaptation of USEPA protocols for implementing fish tissue criteria for mercury (USEPA 2006). This guidance is targeted at protecting public health and would not be transferable to selenium. For example, the fish monitoring protocol recommends compositing samples (which would have the effect of averaging), using skinless fillets in the analysis (which would yield lower values than whole-body measure), and averaging concentrations across locations and trophic levels (which would underestimate toxic hazard). The BAFs are calculated by averaging, and are weighted by human fish consumption parameters, with no intent to ascertain threats to the fish community itself.

CONCLUSIONS

A clear, scientifically sound implementation protocol for the new tissue-based selenium criterion is needed for 3

reasons. First, it would provide an appropriate monitoring design, as the success of the criterion depends on accurate, representative sampling of target populations and receiving waters. Second, the regulated community needs technically correct procedures in order to comply with a more complex monitoring effort than was needed for water-based criteria. For example, in the past a simple grab-sample of ambient waters was sufficient to run a check for compliance with the criterion but now it will also be necessary to sample tissue following a methodology that accounts for several biological and environmental factors. Finally, the protocol would provide crucial technical support for those carrying out provisions of the CWA, such as NPDES permit writers who must have reliable guidance on data collection, modeling, monitoring, and other keys to tracking and controlling selenium discharges. These 3 issues necessitate a comprehensive, detailed guidance document to support the new criterion. In order to facilitate practical implementation, we recommend that the USEPA give serious consideration to a

protocol that incorporates both water column and tissue-based approaches.

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November 15, 2011

Donald R. Glaser, Regional Director
Mid Pacific Regional Office
Federal Office Building
2800 Cottage Way
Sacramento CA 95825-1898

**Subject: Full Environmental Impact Statement Needed for San Luis Drainage Feature
Reevaluation Demonstration Treatment Facility at Panoche Drainage District [FONSI-10-030]**

Dear Mr. Glaser:

We submit these comments as a follow-up to the comments provided on October 17, 2011 on the above-referenced project. After the close of the public comment period we received the

schematic for the project from Rain Healer, USBR on October 24, 2011. The schematic of the project was requested October 14th, before the end of the public comment period, and is essential for understanding the nature and scope of the project.

There are significant and heretofore unknown discrepancies between the proposed project in the Draft Environmental Assessment (DEA) and the schematic that was provided. (See Figure 1) These discrepancies and the undisclosed impacts from the project add further evidence that the current EA/FONSI for the project is legally inadequate, and a full Environmental Impact Statement (EIS) is needed. We seek your assistance in obtaining answers from USBR regarding the definition and scope of this project. We recommend that the Draft EA/FONSI be withdrawn and a full EIS be issued with additional issues analyzed and corresponding information provided:

1. The description of the project, which is at the heart of a NEPA review, needs to be accurate. The schematic provided reveals major inaccuracies in the DEA presented to the public for review. Predicted contaminant concentrations contained in Table 2-1 of the DEA along with the DEA text for the post-biotreatment are not consistent with the schematic. We calculated the predicted mass balances for salt and selenium using USBR load calculations and the figures presented in the DEA. We have highlighted in yellow on the schematic some of the discrepancies using these mass balance calculations for selenium. The salt (TDS) concentrations also are inconsistent with the project DEA. In Table 2-1 of the DEA, the TDS concentration of the reverse osmosis (RO) concentrate is projected to be 29,318 but the post-biotreatment is projected to be 340 mg/L. The schematic has totally different TDS concentrations. In addition, the FONSI states, "However, no salts will be removed from the concentrated waste stream during biotreatment."¹ We have highlighted these inconsistencies in Table 1. Accurate information on the quality of the effluent to be treated and the resulting effluent to be discharged is essential to determine the impacts and cumulative effects from the project. These errors and omissions suggest far greater environmental impacts than those described in the EA/FONSI, and need to be corrected and submitted to the public for review. Moreover, they call into question whether the accuracy of any of the information about the project can be relied upon.
2. This project is illegally segmented and piecemealed to avoid disclosure of the full impacts.² Many essential components of this demonstration treatment project were

¹ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8298 pg 3

² Glaser Declaration 4-2011Case 1:88-cv-00634-OWW-DLB Document 865 Filed 04/01/11 Pages3-5
"Reclamation has determined that an easement issued by the Panoche Drainage District to the United States is the appropriate instrument on which to proceed with the construction of the demonstration

recently given a sole source contract on September 22, 2011 to the Panoche Drainage District. These expenditures include almost a \$1 Million (\$953,300) to plant 1,259 acres of grasses and pistachio trees; over \$1 Million to construct a new Grassland Bypass Channel Inlet Facility, sumps and lateral drains to remove salt from the reuse area.³ All of these elements will be used by the proposed demonstration project and yet the construction, expenditures, and impacts are not disclosed in the DEA. "Reclamation proposes to construct, operate, and maintain for 18 months a Facility for drainage treatment within the geographical boundaries of the existing SJRIP reuse area. Subsequently, Reclamation may elect to continue operating the Facility indefinitely or delegate it to their designated operating partner for treating reuse drainage." (FONSI-1-030 at page 1-2) In January 2011, the proposed demonstration treatment site was added to the Panoche Drainage District. The LAFCO boundary changes expanding into Merced County were done under a negative CEQA declaration to acquire the land for this proposed hazardous waste generation, storage and transfer project. The project is described merely as planting salt tolerant plants. This proposed treatment facility, which may operate in perpetuity, extracts and stores hazardous wastes, but this was not described as a project purpose.⁴

3. Biological impacts have not been adequately considered. The effluent selenium concentrations and the assumptions about effluent treatment provided to USFWS by USBR and used in the 2009 Grassland Bypass Project Biological Opinion (BO) are different from the numbers presented in Appendix B of the Draft EA and now this schematic. Re-Consultation with USFWS is needed because there are numerous inconsistencies and changed assumptions regarding the concentrations, amounts and contaminants in the effluent to be discharged.⁵ Further reliance on the SLDFR Biological Opinion is insufficient because that document rested upon the assumption all discharges from the GBP would cease by 2010.⁶ The effluent selenium concentrations and the resulting impacts of discharging this effluent to the reuse area are not disclosed.

plant on lands owned by that District. A draft easement has been prepared and Reclamation expects to commence negotiations on the terms and conditions of that easement with that District this spring."

³ <http://apply07.grants.gov/apply/opportunities/instructions/oppR11AS20026-cfda15.507-instructions.pdf> Signed September 22, 2011.

⁴ <http://www.fresnolafco.org/documents/staff-reports/January%202011/Panoche%20DD%20MSR.pdf> January 12, 2011

⁵ USFWS 2009 Biological Opinion for the Grasslands Bypass Project
http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826

http://wwwrcamnl.wr.usgs.gov/Selenium/Library_articles/san_luis_articles/USFWS_Comments_DEIS_Continuation_Grassland_Bypass_Project_2010-2019_3-23-2009.pdf

⁶ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=2238

The Project area is home to over 42 species of birds. A compilation of data from 2003 through 2006 shows ranges and geometric mean selenium concentrations in bird eggs collected from the Panoche Drainage District reuse area were consistently at levels toxic to embryos during those four years.⁷ Selenium concentrations in avocets and stilts in 2006 exceeded 90 µ/g dry weight which is 9 times above the high risk level of 10 µ/g dry weight. The attached photos of a deformed embryo found in 2008 had selenium levels of 74.6 µ/g dry weight. Levels exceeding Kesterson concentrations. The project does not propose any monitoring to determine the success of the project nor the impacts the project will have on the reuse area if that is the ultimate destination for the effluent.

4. Essential elements of the project are omitted from the EA/FONSI. For example, the oxidation step to convert selenium in the bio- treated effluent into inorganic forms is not presented. What chemicals will be used and the impacts to achieve this oxidation process are not described or presented. In fact the oxidation step in the schematics presented in Appendix B of the DEA denotes the oxidation step as “optional.” Without this step, however, the release selenium could be extremely toxic at the levels proposed. In fact, the USFWS Biological Opinion and consultation for the referenced San Luis Drainage Feature RE-evaluation (SLDFR) was issued dependent upon this important step, which changes the selenium to selenate.⁸
5. Use of accurate up-to-date water quality data on the effluent to be treated is essential. The DEA instead relies on old water data that is referenced in the previous SLDFR environmental documents.⁹ The schematic indicates the effluent to be treated will

⁷ <http://pubs.usgs.gov/of/2008/1210/> pg 24 Also see http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826 pg 90 USFWS 2009 BO “It is notable that the geometric mean, egg-selenium concentration in recurvirostrid eggs collected at the SJRIP Phase I area in 2008 (50.9 µg/g) exceeded all geometric mean selenium concentrations in recurvirostrid eggs collected at Kesterson Reservoir from 1983 to 1985 (Ohlendorf and Hothem 1994)...”

⁸ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=2238 “Final selenium concentrations in the treated effluent...would include a post treatment oxidation step to convert residual selenium in the effluent to selenate.” Pg 7 of 147 USFWS Biological Opinion SLDFRE.

⁹See Appendix C Drainwater Quantity and Quality SLDFR Draft EIS Appendix C C-6

http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=2260

“ Estimates of TDS, Se, and B concentrations from reuse area discharges were calculated based on an estimated 73 percent water usage volume by reuse facility crops. It was assumed that all constituents are conserved. These calculations and current groundwater concentration under the potential locations for the reuse facilities were then averaged to account for dilution of drainage from the facility with shallow groundwater before discharge into reuse facility drains. This average resulted in calculated estimated discharge concentrations for Westlands (and its subareas) and the Northerly Area. Current data for all other constituents were then scaled by the ratio of calculated estimated TDS concentration to

come from the reuse area. Whereas, the DEA states the effluent will come directly from the drainage sumps. The DEA indicates the treated effluent will be discharged to the Panoche reuse area and yet, the schematic indicates the effluent will be discharged to the reuse area and the Grasslands Bypass. This is a significant inconsistency in the definition of the project. Impacts on downstream uses need to be considered. Selenium demonstration treatment projects over the years have used different drainage water to design the systems, other drainage water to test the treatment systems, and now different drainage water quality will be used to test the success or failure in an area outside of the San Luis Unit and miles from the chosen application in the central sub-area of Westlands. This project is a significant departure from the SLDFR ROD and EIS. (See Figure 2 for the 2007 ROD and SLDFR EIS Schematic) Without accurate water-quality information regarding the effluent to be treated, the public and decision makers reading the EA/FONSI are impermissibly denied a full and accurate picture under what conditions this treated drainage leaves the reuse area and goes into to the reuse area. Also unknown are the amounts and water quality of this treated drainage that leaves the reuse area and goes into the Grasslands Bypass Project, where it eventually travels through state and federal wildlife refuge areas, Mud Slough North and the San Joaquin River. Consultation should be requested with National Marine and Fishery Service regarding these downstream impacts.

6. The DEA states, "Drainage service is needed to achieve a long-term, sustainable salt and water balance in the root zone of irrigated lands in the San Luis Unit...." However, no salts will be removed from the concentrated waste stream during biotreatment. Consequently, salt concentrations in the water discharged back into the SJRIP will be similar to that of the feed water sent into the Facility..[FONSI at page 4]. In the DEA at Table 2-1 indicates the TDS concentration of the reserves osmosis [RO] concentration will be 29,318 mg/L. The schematic provided by USBR on Oct 24 (Figure 1, at end of letter) indicates the RO will be 220mg/L TDS. This inconsistency is further compounded by the DEA statement that no salts will be removed from the concentrated waste stream during biotreatment. This aspect calls into question the stated purpose of the

current TDS concentration. Table C2-8 summarizes the estimated post-reuse concentrations for the San Luis Unit." C-2 pgs 47-51 Assumptions regarding what the future irrigated agriculture might become are very important to the estimated return flows from the on-farm drains. Issues as simple as 'What crops are going to be grown?' have a significant effect on drainage return flow quantity and quality.... The crop mix has been developed to reflect a mix of alfalfa, cotton, sugar beets, small grains, tomatoes, and vegetables. Various planting and harvesting dates that are common to Westlands have been used. The computation of various water delivery times to replenish the soil moisture depletion from the actively growing crops is also involved." Pg C2-8

project which is to “achieve a long-term, sustainable salt and water balance in the root zone of irrigated lands in the San Luis Unit...” (FONSI pg.1).

7. It is unclear whether Congress has authorized this project or whether the incremental obligation of taxpayer dollars, absent direct authorization, complies with the Anti Deficiency Act.¹⁰ The demonstration project and some of the lands served are not included in the authorization under Public Law Public 86-488.¹¹
8. Incremental expenditures spread out over numerous programs and grants call into question how this project in conjunction with other Reclamation expenditures proposed for the San Luis Unit and Westlands drainage collection systems meet congressionally authorized expenditure ceiling limits.¹² The recent USBR declarations before the court indicate a decision had already been made regarding this demonstration project prior to the opening of the public comment period.¹³

¹⁰ http://www.whitehouse.gov/sites/default/files/omb/assets/a11_current_year/s145.pdf

¹¹ The demonstration treatment project is located on lands outside the service area of the San Luis Unit and owned by the Panoche Drainage District and Firebaugh Canal District. Panoche Drainage District does not receive or deliver federal water. Many of the districts to be served by this project are outside of the San Luis Unit service area.

¹² Case 1:88-cv-00634-OWW-DLB Document 814 Supp Declaration Michael Connor Filed 10/01/10. “ The Department....prepared and submitted to Congress a feasibility report. This report documents the estimated total costs ...of implementing the selected alternative will be approximately \$2.7 billion. That amount far exceeds the remaining appropriations authorized for construction of the Unit.” <http://www.usbr.gov/budget/2011/2011Budget.pdf> Mid Pacific pg 75 “*The Feasibility Report presented to the Congress the relative economic benefits of the drainage plan selected Reclamation in the ROD and confirmed the need for new authorizing legislation to increase the appropriations ceiling for funding beyond what was authorized by the San Luis Act (Act of June 3, 1960, 74 Stat. 156) and to waive or defer repayment obligations of the project beneficiaries..... Under this plan, Reclamation will, using its existing legal authorities, commence implementation of the 2007 Record of Decision, San Luis Drainage Feature Re-Evaluation. Pilot treatment technologies will be tested as part of the process of constructing fully functional, self sustaining drainage service facilities in the Westlands Water District Area. This effort will fit within existing appropriations ceilings under the 1960 San Luis Act.*”

¹³ Case 1:88-cv-00634-OWW-DLB Document 865 Filed 04/01/11 Pages3-5. Much of the information described in the Glaser 4-1-11 Declaration was not included in the FONSI/DEA including the Value Engineering Investigations and water quality information.

“Final designs for the demonstration treatment plant were initiated in October 2010. Final designs are 30%complete for drainage conveyance pumps and pipelines, site layout, site security, storage tanks, structural foundations for tanks, power supply, and the treatment plant building; final designs are scheduled for completion in August, 2011. The 30% designs include quantity estimates, cost estimates, and preliminary drawings for pipelines, building plan and sections, and architectural features.... Reclamation awarded a design services contract in February 2011, to HDR Engineering, Folsom, CA, to

9. Monitoring is not provided to establish the effects of the proposed demonstration project to ensure that selenium in the effluent to be discharged is not in a more toxic form and other contaminants such as mercury also are not rendered more toxic after the biological treatment process. Monitoring needs to be included in the EIS.
10. These inconsistencies in the schematic provided and the information contained in the DEA and the previous poor performance of the tested treatment system for the 2006 SLDFR EIS (Appendix B) underscores the need for peer review of the proposal to ensure its integrity, assumptions, and outcomes are scientifically valid.¹⁴
11. According to the new schematic (figure 1) and the DEA, the project proposes to discharge contaminated effluent to both the Grassland Bypass ditch and the reuse area. The impacts are brushed aside and monitoring is not disclosed or included. Creating a disposal site where migratory birds are at risk of death and deformities poses a risk to Bureau officials and thus the public and tax payers. In the past, DOI Solicitors determined the continued operation of the Kesterson National Wildlife refuge fed by selenium contaminated water would constitute a violation of the Migratory Bird Treaty Act. Under the act, federal officials are responsible for preventing conditions that could lead to the death of waterfowl that migrate through the United States from or to other countries. Violations of the act constitute a criminal offense. The Kesterson refuge and this newly created reuse area is part of the Pacific Flyway path used by migrating birds. Canada and Mexico are the other partners of the treaty.
12. As mentioned, we applaud USBR for seeking the necessary National Pollutant Discharge Elimination System Permit (NPDES). Please put us on your mailing list for all filings related to this permit and any documents provided such as the report of waste discharge and proposed monitoring.
13. Please assist us in providing the documents and answering the attached six questions. Please use our email addresses to provide the answers and the documents if possible.

prepare the final designs, specifications, and cost estimates for the water treatment equipment to be installed at the demonstration treatment plant; designs are in progress and are scheduled for completion in August, 2011.”

¹⁴ Data from the previous pilot test demonstrated twice the selenium bio-concentration that was predicted by the bio-concentration model (SLDFR EIS Appendix B, page 18). The previous pilot did not perform to performance objectives, and USBR needs to fully explain and document how they will be able to meet performance objectives, especially with respect to organo-selenium (e.g., biotreatment effluent will be < 10 µg/L primarily as inorganic selenium).

Conclusion

USBR has been party to discharges from this project since 1987, when it first built the connector from the San Luis Drain to Mud Slough to allow discharge of selenium and other contaminants to be discharged to the San Joaquin River. To date well over \$40 million in state funds and another \$38.5 million in federal taxpayer dollars¹⁵ have been spent on this portion of the drainage system project, much of which is serves districts outside of the San Luis Unit covered by Public Law Public 86-488. No cost benefit analysis for this demonstration selenium treatment project is provided. Without justification by a credible economic analysis, we can only conclude that such justification does not exist, and that this project will throw more taxpayer funds at the wrong solution. For the foregoing reasons, the undersigned groups repeat the Bureau's obligation to prepare a new EIS for the proposed treatment facility in order to comply with the National Environmental Policy Act.

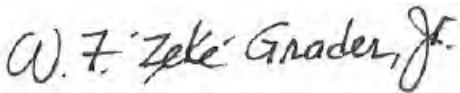
Sincerely,



Jim Metropulos
Senior Advocate
Sierra Club California
jim.metropulos@sierraclub.org



Steven L. Evans
Conservation Director
Friends of the River
sevans@friendsoftheriver.org



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's
Federation Association Inc.
zgrader@ifrfish.org



Larry Collins
President
Crab Boat Owners
lcollins@sfcabboat.com

¹⁵ http://www.waterrights.ca.gov/baydelta/docs/southerndeltasalinity/dwr010807_dwr18a_attach1.pdf
USBR email communication 11-8-11 does not include salaries.



Carolee Krieger
Board President and Executive Director
California Water Impact Network
caroleekrieger@cox.net



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Bruce Tokars
Salmon Water Now
btokars@pacbell.net



Wenonah Hauter
Executive Director
Food and Water Watch
whauter@fwwatch.org



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League
jminton@pcl.org



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



C. Mark Rockwell
Vice President
Northern California Council
Federation of Fly Fishers
mrockwell@stopextinction.org



Adam Lazar
Staff Attorney
Center for Biological Diversity
alazar@biologicaldiversity.org



Conner Everts
Southern California Watershed Alliance
Executive Director
connere@west.net

Frank Egger, President
North Coast Rivers Alliance
fegger@pacbell.net

Cc: Senator Dianne Feinstein
 Senator Barbara Boxer
 Congressman George Miller
 Congresswoman Grace Napolitano
 Congressman John Garamendi
 Congressman Mike Thompson
 Congresswoman Doris Matsui
 Ken Salazar, Secretary of Interior
 Mike Connor, USBR Commissioner
 John Laird, California Natural Resources Secretary
 Charlton H. Bonhom, Director Cal Fish and Game
 Marcia McNutt, Director & Theresa S. Presser U.S. Geological Survey
 Susan Moore, Field Supervisor, US Fish and Wildlife Service
 Tom Maurer and William Beckon, US Fish and Wildlife Service
 Alexis Strauss, Karen Schwinn & Eugenia McNaughton, US Environmental Protection Agency
 Julie Vance and John Shelton, California Department of Fish and Game
 Kim Forrest, USFWS Wildlife Refuge Manager
 San Luis National Wildlife Refuge Complex U. S. Fish and Wildlife Service

Interested Parties

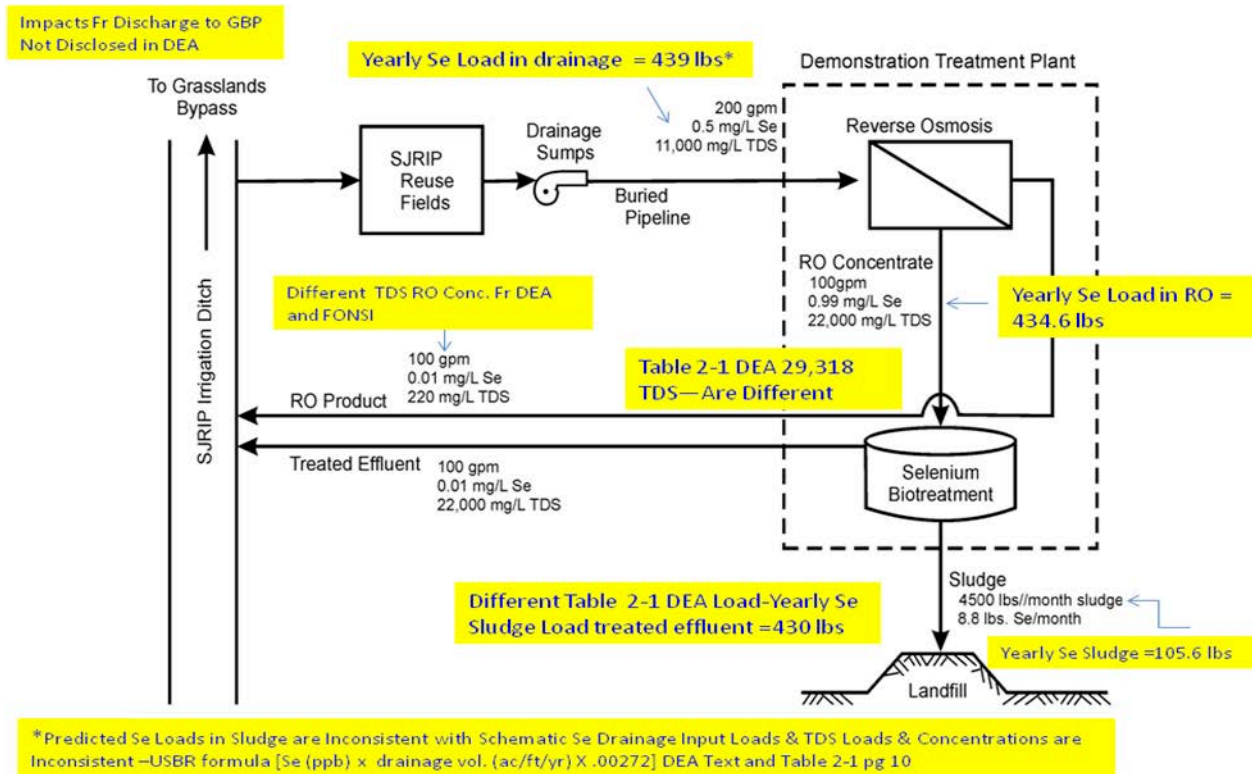


Figure 1

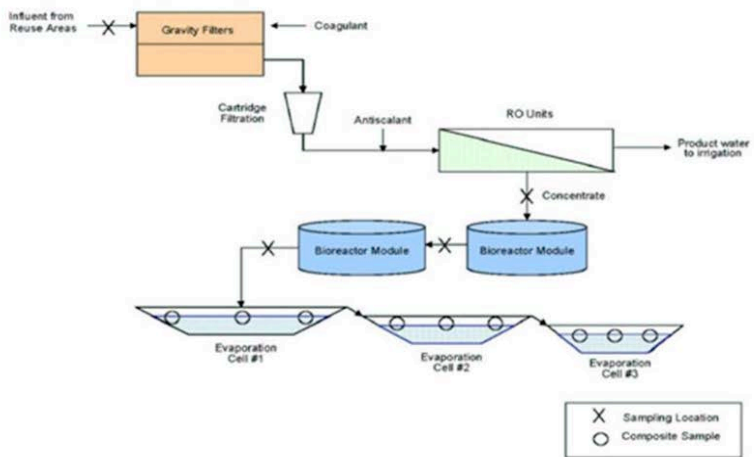


Figure B-1 Pilot Selenium Treatment, Reverse Osmosis, and Evaporation Basin System

http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=2260 SLDFRE EIS Appendix B

Figure 2

Please assist us in answering the following questions and providing the following documents:

1. A copy of the easement, terms and conditions of the easement between the United States and Panoche Drainage District for this demonstration project.
2. In the Fed Status Report of 4-1-11 it was reported to the court that monitoring and measurement of drainage water flows, groundwater levels, and water quality constituents are ongoing and will continue through construction. Please provide us with copies of these monitoring reports and measurements of drainage water flows, ground water levels and water quality constituents.
3. In the Fed Status Report of 4-1-11 it was reported to the court that Reclamation performed a Value Engineering Study to investigate design options which might reduce the cost of the demonstration treatment plant. The Value Engineering Team published a report in March 2011, which contains 12 separate proposals for changes to the 30% design. Reclamation is currently evaluating those proposals to determine which of the design options will be incorporated as the design proceeds forward. Please provide us with a copy of the March 2011 report and subsequent design options or changes.
4. In the Fed Status Report of 4-1-11 it was reported to the court that a contract had been awarded to prepare the final designs, specifications and cost estimates for the

water treatment equipment to be installed at the demonstration treatment plant and that designs would be completed by August 2011. Please provide us with a copy of the contract and the work product.

- 5. In the Fed Status Report of 4-1-11 it was reported to the court that Reclamation and the Panoche Drainage District are preparing a Report of Waste Discharge (ROWD) for the demonstration treatment plant. We understand this will provide the basis for the issuance of an NPDES permit. Please provide us a copy of the ROWD prepared by USBR.**

- 6. Reclamation recently announced that the Data Collection and Review Team will allow the public to attend approximately 4 hours of an 8 hour meeting on November 17, 2011. The closed meeting will include “private contractors.” Could you please provide us with a list of those private contractors and the amounts of money paid by year to each of those contractors. Several of the “private” contractors also appear to be employed by the drainage and/or water districts that benefit from discharging pollution downstream. How does USBR ensure that this conflict of interest does not taint or bias the information provided at public expense.**



NORTH

COAST

RIVERS

ALLIANCE



October 17, 2011

Rain Healer
South Central California Area Office
U.S. Bureau of Reclamation
1243 N St
Fresno, CA 93721

Subject: Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District's San Joaquin River Improvement Project (SJRIP) FONSI-10-030

Dear Ms. Healer:

We appreciate the opportunity to comment on the proposed demonstration project that will transport „in ground“ Panoche Water District polluted sump water directly to where it will be „treated“ by a yet to be disclosed treatment process. The treatment process will produce selenium hazardous waste residues, which will be trucked to a disposal site, as well as contaminated wastewater that will be then discharged in an irrigation ditch under a NPDES permit back into the SJRIP, Mud Slough, the San Joaquin River and the Delta. The Project may last 18 months or

operate indefinitely with an unknown operating time period that *may* need additional analysis.”¹

We applaud the Bureau’s recognition that these west side water pollution discharges need to comply with the Clean Water Act and require a National Pollutant Discharge Elimination System [NPDES] permit.² The project proposes the discharge of concentrations of selenium above Clean Water Act standards even after treatment along with other contaminants such as salt, boron, mercury.³ We find there is insufficient data presented to make an informed decision regarding the impacts from the project. The full range of alternatives is not examined and without sufficient data regarding costs, treatment methods, and the levels of contaminants in the source water to be treated, one cannot meet the National Environmental Policy Act (NEPA) requirements to determine economic and technical feasibility. Absent is any consideration of the only proven effective method of solving this water pollution—stopping the import of water and application to these poisonous soils--and without cost figures, the public cannot make an informed decision regarding the environmental impacts, costs and trade-offs. It appears the DEA attempts to meet these requirements by citing other drainage documents⁴ and yet, this new project is a significant departure from the treatment proposals contained in those documents. For example, the proposed treatment does not propose to remove salt, boron, or mercury and will continue to discharge lethal levels of selenium.

It is discouraging that despite the work of the last twenty plus years, Reclamation is presenting another project with a yet to be identified treatment process to remove selenium alone, without any cost analysis or analysis of the feasibility or consideration of a full range of alternatives, including the reduction of imported water to irrigate these poisonous lands—as has been recommended by numerous federal and state agencies as the most cost effective control solution that protects downstream users. This latest project is just another delay and distraction in meeting Clean Water Act water quality standards and will likely waste scarce taxpayer dollars.

¹ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8298

² <http://water.epa.gov/lawsregs/guidance/wetlands/section402.cfm>

³ <http://www.usbr.gov/mp/sccaosld/docs/index.html> No information could be found on mercury treatment removal levels in the NEPA documents or previous 2004 or 2005 pilot testing. The conclusion mercury levels are projected to be low, is not supported by data.

⁴ <http://www.usbr.gov/mp/sccaosld/docs/index.html>

This demonstration project would spend millions of dollars on yet to be indentified treatment and then discharging the remaining pollutants into the SJRIP and natural water ways, claiming that these discharges will not harm the environment. The documents do not provide sufficient data to support this claim. As shown in Figure 4, after some 15 years of operation, the existing discharge concentrations are still lethal to fish and wildlife as the polluted water flows through national and state wildlife refuges before reaching the San Joaquin River, where significant salmon mortality is predicted.

The DEA fails to consider new information in the just released United States Geological Survey (USGS) study (See Figure 2).⁵ Further the project appears to be segmented into various projects elements and pieces, which is in violation of NEPA. In April 2011, Reclamation, without NEPA review, agreed to grant Panoche Drainage District \$4.24 M to construct pipelines and pump station at the same location and replace the Grassland Bypass Channel Inlet with a concrete structure.⁶ Started under a 1995 FONSI and EA, this “temporary” pollution discharge project has been continued now for a quarter of a century. The full costs of this project along with all the pieces are not disclosed.

As you can see from Figure 2, if the existing load limits contained in the 2001 Waste Discharge Requirements for the Grassland Bypass Project had been enforced, the toxic discharges exceeded the selenium load target in every year until Broadview Water District lands are retired.⁷ The project still misses the pollution control targets for 2 of 6 years after that land retirement. [The red bars show the years when they fail to meet the WDR targets and the green bars show when the dischargers meet the targets.] Clearly, the most effective treatment is land retirement.

The more water imported, the more the project pollutes downstream users and harms beneficial uses. Putting water on these toxic soils creates polluted ground and surface water. The rhetoric used by Reclamation to tout the benefits and success of the San Luis Drainage Grassland Bypass Project misleads the public. Often success is presented in percentages that compare a single year load value with either 1995 or 1996, both 100% supply allocation years, with, for example 2009, when water supply allocation was 10% nor 2008 when it was 40%. The benefits are not from the GBP project necessarily, but from the reduction in imported water supplies that create the pollution.

⁵ <http://www.epa.gov/region9/water/ctr/>

⁶ <http://apply07.grants.gov/apply/opportunities/instructions/oppR11AS20026-cfda15.507-instructions.pdf>

⁷ http://www.swrcb.ca.gov/rwqcb5/board_decisions/adopted_orders/fresno/5-01-234.pdf

There is insufficient information to make a finding of no significant impact. The FONSI and DEA do not meet the legal requirements of the National Environmental Policy Act [NEPA]. A full EIS is needed to prevent further waste of taxpayer dollars and to assure an alternative that will prevent the continued pollution of the water ways with selenium, salt and contaminants is adopted.

Respectfully submitted,



Jim Metropulos
Senior Advocate
Sierra Club California



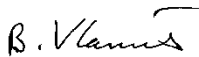
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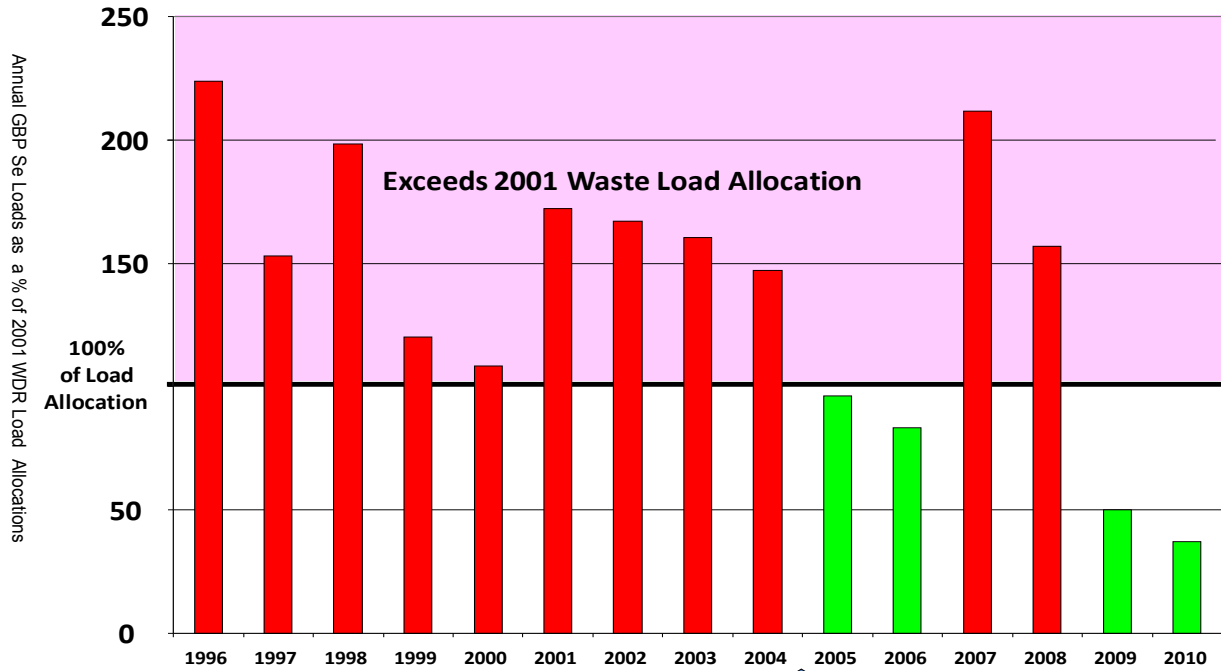
Conner Everts
Executive Director
Southern California Watershed Alliance

Frank Egger, President
North Coast Rivers Alliance

Attachment: Figures 1-6 & Detailed comments

cc: Nancy Sutley, Chair, Council Environmental Quality
Ken Salazar Interior Secretary
David Hayes, Deputy Interior Secretary
Don Glaser, Regional Director BOR
Alexis Strauss, USEPA
John Laird, Resources Secretary
Phil Isenberg, Delta Stewardship Council
Charles Hoppin, Chairman SWRCB
Kate Hart, Chair CVRWQCB
Rod McGinnis, NMFS
Ren Lohofener, USFWS
Charlton "Chuck" Bonham, Department of Fish and Game
Gerry Meral, Department of Water Resources
Mark Madison, City of Stockton
Tom Howard, SWRCB
Rudy Schnagl, CVRWQCB
Interested parties

Grasslands Bypass Project met the Specific Water Year 2001 Waste Load Allocations only after Broadview W.D. was retired.*



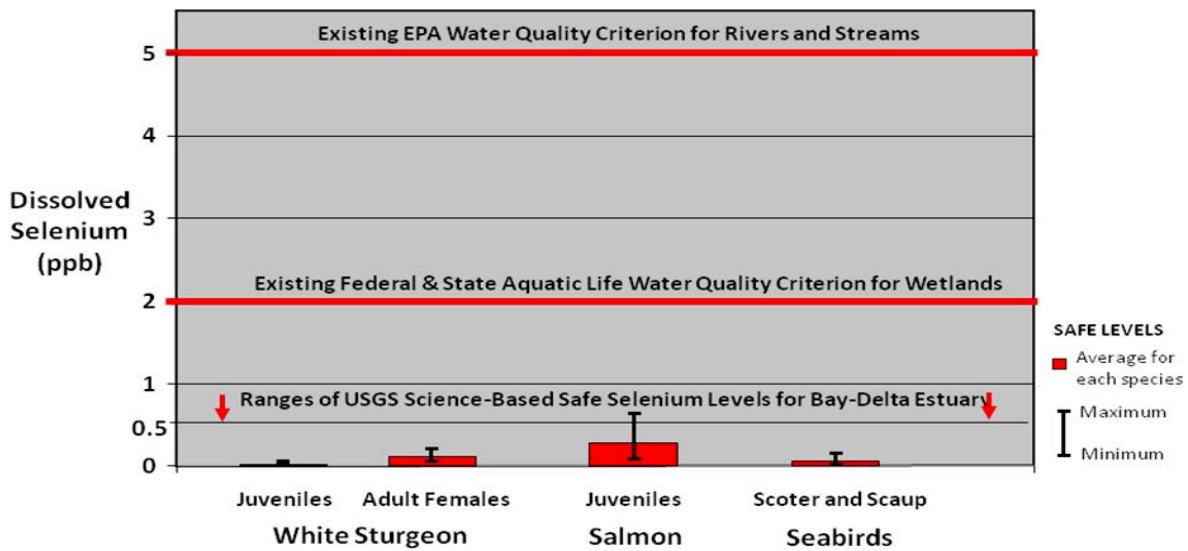
*Specific Water Year Waste Loads under Waste Discharge Requirements No.5-01-234 were not enforced. Pollution loads were relaxed to allow greater selenium discharges. Data Source: USBR [C.Eacock] and CVRWQCB [R. Schnag]

Broadview W.D. Retired

Figure: 1

Existing Selenium Water-Quality Standards Do Not Protect Bay-Delta Species:

A new USGS study, which will be used by EPA to revise standards, shows that much lower levels of selenium will be required to protect critical species.



Critical Bay-Delta Estuary Species

Figure 2

<http://www.epa.gov/region9/water/ctr/>

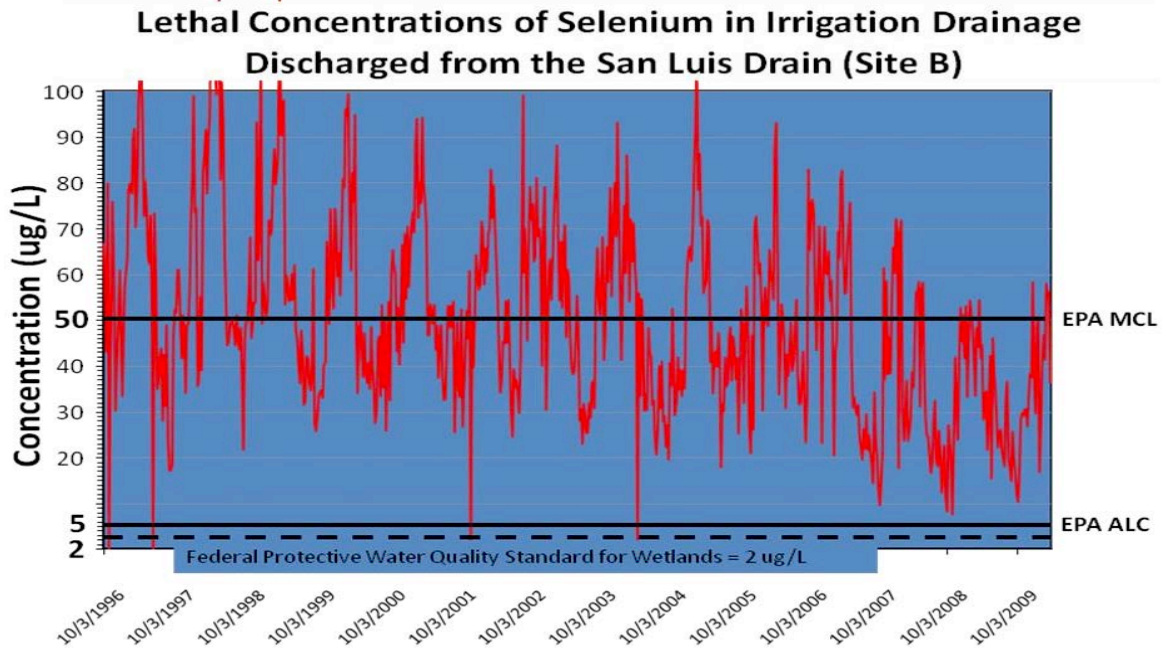


Figure 3

Data from USBR MCL=Maximum Contaminant Level for Drinking Water ALC=Aquatic Life Criterion

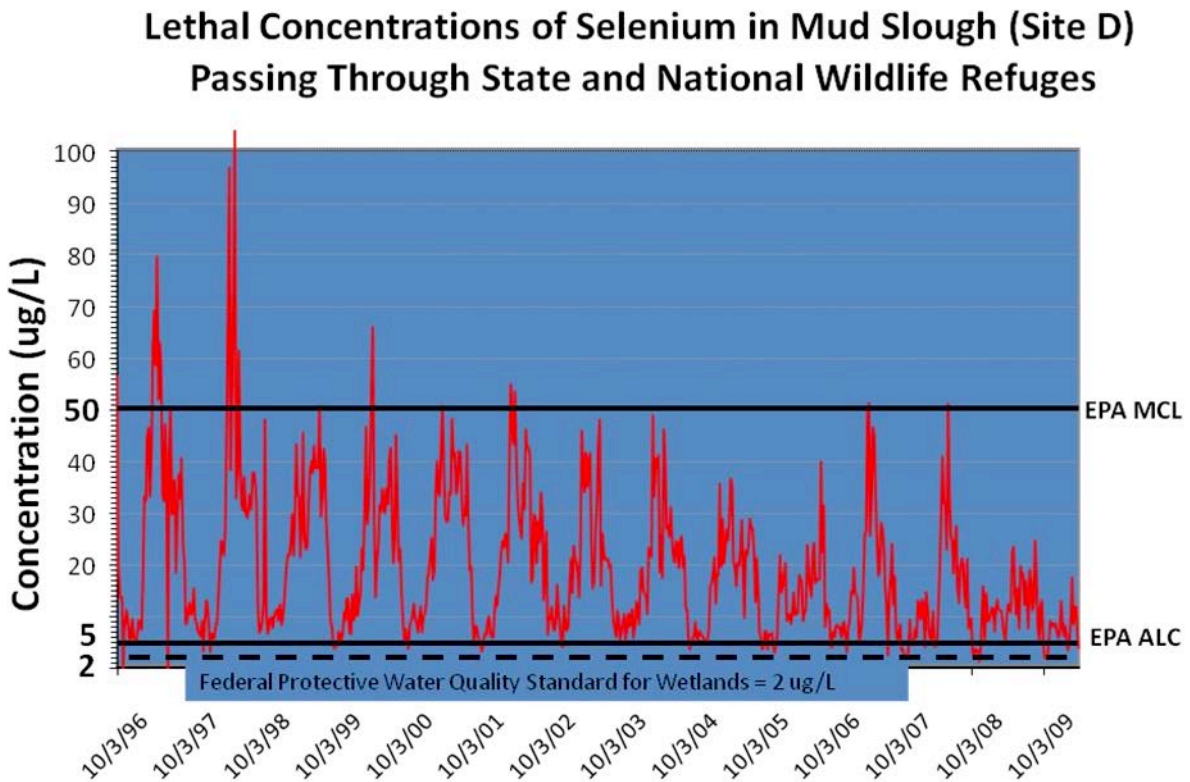
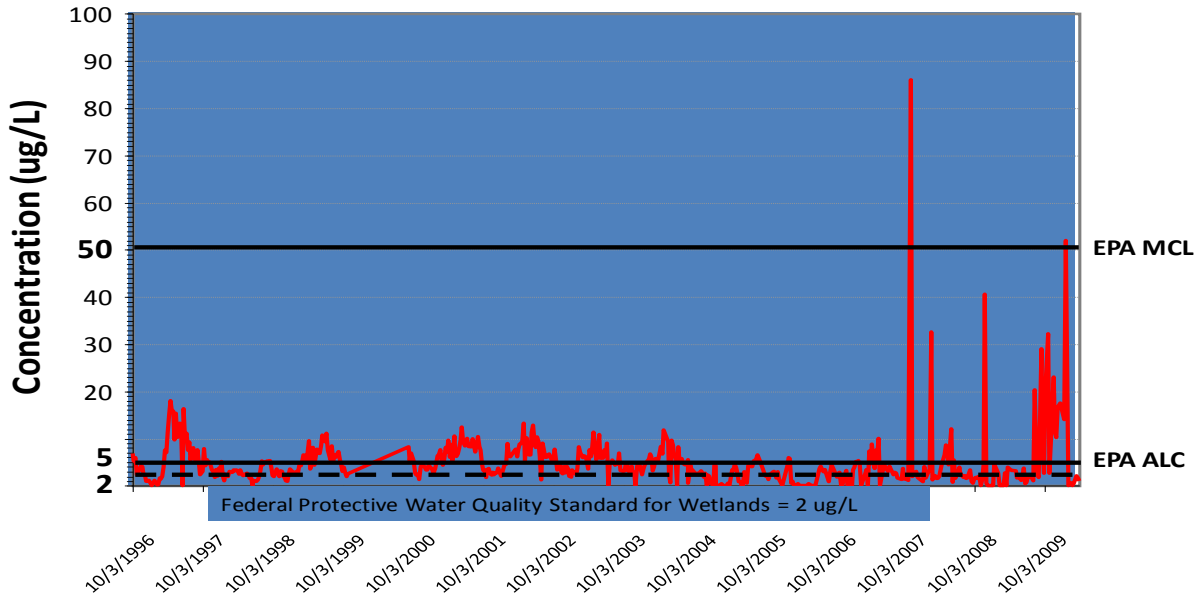


Figure 4

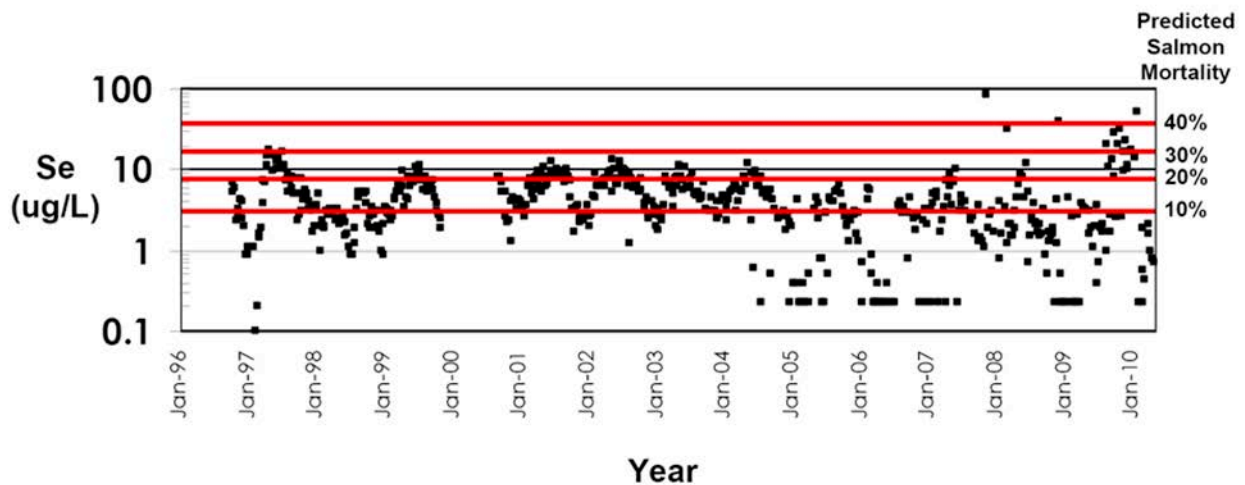
Data from USBR MCL=Maximum Contaminant Level for Drinking Water ALC=Aquatic Life Criterion

Lethal Concentrations of Selenium in San Joaquin River (Site H) Downstream of Mud Slough



Data from USBR MCL=Maximum Contaminant Level for Drinking Water ALC=Aquatic Life Criterion **Figure 5**

GBP Selenium Discharged to the San Joaquin River Causes Levels that are Dangerous for Salmon



Selenium concentrations measured in the San Joaquin River at Hills Ferry (data from the U.S. Bureau of Reclamation)

Figure 6

**Specific Comments on Draft EA/FONSI for San Luis Drainage Feature
Reevaluation Demonstration Treatment Facility
At Panoche Drainage District**

The Project Does Not Meet Drainage Needs or Existing Waste Discharge Requirements—This Project Is Yet Another Delay in Meeting Clean Water Act Requirements.

The proposed project does not meet the primary need “*to achieve a long-term, sustainable salt and water balance in the root zone of irrigated lands in the San Luis Unit and adjacent areas*” because the proposed demonstration plant will not remove salt from drainage water, nor will it reduce water table elevations. Removal of selenium but not salt from high groundwater does not meet the project need.

The Draft EA/FONSI fails to provide even rudimentary documentation on project costs in order to meet the proposed project purpose to “*demonstrate and operate the reverse osmosis (RO) and selenium biotreatment technologies described in the Feasibility Report in order to collect cost and performance data required for final design of the corresponding full-scale drainage service treatment components to be constructed in Westlands Water District (Reclamation 2008).*” The Draft EA/FONSI excludes the findings of the Feasibility Report that RO treatment is not cost effective compared to the value of crops grown and that substantial increases in subsidies to San Luis Unit contractors would be necessary in order to implement full-scale drainage service.⁸

As stated, the rhetoric used by Reclamation to tout the benefits and success of the San Luis Drainage Grassland Bypass Project is misleading and exaggerates the benefits. Often success is presented in percentages that compare a single year load value with either 1995 or 1996, both 100% supply allocation years, with, for example 2009, when water supply allocation was 10% nor 2008 when it was 40%. Failing to account for water delivery volume differences imported to irrigate these toxic soils

⁸ http://www.usbr.gov/mp/sccaosld/docs/sldfr_report/slfr_3-08_v02.pdf pg 99

misleads decision makers when analyzing the environmental impacts of the project. Appendix F is not up to date and perpetuates the misrepresentation. Not adjusting the averages for „pre-project“ and post project to account for water volume imports distorts the benefits. Simply put, the more water that is imported the more pollution created. As one can see from Figures 3 & 4 the consolidation of this drainage for discharge to Mud Slough and the San Joaquin River has consistently put lethal levels of selenium through National and State Wildlife areas and the San Joaquin River until it is diluted some fifty miles downstream from the point of discharge.

This project is inconsistent with Reclamations“ current project Waste Discharge Requirements⁹ permitting use of the San Luis Drain to discharge polluted water from the project to Mud Slough and the San Joaquin River: Item 29(i):

“An In-Valley Treatment/Drainage Reuse element of the Project will be implemented on up to 6,200 acre of land within the Grassland Drainage Area. This element of the Project is composed of three phases involving water reuse, removal of salt, selenium and boron, and the disposal of the removed salts to prevent them from discharging into the San Joaquin River. Approximately 17,000 acre-feet, or half of the total drain water produced in the Grassland Drainage Area will be handled by this element of the Project. Phase I involves the purchase of land and planting to salt-tolerant crops by 2003, Phase II involves the installation of subsurface drainage and collection systems and an initial treatment system, and Phase III involves the completion of construction of treatment removal and salt disposal systems by 2009.”

The proposed project treats just 200 gallons a minute, equivalent to about 40 garden hoses and only a small fraction of total drainage flow and contaminated groundwater,¹⁰ and does not remove salts. Thus, the proposed project misses the mark in meeting Reclamation“s permit conditions required to meet water quality protections.

The proposed project also does not meet the secondary project purpose “to

⁹ http://www.swrcb.ca.gov/rwqcb5/board_decisions/adopted_orders/fresno/5-01-234.pdf

¹⁰ http://www.usbr.gov/mp/ptms/docs/08-07-07_proj_update_west_side_reg_drainage.pdf

evaluate other innovative technologies, which may reduce the cost and environmental impacts as compared to the technologies evaluated in the Feasibility Report, while meeting the requirements for drainage service” because the document fails to identify those “innovative technologies.” Because these technologies are not described at all, the reader can only assume that those technologies do not exist.

Failure to Consider a Full Range of Treatment and Pollution Control Alternatives

The Proposed Action does not meet the project need *to achieve a long-term, sustainable salt and water balance in the root zone of irrigated lands in the San Luis Unit and adjacent areas* because it does not remove salt from drainage water nor does it reduce high groundwater levels.

As stated by USGS Director Mark Myers in a letter to Senator Feinstein, May 2008, *“Perhaps the greatest uncertainties in the proposed plans are the technical feasibility of biotreatment of selenium at the scale and salinities to be encountered. (The feasibility report for treatment has still not been released and could not be reviewed for this letter.) Land retirement was the only alternative presented as an option to drainage treatment within the Reclamation EIS. Substitution of deep ground-water pumping that offsets a fraction of the surface water delivery is another alternative that has merit.”*^{11 12} No feasibility report for treatment was provided in this DEA or a full range of treatment options. Further, without knowledge of the water chemistry to be treated the public and decision makers cannot make an informed decision regarding the feasibility of removing

¹¹ http://www.rcamnl.wr.usgs.gov/Selenium/Library_articles/feinsteinltr0001-from-Director.pdf

¹² http://www.usbr.gov/mp/sccaosld/docs/sldfr_report/slfr_3-08_v02.pdf pg viii

The San Luis Unit was authorized with two appropriation ceilings. The construction of project works, except for distribution systems and drains, are covered by an indexable ceiling. The ceiling for the distribution systems and drains is not subject to indexing. The combined remaining construction cost ceiling for the San Luis Unit is \$428,674,777. The total estimated cost to implement the In-Valley/Drainage-Impaired Land Retirement Alternative is \$2.24 billion. The total estimated cost to implement the In-Valley/Water Needs Land Retirement Alternative is \$2.69 billion. Thus, implementation of either of these action alternatives would exceed the combined remaining construction cost ceilings for the San Luis Unit.

selenium in water containing salts, mercury, boron, trace elements, nitrate and other contaminants. Many of these trace elements and contaminants can render the treatment ineffective.

A summary of the existing credible scientific evidence relevant to selenium removal at this scale and volumes along with the potential chemical interference from other contaminants was not provided. Instead the document relies on 1980 ground water quality data from Westlands Water District in the SLDFRE EIS.

No information is provided on either additional treatment alternatives or pollution control strategies such as curbing the importation of water to these contaminated soils and thus, the resulting polluted water being collected and discharged to the San Joaquin River and Delta Estuary. Without cost figures and detailed information regarding contaminants in this polluted groundwater caused by importing water, the public cannot make an informed decision regarding the environmental impacts, costs and trade-offs. Groundwater levels, groundwater quality and costs could be compared to the estimated costs based on reverse osmosis and undisclosed “innovative technologies.” The averted costs of water, crop and power subsidies previously going to retired lands could be compared to the value of crops that would have otherwise been grown on the retired lands to determine improvements in salt and water balance in the root zone of remaining irrigated lands in the San Luis Unit and adjacent areas. Evaluation of such an alternative would help determine whether retirement of lands within the San Luis Unit would improve saline groundwater conditions.

Insufficient maps and information is provided to determine if the project is in the San Luis Unit of the Central Valley Project, and thus potentially authorized under Public Law No 88-488. At first glance the project appears to be outside of the service area. Thus, what authority and funding the proposed project is under is not clear. Further it appears there is no identified funding, and yet Reclamation is moving ahead with a controversial undefined project that might obligate Congress to expenditures not authorized.

The Proposed Action differs significantly from the Preferred Alternative in the San Luis Drainage Feature Reevaluation Record of Decision (SLDFRE ROD) in that it

proposes to directly treat sump water, rather than concentrated sump water that has gone through reuse and concentration at the San Joaquin River Improvement Project. This is a significant change. The decision to treat these polluted flows was based on a reduced volume to reduce the costs. Even that approach was not cost effective. The Proposed Action would result in even greater costs because of the larger volume of drainage to be treated.

The Proposed Action description fails to provide any cost estimates for plant construction, operation, energy needs, energy sources, or disposal of hazardous wastes. A cost-benefit analysis is relevant to the selection of not only the treatment options but weighing these against other alternatives. No cost benefit analysis is provided. Compliance with section 102(2) (B) of NEPA is not adequate given these deficiencies.

Section 3.1 Water Resources—Failure to Provide Meaningful Analysis of the Impacts From the Treatment Approaches.

The Draft EA claims that the project will cumulatively improve water quality and amounts of selenium discharged into Mud Slough would be “much less” but no specific quantities of selenium are provided. Without information or data, the project plan simply states that operating this treatment plant in perpetuity will not have an impact. Quantities of selenium and other contaminants discharged should be provided. Also the water quality parameters of the water to be treated are not provided. The chemistry affects the treatment efficacy. Trace elements, nitrate and other contaminants are known to render biological treatment ineffective in removing selenium. Large quantities of salts and other contaminants impact the effectiveness of reverse osmosis. No details are provided regarding the treatment methods so it is impossible to know what are the potential water pollution impacts and compliance with Clean Water Act standards. The proposal to discharge selenium at 10 µ/L would violate CWA standards.

Additionally, the project fails to identify mercury as a constituent of concern for this project. Additional monitoring of mercury should be performed to determine if it is of concern.¹³

¹³ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826 pgs 94-96 USFWS 2009 BO

Section 3.3 Biological Baseline Data Insufficient to Determine Impacts

The approach presented in this document is different from the schematic presented in the SLDFRE document referenced in the DEA. The poor maps, details and absence of a schematic for the project make assessment of the project impacts difficult. From the document it appears that “in-ground water” will be pumped directly to the proposed facility in pipes, enter the facility and then the discharge is to an existing irrigation drainage ditch. Without a better explanation or flow diagram the process at the facility and how the yet to be named alternative technology will enter into the project remain unknown. Without this information it is difficult to determine the impacts on biological resources.

The H.T. Harvey and Associates Panoche Drainage District, Giant Garter Snake Survey Report of July 8, 2008, admittedly was not conducted according to protocol timing of April 15 to June 1 and for a different project, but the map at page 8 where the two valley snakes were trapped could be useful in assessing the impacts of this project if the collection and distribution of the polluted flows were clearly defined and shown on the map. Also a Craig Swick survey of San Joaquin Kit Fox Range in 1973, found the range to include Delta Mendota Canal, which is not surveyed for this project, but is adjacent to the southern boundary. The USFWS Protocols Kit Fox cited in the Categorical Exemption used for the test borings are June 1999, which are out of date.

The sloppy information in this document is evident in the following incorrect statement on page 17: “*Under the GBP Biological Opinion (USFWS 2010), several thousand acres of agricultural lands in the vicinity of the SJRIP reuse area have been idled from irrigated agricultural use.*” The reality is that the U.S. Fish and Wildlife Service’s (USFWS) Grasslands Bypass Project Biological Opinion did not result in the retirement of any agricultural lands. The purchase/assignments of Broadview, Centinella, Widren and Mercy Springs water districts, as well as the Britz and Sumner Peck settlements where saline groundwater limits crop production were responsible for

http://wwwrcamnl.wr.usgs.gov/Selenium/Library_articles/san_luis_articles/USFWS_CEQA_Scoping_Comments_C_VRWQCB_GBP_Extension_3-19-09.pdf Pgs 15-17

the land retirement.

However, it is true that in the Final Fish and Wildlife Coordination Act Report for SLDFRE, the USFWS recommended retirement of all San Luis Unit lands within the Grasslands area.¹⁴ The Fish and Wildlife Coordination Act requires coordination with Fish and Wildlife Service when a permit or license will impact natural water ways or wetlands.....*otherwise controlled or modified for any purpose whatever, including navigation and **drainage**, by any department or agency of the United States.* (Emphasis added). Reclamation brushes this requirement aside without a valid justification. Further Reclamation also disregards the recommendation from the USFWS to retire of the 80,000 acres of San Luis Unit lands within the Grasslands Watershed area.¹⁵ A new EIS should be prepared which considers retirement of all San Luis Unit lands within the Grasslands Drainage Area, as recommended previously by the U.S. Fish and Wildlife Service in their Coordination Act Report for SLDFRE.

At page 4, no data is provided to support the opinion, “The facility will be

¹⁴ USFWS, 2006, Coordination Act Report on San Luis Drainage Feature Re-evaluation. Available at: [http://www.usbr.gov/mp/mp150/envdocs/MP700_San%20Luis%20Drain_FinalEIS_App%20M%20\(Part%201%20of%204\).pdf](http://www.usbr.gov/mp/mp150/envdocs/MP700_San%20Luis%20Drain_FinalEIS_App%20M%20(Part%201%20of%204).pdf).

¹⁵[http://www.usbr.gov/mp/mp150/envdocs/MP700_San%20Luis%20Drain_FinalEIS_App%20M%20\(Part%201%20of%204\).pdf](http://www.usbr.gov/mp/mp150/envdocs/MP700_San%20Luis%20Drain_FinalEIS_App%20M%20(Part%201%20of%204).pdf) pg 63:

We believe the Service’s Preferred Land Retirement Alternative (full retirement) for the San Luis Drain Feature Re-Evaluation Project would release Reclamation from any future obligation to provide drainage service to the SLU while maximizing avoidance of adverse environmental effects. Our contention is that a full retirement alternative represents the most logical and least risky option to finally solve the drainage problem from the perspective of protecting and enhancing regional fish and wildlife resources. This land retirement alternative is compatible with CALFED and CVPIA goals and objectives by reducing project water demand, increasing available supplies, enhancing fish and wildlife habitat, and reducing contaminants reaching the Delta. It is an approach that appears most compatible with both the Service and Reclamation’s respective missions, since the goal is to find a drainage solution for the study area which includes measures to preserve, protect, restore, and enhance fish and wildlife resources affected by water deliveries to the SLU.

The Service strongly prefers to address SLU drainage issues with options that would eliminate the need for drainage service altogether. The Service believes the SLDFR should seek a more permanent and complete resolution of drainage issues in the San Joaquin Valley. Drain water management is expensive and risk-laden.

operated year-round and will be lighted for safety and security. The effects to wildlife resources from this light source are expected to be negligible because of existing low value of the area to wildlife.”

3.6 Indian Trust Asset Impacts Not Adequately Analyzed.

The Draft EA/FONSI fails to identify that the continued diversion of Trinity River water to the Grasslands area impacts the Indian Trust Assets of the Hoopa Valley and Yurok Tribes. The Bureau of Reclamation’s 1959 water permits for the Trinity River Division of the Central Valley Project (CVP) included a significant expansion of the CVP service area within the San Luis Unit.¹⁶

The Draft EA/FONSI is part of an attempt to justify continued irrigation of lands that are causing impairment of the beneficial uses of water contaminating groundwater and harm to other beneficial uses. Continued taxpayer subsidies cannot be economically justified. This project will continue the taxpayer’s downward economical spiral, throwing good money after bad money. Diverting water from the Trinity River will continue to adversely affect the salmon fishery that is the basis for the Hoopa Valley and Yurok Indian Trust Assets. The Draft EA/FONSI fails to disclose the negative economic and environmental impacts of continued irrigation of the San Luis Unit. Conversely, the document fails to identify the benefits of ceasing irrigation of toxic lands, including benefits to Tribal Trust and Public Trust assets.

3.7.1 Hazardous Waste

The DEA does not characterize 55,000 pounds of hazardous waste that is being created and stored at the facility before shipment to a hazardous waste facility. How much of it is selenium? What other constituents/pollutants are expected to be in it in what amounts? What is the cost of disposing of this amount of hazardous waste and cumulatively is it even feasible to consider disposal of a larger amount for the entire San Luis Unit? USGS raised questions regarding the feasibility—both technically and

¹⁶ See <http://tcrd.net/exhibita.htm>

economically—of treatment because of the sheer volumes to be treated if technically feasible. USGS estimates at 50 years, with 100,000 acres of land retirement and treatment for the rest of the drainage, there will be a requirement for salt storage of 20 million tons in evaporators or landfills. This salt will be contaminated with a variety of trace elements common in drainage waters including selenium, boron, molybdenum, chromium, and arsenic.¹⁷

3.9.2 Socioeconomic Impacts

What is the expected cost savings to the Panoche Drainage District from the reduced selenium discharged into Mud Slough? How many pounds will it be and what is the rate of savings?

3.10 Air Quality Impact and 3.11 Global Climate Impacts Not Fully Considered.

The Draft EAFONSI is grossly inadequate in its evaluation of air quality and the impact on global climate change. The document fails to identify the source or amount of necessary electricity to run the demonstration plant. Will the project use CVP Project Power? If so, what will be the source of replacement power for CVP preference customers from increased demand for CVP Project Use Power? It is likely that replacement power would be generated from fossil fuels. Therefore, the air quality section completely fails to identify the air quality impacts of replacement fossil fuel energy. How much energy will it be and what kind of load will it create on the system? How much will the Western Area Power Administration's (WAPA) customer costs increase to purchase replacement power? How will it affect the power allocation and costs of the Hoopa Valley Tribe's WAPA contract? How will cost increases affect low income populations such as those within the Trinity Public Utilities District boundaries? If the plant is turned over to the contractors, who will pay for the energy for the plant? Is it a reimbursable CVP expense or non-reimbursable?

Cumulatively, a revised document should identify the expected global warming and air quality impacts from the replacement energy demand from fossil fuels for a fully built-out drainage system for the San Luis Unit, as well as, cost impacts to CVP customers, including low income and tribal customers.

¹⁷ <http://pubs.usgs.gov/of/2008/1210/> pg 2.

August 11, 2011



Michael C. S. Eacock (Chris)
Data Collection and Review Team Grassland Bypass Project (GBP)
Project Manager/Soil Scientist
U.S. Bureau of Reclamation
South-Central California Area Office
San Joaquin Drainage
1243 N Street
Fresno, California 93721

Grassland Bypass Project Oversight Committee:

Jared Blumenfeld,
Administrator (Region 9)
Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Pamela Creedon,
Executive Officer
Central Valley Regional Water Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Donald R. Glaser
Regional Director
U.S. Bureau of Reclamation
Mid-Pacific Region, Regional Office
2800 Cottage Way
Sacramento, CA 95825-1846

Ren Lohofener
Regional Director
U.S. Fish and Wildlife Service
Pacific Southwest Regional Office
2800 Cottage Way
Sacramento, CA 95825

Re: Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project

Dear Grassland Bypass Project Data Collection & Review Team and Oversight Committee:

The undersigned groups oppose reductions in the monitoring program for the Grassland Bypass Project and, furthermore, recommend a comprehensive reassessment of the need for enhanced monitoring and scientific evaluation. We can see no technical justification or rationale for this reduction in monitoring for a project that has exceeded water-quality objectives and standards for more than fifteen years. We urge the Oversight Committee to reject this unjustified reduction in monitoring and require a reassessment of monitoring and study needs in view of the historical experience with the Grasslands Bypass Project and the long-ignored scientific recommendations of the United States Geologic Survey (USGS) and others to take a systematic, mass-balance approach to understanding the impacts of selenium and other contaminants from the Project. The discharge of selenium and other contaminants in excess of Federal and State water-quality standards threaten populations of Salmon, Steelhead, and Sacramento Splittail, as well as the waterfowl and wildlife resources of the State and Federal National Wildlife Refuges in the area. At the proposed concentrations, mortality of Chinook salmon, steelhead, Sacramento Splittail, waterfowl, and other wildlife are predicted in or adjacent to Mud Slough, the San Joaquin River, and the Delta Estuary. (See Figure 6)

We appreciate the opportunity to comment upon the United States Bureau of Reclamation (USBR) and San Luis Delta Mendota Water Authority (SLDMWA) draft monitoring proposal pending before the Data Technical Committee. The draft proposal would curtail the monitoring program for the discharge of selenium, salt, boron and other contaminants being drained into Mud Slough and the San Joaquin River, using the Federal San Luis Drain as the wastewater collection and discharge conduit. The monitoring proposal would reduce the frequency of monitoring for critical contaminants and supporting parameters at various sites, with no technical justification or analysis of increased bias and uncertainty in tracking water-quality compliance and Project effectiveness. These reductions will mask the pollution spikes in the watershed, river and estuary and provide insufficient data needed to model impacts to the San Joaquin River and the Delta Estuary. These deficiencies have been previously outlined by the scientific community, but continue to be ignored.

In a declaration before the United States District Court for the Eastern District of California filed by Mr. Glaser, Mid-Pacific Region Director, USBR, on April 1, 2011¹, Mr. Glaser and USBR reported, “On February 16, 2010, the Regional Board staff announced that it would no longer conduct water quality monitoring at twelve sites for the GBP, because of funding and staffing shortage. In addition, staff for the California Department of Fish and Game expressed doubts that they could continue biological monitoring for the project due to staff losses. Reclamation is working with other agencies to revise the Project’s monitoring program, and will assign staff and seek funding to assure that the water quality and biological monitoring requirements are met.”²

Operating under State of California Waste Discharge Requirements (WDRs), USBR and SLDMWA (Dischargers) have transported selenium and other contaminants from the San Luis Drain to the San Joaquin River starting in 1995 as a “temporary” two year project that was next extended to 2000, and then again extended to 2009, and recently extended again to 2019.(See Figure 1) USBR data document that, from 1996 to 2008, the dischargers have dumped 85,954 lbs of selenium, 25,251,000 lbs of Boron and 9,772,610 tons of salt to Mud Slough, the San Joaquin River, and the Delta Estuary.³

Even before 1995, these Dischargers drained selenium and other contaminants from the San Luis Drain, via Mud Slough to the San Joaquin River actually began under two Clean Water Act National Pollutant Elimination System (NPDES) permits.⁴ (See Figure 1) Under those permits the selenium pollution controls and monitoring frequencies were much stronger. The compliance monitoring took place at the point of discharge not some 30 miles downstream. And concentrations at the point of discharge were much lower for Mud Slough (north) along with concentrations measured in the San Joaquin River monitoring sites. First, in November of 1987, USBR was allowed to drain the Kesterson ponds via Mud Slough into the San Joaquin River. A second NPDES permit to discharge selenium contaminated groundwater was issued to the Dischargers, USBR and SLDMWA, in March of 1996, where toxic drainage and ground water discharged also had similar monitoring and water quality compliance requirements.⁵

Under the previous and present permits Dischargers use sumps and pumps to move groundwater collected from subsurface drainage systems, which collect contaminated groundwater from as deep as 100 feet drawing from contaminated water from basically horizontal groundwater wells some 50- 100 feet in depth⁶ to collect pollution from over 97,000 acres and discharge toxic contaminants that exceed federal and state water quality standards, violate the Sacramento-San Joaquin Valley Basin plan, degrade beneficial uses, and create a nuisance and burden for downstream users to clean up, thus passing these environmental hazards and treatment costs to downstream users.

What is the rationale for curtailing monitoring?

Repeated requests to develop a comprehensive and effective monitoring program for the Grasslands Bypass Project have not been acted upon.⁷ There has been a consistent failure to develop monitoring to determine the fate and transport of selenium and other contaminants in the food chain where it's magnified effects result in a narrow window of exposure before mortality. Despite the lack of monitoring, selenium concentrations in avocet and stilt eggs at the Grasslands Drainers' reuse area have been found to exceed those found at Kesterson National Wildlife Refuge!⁸ Further the project has failed to track the selenium loading from the Grassland Drainage Area into the San Joaquin River, the Sacramento-San Joaquin Delta and the North Bay (e.g. Suisun Bay), as required in the 2001 Record of Decision for the GBP.⁹ Biological monitoring and impacts especially to coldwater fish have not been monitored.¹⁰ For example a Lemly index was not determined for San Joaquin River sites due to lack of sufficient sample of invertebrates and because bird eggs, one component of the index, are not sampled there. Selenium is being exported to southern California's water supplies through the California Aqueduct threatening drinking water quality and likely is accumulating in fish and reservoirs in Southern California as a result.¹¹

Also the GBP has failed to monitor and consider the long term impacts of discharging selenium through wetland and slough areas adjacent to federal and state wildlife refuges, the San Joaquin River and Delta Estuary.¹² This history of inadequate monitoring and insufficient scientific assessment will be made far worse if the proposed reductions in monitoring are allowed. We find absolutely no evidence that the proposed reductions are based on documented scientific analysis.

Models Accurately Document an Ongoing Failure to Meet Water Quality Standards in the San Joaquin River and Mud Slough and Continue to Impair the Bay-Delta.

Since 1994, models used to establish the amount of selenium loads to be discharged to the San Joaquin River and Delta Estuary have accurately documented that these loads of pollution do not meet Federal and State standards for minimal protection of water quality.¹³ [See Figures 3-5] Moreover, since 2000 the load models used have even been modified to permit greater discharges of pollution without triggering a violation. These modifications include relaxing criteria for violation rates, choosing a monthly mean instead of a 4 day average, and changing the water years.¹⁴ Environmental Defense Fund estimates the change from the four-day flow averaging period to a one month averaging period resulted in a 21 percent to 44 percent increase in allowable loads.¹⁵ “If implemented as an interim compliance, this change in the averaging period would be expected to cause numerous violations of the water quality standards. Similarly, relaxing the once-in-three year excursion rate to a once-in five-month per year rate resulted in a significantly higher allowable load.”¹⁶ These predicted violations have proven accurate.¹⁷ Using similar calculation assumptions, USBR figures for 2009-2019 predict violations also for the continued loads of pollution allowed.¹⁸ The dischargers use these generous load targets and the ability to meet them as a sign of success. The fact remains, however, that they fail to meet safe concentrations in the Mud Slough (north) wetland channels through State and Federal Wildlife Refuges and concentrations remain extremely high in Mud Slough (north) and in the San Joaquin River above the compliance point measured some 30 miles away. Along with the violations of the federal and state water quality standards, concentrations of selenium in fish and wildlife also remain high. Scientists predict a high mortality for coldwater fish such as salmon and green sturgeon from these concentrations.¹⁹

The San Joaquin River downstream of the Merced River has been delisted as water quality impaired because of dilution water from the Merced River, weak standards and inadequate monitoring mentioned above. The selenium contamination, however, continues to drain into the Bay-Delta with predictable results. The Clean Water Act Section 303(d) list of water quality limited stream segments lists 41,736 acres in the Delta, 5,657 acres in the Carquinez Straights, 70,992 acres in San Francisco Bay Central, 9,024 acres in San Francisco Bay south and 68,349 acres in San Pablo Bay as impaired by selenium.²⁰ The west side discharges are a major source of those water quality impairments.²¹ Health advisories are in effect for scaup, scoter and benthic feeding ducks in many of those areas.

A study by the U.S. Fish and Wildlife Service²² for USEPA identified that several bird species protected under the Migratory Bird Treaty Act (MBTA) are considered “species most at risk” from selenium contamination in the San Francisco Bay. Greater scaup, lesser scaup, black scoter, white-winged scoter, surf scoter and bald eagle are listed as “species most at risk” from selenium contamination and all are covered by the Migratory Bird Treaty Act (MBTA). By allowing continued discharges of selenium in excess of Basin Plan objectives from the Grasslands Bypass Project, there is downstream contamination and selenium bioaccumulation in the Bay-Delta, and increasing likelihood of MBTA and ESA violations by the United States.

Government Scientists Have Criticized the Existing Monitoring Program and Proposed Reductions Further Erode Protection of Public Resources

EPA has urged the development of a comprehensive monitoring program if the project is extended.²³ USFWS comments have identified numerous monitoring deficiencies with regard the fate and transport of selenium and the long term effects on especially on coldwater fish, wildlife and endangered species.²⁴

In 1996 USGS scientists provided the Oversight Committee with a comprehensive critique of the proposed monitoring plan, developed in cooperation with USBR.²⁵ Many of USGS comments still apply. They include recommendations for assessing the fate and transport of selenium in the project area; evaluation of selenium in sediment and its transport; evaluation of suspended particulate forms of selenium from the discharges; and for better biological and water quality monitoring. One of the main findings of the USGS review is that a monitoring program and study is needed to evaluate the mass balance of SE that includes the dissolved and suspended particulate forms of selenium. This continuing lack of comprehensive monitoring for the management of selenium contamination is also echoed in a recent scientific article, by Luoma & Presser 2009:²⁶

“Uncertainties in protective criteria for Se derive from a failure to systematically link biogeochemistry to trophic transfer and toxicity (Figure 1). In nature, adverse effects from Se are determined by a sequence of processes (12). Dilution and redistribution in a water body determine the concentrations that result from mass inputs. Speciation affects transformation from dissolved forms to living organisms (e.g., algae, microbes) and nonliving particulate material at the base of the food webs. The concentration at the base of the food web determines how much of the contaminant is taken up by animals at the lower trophic levels. Transfer through food webs determines exposure of higher trophic level animals such as fish and birds. The degree of internal exposure in these organisms determines whether toxicity is manifested in individuals. Se is first and foremost a reproductive toxicant (both a gonadotoxicant and a teratogen): the degree of reproductive damage determines whether populations are adversely affected. Adverse effects on reproduction usually occur at lower levels of exposure than acute mortality, but such effects can extirpate a population just as effectively as mortality in adults.”

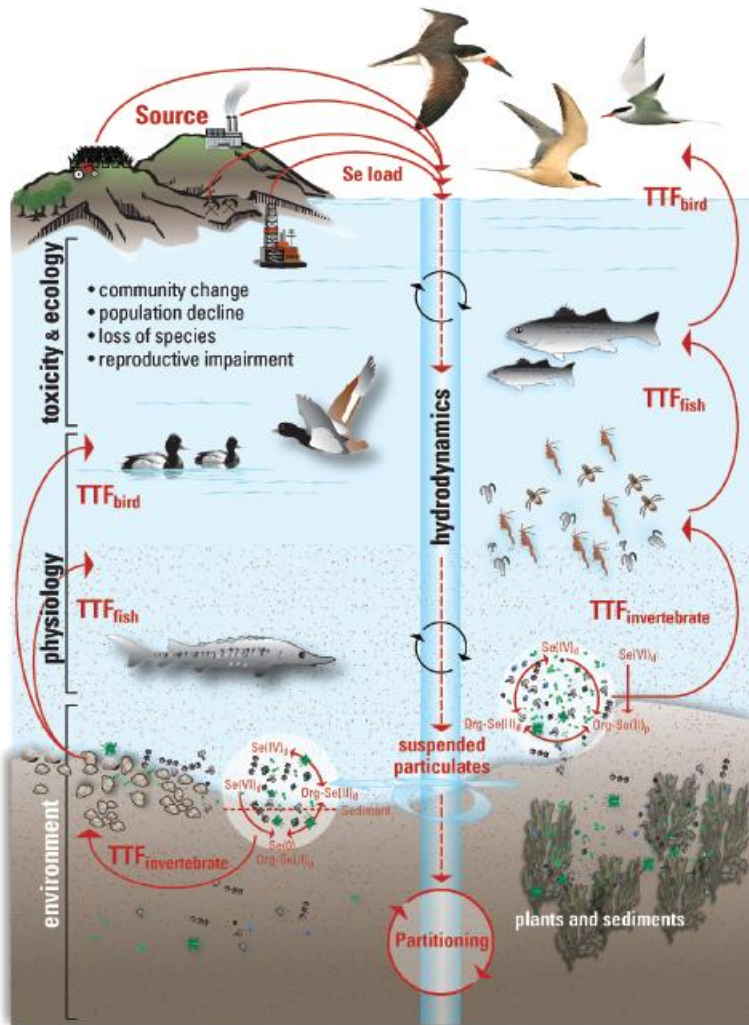


FIGURE 1. Conceptual model of Se fate and effects emphasizing the roles of speciation, biogeochemical transformation, and trophic transfer factors in modeling two aquatic food webs: a water column food web and a benthic food web. TTF = trophic transfer factor. Subscript d means dissolved, subscript p means particulate.

As of 2007 an estimated 222,025 cubic yards of sediment has accumulated in the San Luis Drain.²⁷ This is nearly a four-fold increase over the original 55,788 cubic yards of sediment that were recommended for removal at the beginning of the project but never carried out.²⁸ Also contained in the USGS report on the Review of the Grassland Bypass Channel Project Monitoring Program is the following assessment of the entire monitoring program: "The original Monitoring Plan is not adequate because it does not account for all appropriate sources and sinks of selenium, salt, and boron within the GBCP area and because the sampling design does not adequately address temporal, width, and depth variability in chemical concentrations and loads."²⁹ These contaminated sediments and suspended particulates in the water pose a toxic danger in the Drain, as well as, in Mud Slough and the San Joaquin River, that continue to grow and the proposed reductions in monitoring do not remedy these problems and shortcomings.

Conclusion: Continued Monitoring and a More Rigorous Approach are Necessary to Protect the Public Interest and Water Quality.

Rather than reduce monitoring, as proposed, we urge a substantial increase in the current 2001 monitoring plan to ensure compliance with state and federal law, while at the same time immediately initiating a comprehensive, peer-reviewed reevaluation of the monitoring program and the amounts of selenium being discharged under the current Total Maximum Daily Load (TMDL) and WDRs implementing the TMDLs. As noted in the November 3, 1995 agency letter, "There is no commitment, at this time, to approve long-term use of the Drain."³⁰ Further in 2001 the Regional Board staff reported, "If monitoring demonstrates that the water quality objectives are not being met then additional load reductions or amendments to the TMDL will be required."³¹ As noted previously and documented in figures 3-5, discharges exceed federal and state water quality standards. The Waste Discharge Requirements and compliance monitoring need to be strengthened not relaxed.

Based on current science, the continued extension of discharges from the Grasslands Bypass Project make it more important than ever to ensure that a long-term monitoring and scientific assessment finally address the impacts of the Project and the realistic chances of future reductions in contamination.

Sincerely,

Cc: Marcia McNutt, Director & Theresa S. Presser U.S. Geological Survey
Susan Moore, Field Supervisor, US Fish and Wildlife Service
Tom Maurer and William Beckon, US Fish and Wildlife Service
Karen Schwinn & Eugenia McNaughton, US Environmental Protection Agency

Interested Parties

Permit History for Selenium Discharges From Grasslands Basin Watershed to Mud Slough and San Joaquin River: A Case History in the Failure to Enforce Water Quality Standards

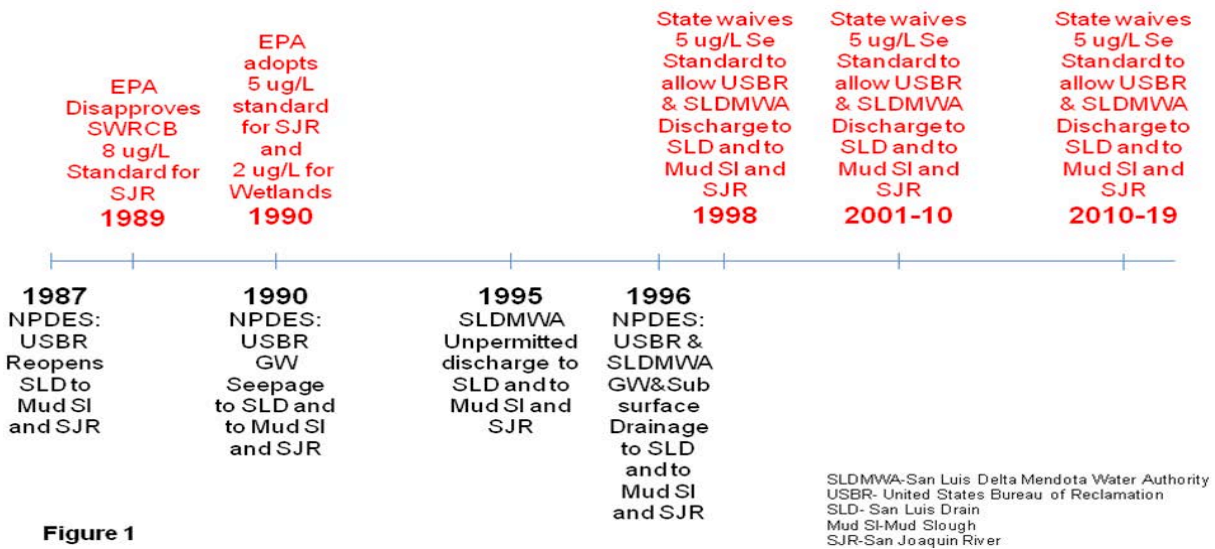


Figure 1

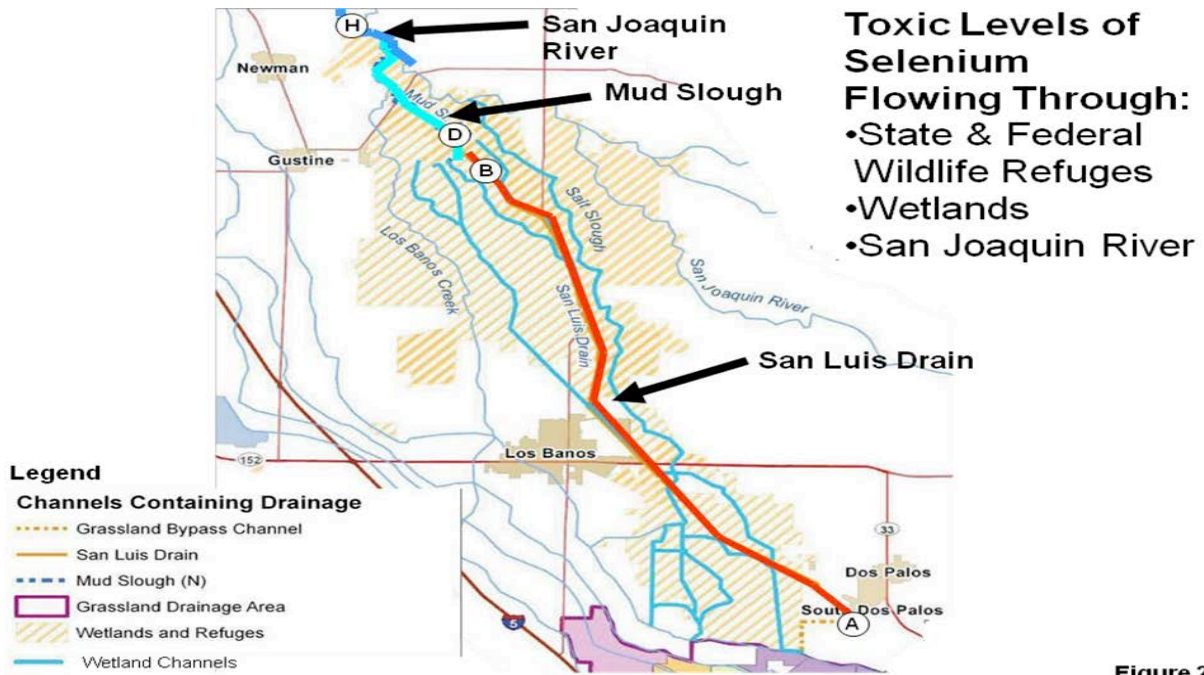


Figure 2

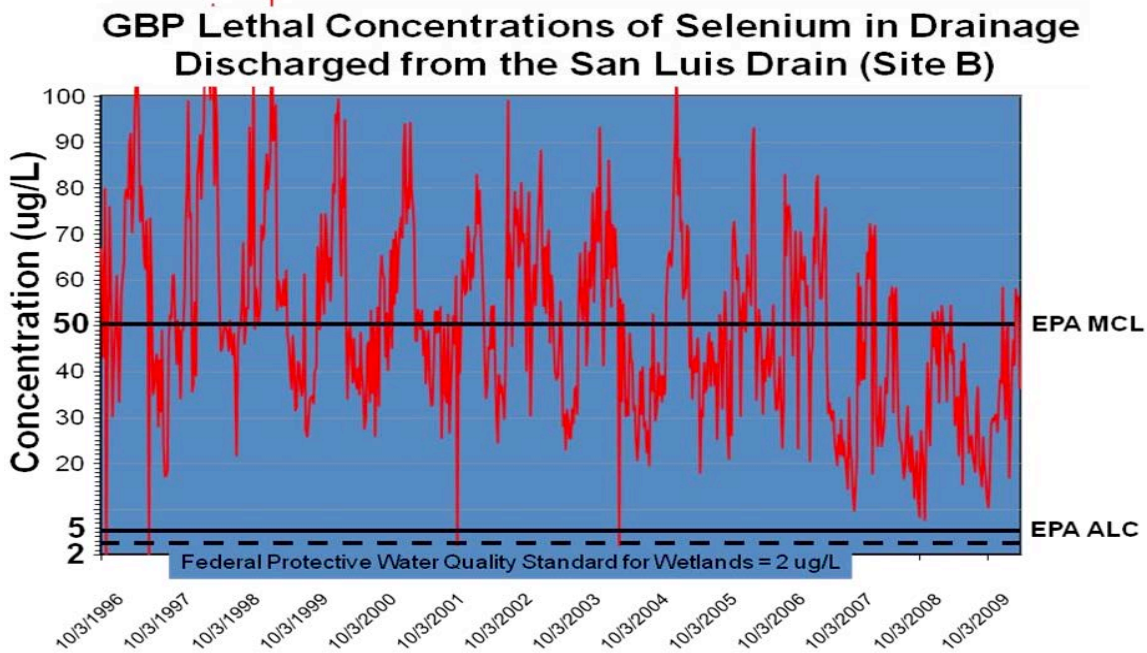


Figure 3

Data from USBR-Eacock MCL=Maximum Contaminant Level for Drinking Water ALC=Aquatic Life Criterion

GBP Lethal Concentrations of Selenium in Mud Slough (Site D) Through State and National Wildlife Refuges

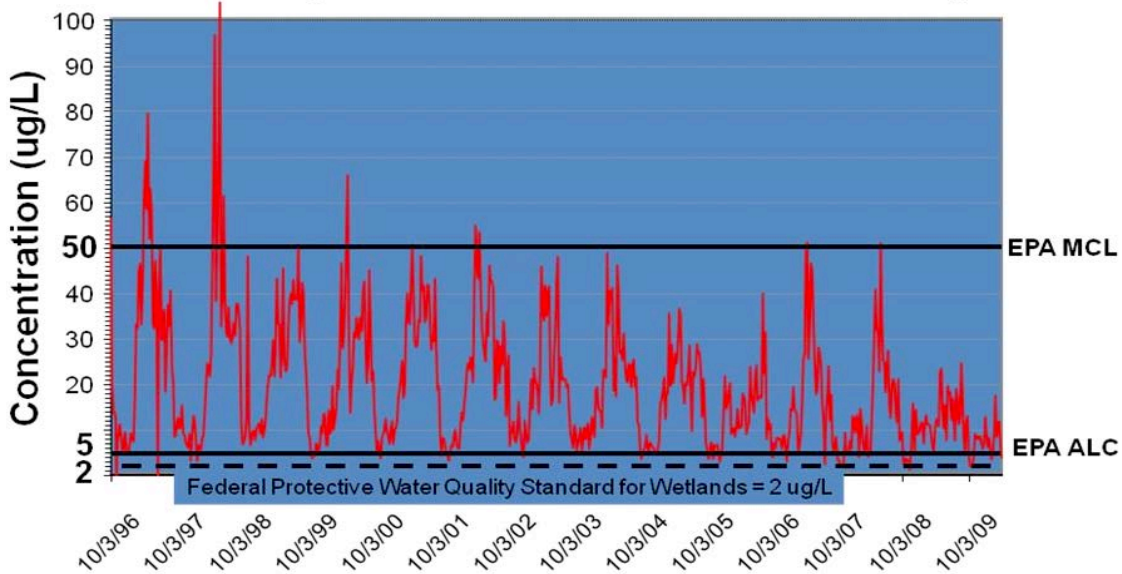


Figure 4

Data from USBR=Eacock MCL=Maximum Contaminant Level for Drinking Water ALC=Aquatic Life Criterion

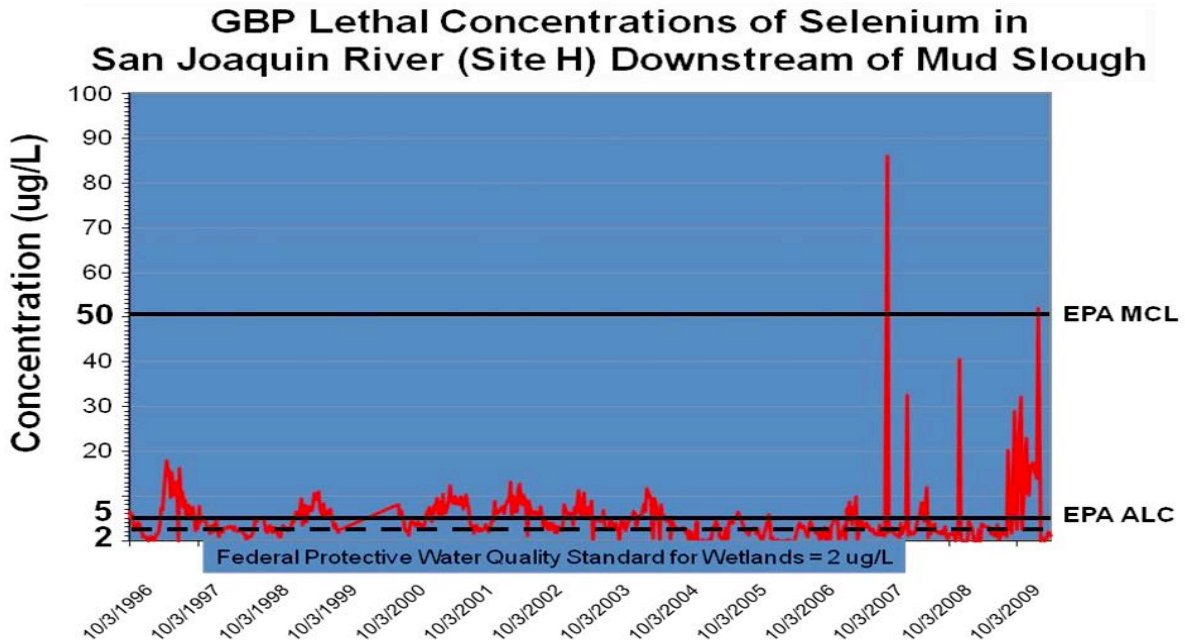
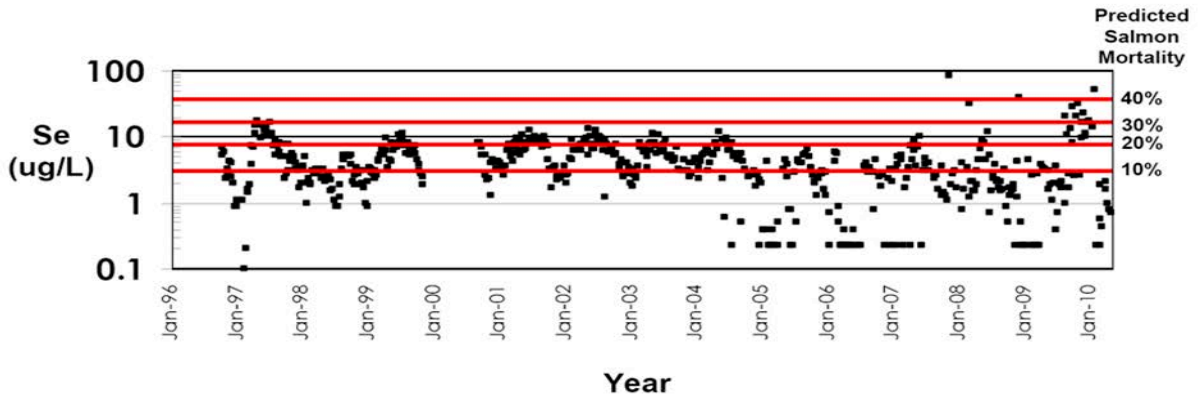


Figure 5
 Data from USBR Eacock MCL=Maximum Contaminant Level for Drinking Water ALC=Aquatic Life Criterion

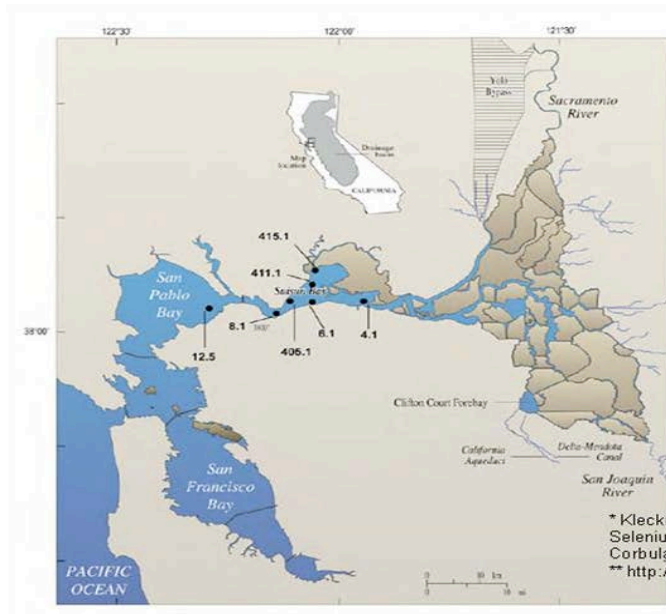
Selenium Levels in the San Joaquin River are not Safe for Salmon



Selenium concentrations measured in the San Joaquin River at Hills Ferry (data from USBR [Eacock] and USFWS [Maurer & Beckon])

Figure 6

Selenium Impacts in Bay-Delta



Unsafe levels of Selenium concentrations found in Suisun Bay and Northern San Francisco Bay 2 to 22 ppb.*

Selenium loads per day from Westside irrigators contribute approximately 10 to 30 times daily selenium load compared to the Sacramento and Oil refineries combined.**

* Kleckner, A.E., Stewart, A.R., Elrick, K., and Luoma, S.N., 2010, Selenium and stable isotopes of carbon and nitrogen in the benthic clam *Corbula amurensis* from Northern San Francisco Bay, California: May 1995b
 ** <http://pubs.usgs.gov/pp/p1646/>

Figure 7

ENDNOTES

¹ Federal Defendants' Status Report of April 1, 2011. Case 1:88-cv-00634-OWW-DLB Document 864 Filed 04/01/11 page 6 & Glaser Third Declaration pg 6-7

² Ibid.

³ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4418 pg 26 of 66 FEIR/EIS [Final EIS/EIR, Private/individual comments Part 2, Grassland Bypass 2010-2019](#)

⁴ Order No. 87-201 NPDES No. CA 0082171 Waste Discharge Requirements for United States Department of the Interior Bureau of Reclamation & Order No 90-027 NPDES NO CA 0082368 WDRs for USBR.

⁵ Order No 96-0922 NPDES No. CA 0083917 Waste Discharge Requirements for USBR and San Luis Delta Mendota Water Authority adopted March 22, 1996.

⁶ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4413 "Tile drainage systems affect groundwater-flow in upper parts of the semi-confined aquifer. Seasonal changes in groundwater levels and drain flow indicate field conditions are affected by upslope irrigation activities. Furthermore, observation well data show that groundwater movement is upward towards the drainage systems from depths as great as 100 feet below land surface (Deverel and Fio, 1991; Fio, 1994)." Pg 236 of the PDF

⁷ <http://www.epa.gov/region9/nepa/letters/Grassland-Bypass-FEIS.pdf> EPA March 30, 2009 Detailed EIS/EIR Comments RE Grassland Bypass Project Continued Use of San Luis Drain: *“Develop a comprehensive monitoring program that includes multiple contaminants and follow-up for detected biological effects...this program should cover biological as well as water quality and sediment components.”*

http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4415 pg 15 -52 of PDF USFWS March 22, 2009 Comments RE Continuation of GBP 2009 to 2019 USFWS recommends... *“An evaluation of the environmental effects of continued acute spikes of selenium to the biota in the vicinity of the Grasslands wetland supply channels...Selenium bioaccumulates rapidly in aquatic organisms and a single pulse of selenium (>10 µg/L) into aquatic ecosystems could have lasting ramifications....Maier et al. found that the invetebtrate food web was still contaminated at >4 µg/L 12 months after selenium treatment when the monitoring ended even though water concentrations were <1 µg/L.”*

<http://pubs.usqs.gov/pp/p1646/pdf/pp1646.pdf> pg 26. ... *“monitoring was not sufficiently frequent to accurately characterize loads during variable flows.”...annual data are not available from individual farm-field sumps to help qualify source-area shallow groundwater conditions and determine long-term variability in selenium concentrations...compliance monitoring sites are 50 and 130 miles downstream from the agricultural discharge. Pg 118-119.*

Grassland Bypass Project 1999-2000 Annual Report at page 4, “The Oversight Committee recommended that additional studies be undertaken to establish the sources of selenium.”

http://openlibrary.org/books/OL23302134M/Grassland_bypass_project

Grassland Bypass Project 2001-2002 Annual Report at page 4, “The Oversight Committee recommended that additional studies be undertaken to establish the sources of selenium.”

http://openlibrary.org/books/OL23302136M/Grassland_bypass_project

“ A Review of the Grassland Bypass Channel Project Monitoring Program” Presser, Sylvester, Dubrovsky and Hoffman, December 1996

http://wwwrcamnl.wr.usgs.gov/Selenium/Library_articles/Presser_et_al_GBP_monitoring_plan_1996.pdf

http://www.swrcb.ca.gov/rwqcb5/water_issues/grassland_bypass/usfws_att_e.pdf Email From Tomas Mauer, Chief, Investigations and Prevention Branch Sacramento Fish and Wildlife Office, U.S. Fish and Wildlife Service to Shauna McDonald [USBR], 11-18-09: *“Site H is not as problematic a sampling site as it is described for monitoring selenium levels in this stretch of the San Joaquin River. Although the site is inappropriate to use for selenium load calculations, the historic data clearly shows that selenium concentrations here can reach high levels throughout much of the year regardless of Merced River influences. The highest selenium levels occur in the summer when Merced River flows through the side channel would not be influencing site H. Currently, sampling at site H is less frequent, and thus potential spikes of selenium may not be observed. A more detailed analysis of the data at this site may assess how well the current sampling regime would detect the highest selenium levels. Even the current reduced sampling effort shows concentrations over 9 µg/L. This is above the 20 percent mortality level and three times higher than the 10 percent mortality level for salmonids (attached chart includes more recent data for 2007).”*

⁸ USFWS 2009 Biological Opinion for the Grasslands Bypass Project page 90.

http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826 “It is notable that the geometric mean, egg-

selenium concentration in recurvirostrid eggs collected at the SJRIP Phase I area in 2008 (50.9 µg/g) exceeded all geometric mean selenium concentrations in recurvirostrid eggs collected at Kesterson Reservoir from 1983 to 1985 (Ohlendorf and Hothem 1994)..."

⁹ USBR 2001 Record of Decision page 6. http://www.usbr.gov/mp/grassland/documents/rod_final_09-28-01.pdf

¹⁰ http://www.swrcb.ca.gov/rwqcb5/water_issues/grassland_bypass/usfws_com.pdf "Selenium concentrations in the food-chain of these impacted waters have often reached levels that could impact or even kill a substantial proportion of young salmon (Beckon et al. 2008) if the salmon, on their downstream migration, are exposed to those selenium-laden food items for long enough for the salmon themselves to bioaccumulate selenium to toxic levels. Based on existing water quality data for selenium in specific reaches of the San Joaquin River, Beckon and Maurer (2008) concluded that there remains a substantial ongoing risk to migrating juvenile Chinook salmon and steelhead in the San Joaquin River as noted in Attachment E. The Service asks that the Regional Board consider the protection of Chinook salmon and steelhead in the San Joaquin River, including the reach between Sack Dam and the Merced River, in this Basin Plan Amendment." [page 6 of pdf]

¹¹ <http://calitics.com/tag/Selenium> Napolitano, Garamendi, et al., November 26, 2010.

Personal Communication Rudy Schnagl to Ms Schifferle, 8-8-11 'Flow models document most of the San Joaquin River is diverted to the California Aqueduct, thus contaminants are likely captured and sent south.'

¹² Suisun Bay in the Delta is selenium impaired and agriculture is listed as a source in the 303(d) listing of this water body. Further, EPA is in the process of developing a site specific selenium objective for the Delta, so reduced monitoring of the GBP could further hinder compliance with this future objective.

¹³ http://www.swrcb.ca.gov/rwqcb5/water_issues/tmdl/central_valley_projects/san_joaquin_se/se_tmdl_rpt.pdf "There would be effectively no allocation of selenium load in the absence of Merced River dilution flows. The source analysis has shown that subsurface agricultural return flows from the DPA are the primary source of selenium load in the lower SJR Basin." [page 14] Also see 1994 Regional Board staff report, Total Maximum Monthly Load Model for the San Joaquin River (Karkoski, 1994),

¹⁴ November 3, 1995, Letter to Karl Longley Central Valley Regional Water Quality Control Board from Dan Nelson, SLDMWA, Roger Patterson, USBR; Felicia Marcus, USEPA; Joel Medlin USFWS.

"A commitment to specific monthly and annual selenium load values which assure that within 2 years, the Water Authority will implement actions sufficient to reduce selenium loads to the River by at least 5 percent per year up through the end of the 5th year. ...the parties agree that for the purpose of establishing selenium load reductions, the following water quality objectives are now applicable: (a) 5 ppb selenium, measured as a 4-day average, in the San Joaquin River and Mud Slough and (b) 2 ppb selenium, measured as a monthly mean, in Salt Slough and the wetland channels.

¹⁵ 1994 Environmental Defense Fund, Terry Young and Chelsea Congdon "Plowing New Ground" pg 35.

¹⁶ Ibid.

¹⁷http://www.swrcb.ca.gov/rwqcb5/water_issues/tmdl/central_valley_projects/san_joaquin_se/se_tmdl_rpt.pdf pg 20 of the PDF

“Load allocations in this TMDL [for the SJR] are established for meeting the selenium water quality objective in the SJR downstream of the Merced River confluence. There would be effectively no allocation of selenium load in the absence of Merced River dilution flows. The source analysis has shown that subsurface agricultural return flows from the DPA are the primary source of selenium load in the lower SJR Basin..... Attainment of the selenium water quality objective upstream of the Merced River confluence may require significant changes to the DPA discharge, including the relocation of the discharge point.”

http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/susan_moor_e.pdf pg 2 of the PDF

¹⁸ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4418 pg 26 of 66 FEIR/EIS [Final EIS/EIR, Private/individual comments Part 2, Grassland Bypass 2010-2019](#)
http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=3513

Also see Appendix C of the December 17, 2009 [Agreement for the Continued Use of the San Luis Drain](#) Agreement No. 10-WC-20-3975. Predicted violations of CWA standards will continue with proposed loads approximately until years 9 and 10. They will be violated for those years unless “highly speculative treatment” is achieved. See http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4415 pg 4 of 40 of the PDF. EPA comments on the DEIS/EIR for Continued Use of the San Luis Drain for Discharge into Mud Slough and the San Joaquin River.

¹⁹ http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=3513

²⁰ http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/303dlists2006/epa/state_usepa_combined.pdf

²¹ http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/susan_moor_e.pdf see page 2 of the PDF

²² http://www.swrcb.ca.gov/rwqcb2/water_issues/programs/TMDLs/northsfbay/selenium/Species_at_risk_FINAL.pdf, accessed 4/20/11.

²³ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4415 see EPA comments pg 5 of 40 of the PDF.

²⁴ http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/

http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/susan_moor_e.pdf

²⁵ http://wwwrcamnl.wr.usgs.gov/Selenium/Library_articles/Presser_et_al_GBP_monitoring_plan_1996.pdf and see USFWS comments and EPA comments RE USBR NEPA Document at http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4415

²⁶ <http://pubs.acs.org/doi/abs/10.1021/es900828h>

²⁷ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4415 see USFWS comment pg 33 of 40 of the PDF.

²⁸ http://wwwrcamnl.wr.usgs.gov/Selenium/Library_articles/Presser_etal_GBP_monitoring_plan_1996.pdf @ pg 81 of the pdf.

²⁹ http://wwwrcamnl.wr.usgs.gov/Selenium/Library_articles/Presser_etal_GBP_monitoring_plan_1996.pdf @ pg 15 of the pdf

³⁰ November 3, 1995 Letter From USBOR, USFWS, US EPA and San Luis Delta Mendota Water Authority to Karl Longley, Chair of the Regional Water Quality Control Board: Re Basin Plan Amendment for the San Joaquin River. *“The Selenium load reductions proposed will not necessarily achieve these water quality objectives by the end of the 5th year, and thus a long-term implementation schedule will be required.....It is understood that load reductions of this sort are only a first step and do not fully protect against the environmental impacts which may result from selenium discharges during months when water levels are low in the San Joaquin River”* at pages 3-4.

³¹ http://www.swrcb.ca.gov/rwqcb5/water_issues/tmdl/central_valley_projects/san_joaquin_se/se_tmdl_rpt.pdf *“Load allocations in this TMDL are established for meeting the selenium water quality objective in the San Joaquin River (SJR) downstream of the Merced River confluence. There would be effectively no allocation of selenium load in the absence of Merced River dilution flows. The source analysis has shown that subsurface agricultural return flows from the Drainage Project Area (DPA) are the primary source of selenium load in the lower SJR Basin..... Attainment of the selenium water quality objective upstream of the Merced River confluence may require significant changes to the DPA discharge, including the relocation of the discharge point.”*



April 7, 2011

Ms. Katherine Hart, Chair
Regional Water Quality Control Board, Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

Re: Irrigated Lands Regulatory Program Framework Comments

Dear Chairperson Hart and Board Members:

In America we hold a value that each of us must not foul downstream water supplies with our waste, just as we expect those upstream of us to do the same. The problem is, the proposed irrigated lands program falls short of this value and falls short of enforcing laws that require our waste to not degrade our neighbors' water or create a nuisance.

Some give praise to the program governing discharges from irrigated agricultural of polluted groundwater waste from the Grasslands Watershed Basin to the San Joaquin River. Since 1995, the San Luis Delta-Mendota Water Authority (SLDMWA) and United States Bureau of Reclamation (USBR) have been discharging polluted groundwater with high levels of selenium and other contaminants using the federal San Luis Drain for discharge to the San Joaquin River at levels lethal to fish and wildlife. Dilution flows downstream of the Merced River have been the method used to meet water standards downstream. From Mud Slough down to the Merced River, because of this discharge of polluted water, the river often has concentrations that exceed Clean Water Act standards. (See Figures 3-4).

The program where dischargers consolidate and concentrate these wastes toxic to fish and waterfowl, and then discharge them under a permit with some monitoring, is considered exemplary by the polluters. But it has relied on waivers of water quality rules and dilution to meet the law. (See Figure 1) Not enforcing water quality standards has its costs. But in this case the costs are passed along to others downstream. It is a case study of how irrigating toxic soils is proceeding largely unchecked, consolidating pollution and damaging downstream uses.

Selenium is a metalloid that can be very dangerous under some circumstances. Most significantly, it bio-accumulates in the food chain, concentrating as it moves up the food chain. This is what happened to Merced County cattle ranchers Jim and Karen Claus 30 years ago when selenium-tainted drainage water leaked from ponds at the Kesterson National Wildlife Refuge. The Claus's cattle,

along with that of other nearby cattle ranchers, started getting sick and dying, after consuming the tainted drainage water and eating tainted grasses.

Kesterson was ordered cleaned up and closed as a public nuisance in 1985, yet for a quarter of a century, some Westside irrigation districts have been permitted to continue draining their selenium-laced waste waters directly to the San Joaquin River where it flows to the Delta.¹

Monitoring the impacts of this essentially unregulated drainage has been sparse.² Chinook fry and splittail who feed in the San Joaquin River sloughs and floodplains and intermittent flooded wetlands are exposed to lethal doses. Bottom fish along with white and green sturgeon are particularly threatened as they feed on aquatic life that collects selenium and further concentrates the impacts in these fish. Dungeness crabs were recently added to the list. The lethal deformities in waterfowl and migratory birds at Kesterson and the Tulare Basin caused by selenium have been well documented.³

We know the costs of spreading this contamination in sloughs, wetlands, estuaries and slow moving water is costly to clean up (if that is even possible) and if the selenium buildup and accumulation cannot be halted the consequences may be catastrophic to the downstream biosphere. And yet, we continue with a regulatory program that transfers these dangers to downstream users, both human and wildlife.⁴

¹ USFWS November 8, 2002 Exceedances of Water Quality Objective for Grassland Wetland Supply Channels. http://www.swrcb.ca.gov/rwqcb5/water_issues/grassland_bypass/usfws_att_c.pdf & <http://www.pcl.org/files/USGSDrainageMgmt.pdf> pg 26.

Selenium removal from agricultural drainage from the western San Joaquin Valley is hampered by the large amounts of associated salt in any waste stream subjected to treatment. Extensive testing of technologies for removal of selenium from the water-column utilizing chemical and biological processes as part of the SJVDP achieved little operational success or cost-effectiveness (SJVDP, 1990c). Drainage treatment to remove selenium was not one of the strategies recommended by the SJVDP (1990a). In the *Preface* to the San Joaquin Valley Drainage Program final report (1990a), Edgar Imhoff, head of the program, wrote that “...*hopes for a master drain and expectations of a technological breakthrough in drainage water treatment are the reasons that the drainage problem has grown to nearly 500,000 acres and is adversely affecting the environment.*”

²See http://www.swrcb.ca.gov/rwqcb5/water_issues/grassland_bypass/usfws_att_c.pdf

<http://pubs.usgs.gov/pp/p1646/pdf/pp1646.pdf> pg 26. ... “*monitoring was not sufficiently frequent to accurately characterize loads during variable flows.*”...*annual data are not available from individual farm-field sumps to help qualify source-area shallow groundwater conditions and determine long-term variability in selenium concentrations...compliance monitoring sites are 50 and 130 miles downstream from the agricultural discharge. Pg 118-119.*

http://wwwrcamnl.wr.usgs.gov/Selenium/Library_articles/Presser_etal_GBP_monitoring_plan_1996.pdf

³ <http://pubs.usgs.gov/pp/p1646/pdf/pp1646.pdf> pg 2.

⁴ <http://pubs.usgs.gov/fs/2004/3091/> U.S. Department of the Interior U.S. Geological Survey Fact Sheet 2004-3091 August 2004

At the same time state and federal budgets are being cut.⁵ The hodge podge of treatment methods to stop this discharge of selenium pollution to downstream neighbors is unlikely to succeed. Monitoring budgets are being cut. In February 2011, Central Valley Regional Water Quality staff announced they would no longer conduct monitoring for the project at 12 sites and Fish and Game representatives indicated they also would no longer conduct biological monitoring. The Bureau promises to pick up the costs and yet, the proposed draft monitoring program suggests significant cuts in both water quality and biological monitoring, despite promises to the contrary.⁶ Compliance monitoring for loads is very different from monitoring for water contaminants, sediment movements and biological impacts both for aquatic and wildlife. Cutting the days, time periods and parameters *can render the analysis from the monitoring useless in terms of analyzing the impacts from the spread of this pollutant and the synergistic impacts with other contaminants*. Averages minimize the peak exposures which are often lethal and stay in the aquatic system long after the discharge recedes.⁷

Relying on load measurements is a misleading measurement for compliance with Clean Water Act standards and pollution controls.⁸ For example over more than a ten-year life of the discharges from the Grasslands Watershed to the San Joaquin River from Mud Slough, U.S. Geological Survey scientists estimate a cumulative hazard of 6.6 Kestersons (ksts) as the cumulative hazard load.⁹ Uncontrolled discharge of selenium-tainted groundwater and storm water exceeding protective standards is

“ The dry years and low flow seasons will be the ecological bottleneck (the times that will drive impacts) with regard to Se. Surf scoter, greater and lesser scaup, and white sturgeon are present in the estuary during the low flow season and leave before high flows subside. Animals preparing for reproduction, or for which early life stages develop in September through March, will be vulnerable.”

⁵ <http://www.assembly.ca.gov/acs/committee/c26/hearings/03012011/030111%20hearing%20materials%20-%20fed%20program%20cuts.pdf>

<http://www.nwf.org/News-and-Magazines/Media-Center/News-by-Topic/General-NWF/2011/02-22-11-House-Continuing-Resolution-Passes.aspx>

http://wwwrcamnl.wr.usgs.gov/tracel/references/pdf/Estuaries_v26n4Ap956.pdf

⁶ Third Supplemental Declaration of Donald R. Glaser, CV-F-88-634-OWW/DLB, CV-F-91-048-OWW/DLB, Document 865 Filed 04/-1/11 Firebaugh Canal Water District et.al. v US at page 7

⁷ <http://pubs.usgs.gov/pp/p1646/pdf/pp1646.pdf>
<http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/pollutants/selenium/fs.cfm>
<http://wwwrcamnl.wr.usgs.gov/Selenium/library.htm>

⁸ <http://pubs.usgs.gov/pp/p1646/pdf/pp1646.pdf> pg 18 and 152.

“The selenium loads measured as the input to the system (drainage canals) are perpetually different from those measured as the outputs from the system (downstream in wetland sloughs or the San Joaquin River)” pg 153.

⁹ <http://pubs.usgs.gov/pp/p1646/pdf/pp1646.pdf> pg 119.

permitted in wetland areas during periods of wet weather.¹⁰ (See Figure 2) In periods of low flows selenium concentrations increase, but loads typically go down.¹¹

Under the proposed irrigated lands regulatory program upstream selenium waste water stored in ground water aquifers in the Westlands subarea will measure only electrical conductivity and elevation.¹² Previous USGS and USBR studies show vast ground water areas with selenium contamination that exceeds hazardous waste levels. (See Figure 8) There is no requirement to monitor the spread of this pollution to downstream neighbors and to the San Joaquin River where eventually it accumulates in the Delta estuary, sloughs, wetlands, and temporal floodplains. State and federal scientists predict this pollution from irrigated agriculture unless halted, will harm beneficial use.¹³ Mobilization of selenium by irrigation and contamination of ground water has resulted in concentrations of groundwater greater than hazardous waste levels. (See Figure 8) This pollution violates federal (40 CFR 131.12) and state anti-degradation regulations.¹⁴ Under worse case scenarios government scientists conclude that selenium contamination could create an ecological crisis in the Bay-Delta similar to that created at Kesterson National Wildlife Refuge in the 1980s.¹⁵

Scientists and water board staff estimate that more than 85% of the pollutant loads of selenium in the San Joaquin River that reach the Delta Estuary are from the west side irrigators.¹⁶ They estimate the daily discharges of selenium to the Delta Estuary from the San Joaquin River is 10 to 30 times the combined total of selenium discharges from the combined Sacramento River sources and the Bay Area oil refineries.¹⁷

Selenium is also being exported to southern California's water supplies through the California Aqueduct threatening drinking water quality and likely is accumulating in fish and reservoirs in Southern California as a result.¹⁸

¹⁰ ibid pg 17.

¹¹ ibid pg 70-90.

"During the first two years of the project, loads were above load targets. It is notable that drain water discharged to the San Joaquin River through the San Luis Drain is more consistently concentrated than were historic discharges to the wetlands channels system." pg 121

¹² See proposed Waste Discharge Requirements for Westlands Water District &

ibid. pg 25.

¹³ <http://pubs.usgs.gov/pp/p1646/pdf/pp1646.pdf> pg 15 & 25.

<http://www.pcl.org/files/USGSDrainageMgmt.pdf>

¹⁴ ibid pg 14.

¹⁵ ibid. pg 18.

¹⁶ http://esd.lbl.gov/files/about/staff/nigelquinn/comp_model.pdf

see also http://www.swrcb.ca.gov/rwqcb5/water_issues/water_quality_studies/sjr9900.pdf

¹⁷ <http://pubs.usgs.gov/of/2000/ofr00-416/#pdf> ; pp 1-2.

¹⁸ <http://calitics.com/tag/Selenium> Napolitano, Garamendi, et al., November 26, 2010.

Do we have enough water in California to continue to pollute it and expect dilution to meet clean water standards while clean up costs are passed on to downstream users? No. It is time to clean up the source of the pollution and enforce the law. It is time to enforce the law, including the State Board 1985 Kesterson cleanup or, WQ 85-1, which addressed San Joaquin River drainage pollution. Clean Water Act standards and state laws designed to protect water quality from unreasonable use, nuisance, and degradation need to be enforced. The proposed Irrigated Lands Regulatory program falls short of protecting water supplies and the public from contamination caused by irrigated agriculture.

Thank you for the opportunity to comment. Attached are the charts and figures referenced herein.



Jim Metropulos
Senior Advocate
Sierra Club California
jimmetropulos@sierraclub.org



Steven L. Evans
Conservation Director
Friends of the River
sevans@friendsoftheriver.org



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's
Associations Inc
zgrader@ifrfish.org



Jonas Minton
Senior Policy Advisor
Planning and Conservation League
jminton@pcl.org

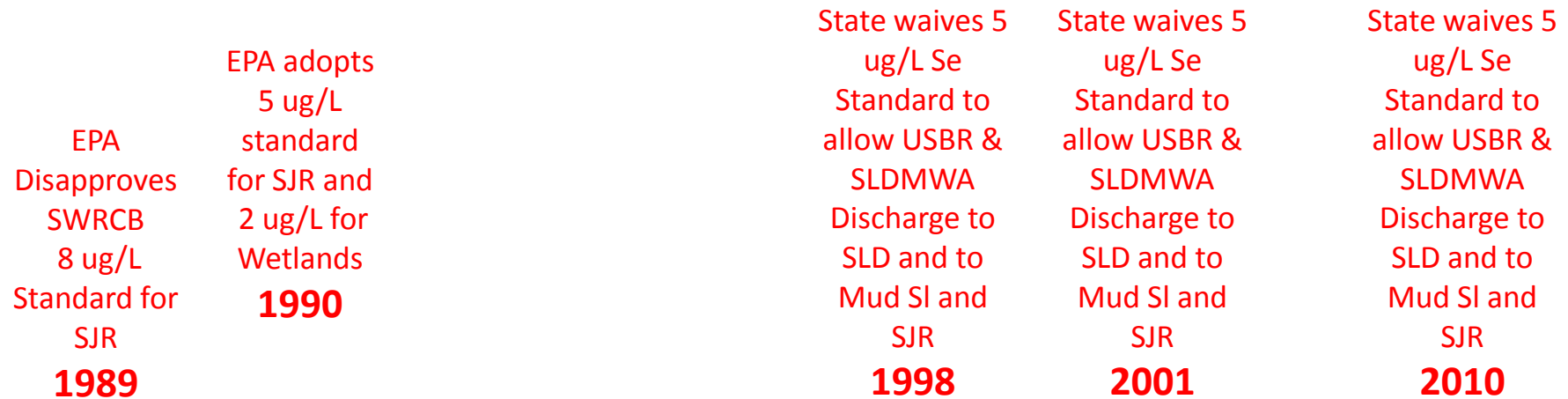
Attachments Charts and Slides 1-9.

Selenium Contamination of Groundwater & Surface Waters: A case history in the failure to enforce water quality standards

Irrigated Lands Framework
Agenda Item #7
April 7, 2011



Permit History for Selenium Discharges From Grasslands Basin to Mud Slough and San Joaquin River: A Case History in the Failure to Enforce Water Quality Standards



1987
NPDES:
USBR
Reopens
SLD to
Mud SI
and SJR

1990
NPDES:
USBR
GW Seepage
to SLD and to
Mud SI and
SJR

1995
SLDMWA
Unpermitted
discharge to
SLD and to
Mud SI and
SJR

1996
NPDES:
USBR &
SLDMWA
GW&Subs
urface
Drainage
to SLD and
to Mud SI
and SJR

SLDMWA-San Luis Delta Mendota Water Authority
USBR- United States Bureau of Reclamation
SLD- San Luis Drain
Mud SI-Mud Slough
SJR-San Joaquin River

Figure 1

**Toxic Levels of Selenium
Flowing Through:**

- State & Federal Wildlife Refuges
- Wetlands
- San Joaquin River

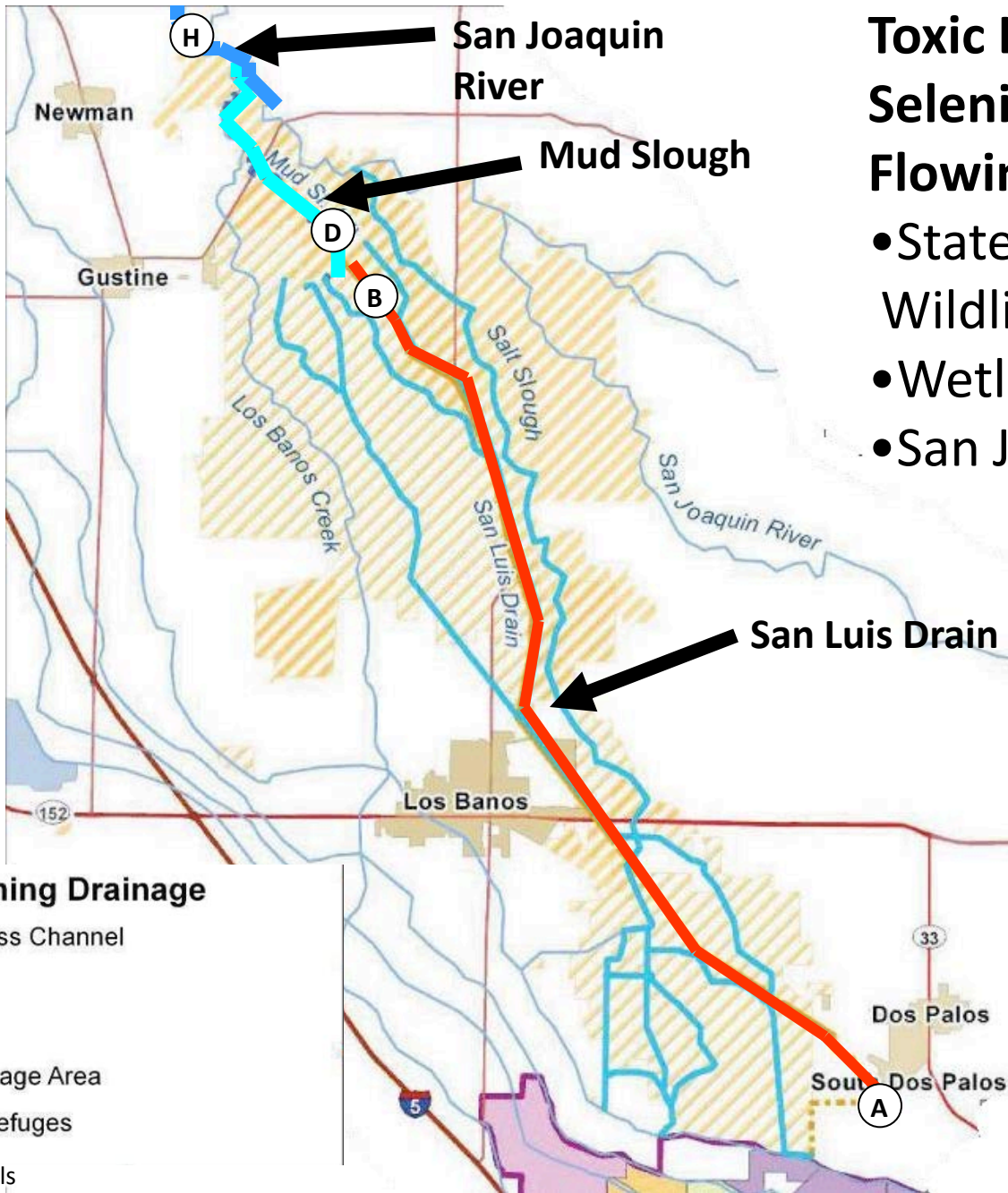


Figure 2

Lethal Concentrations of Selenium in Irrigation Drainage Discharged from the San Luis Drain (Site B)

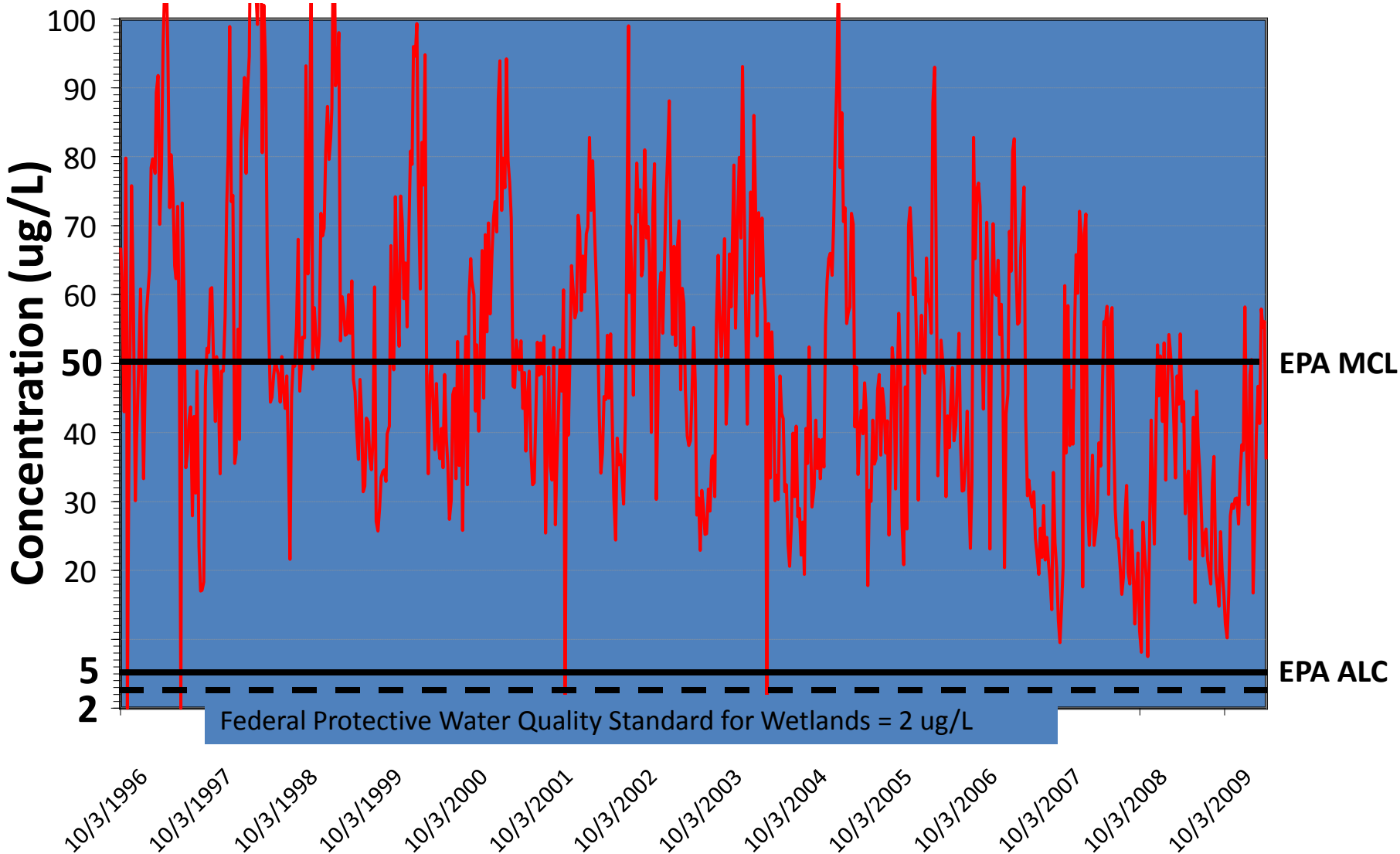


Figure 3

Lethal Concentrations of Selenium in Mud Slough (Site D) Through State and National Wildlife Refuges

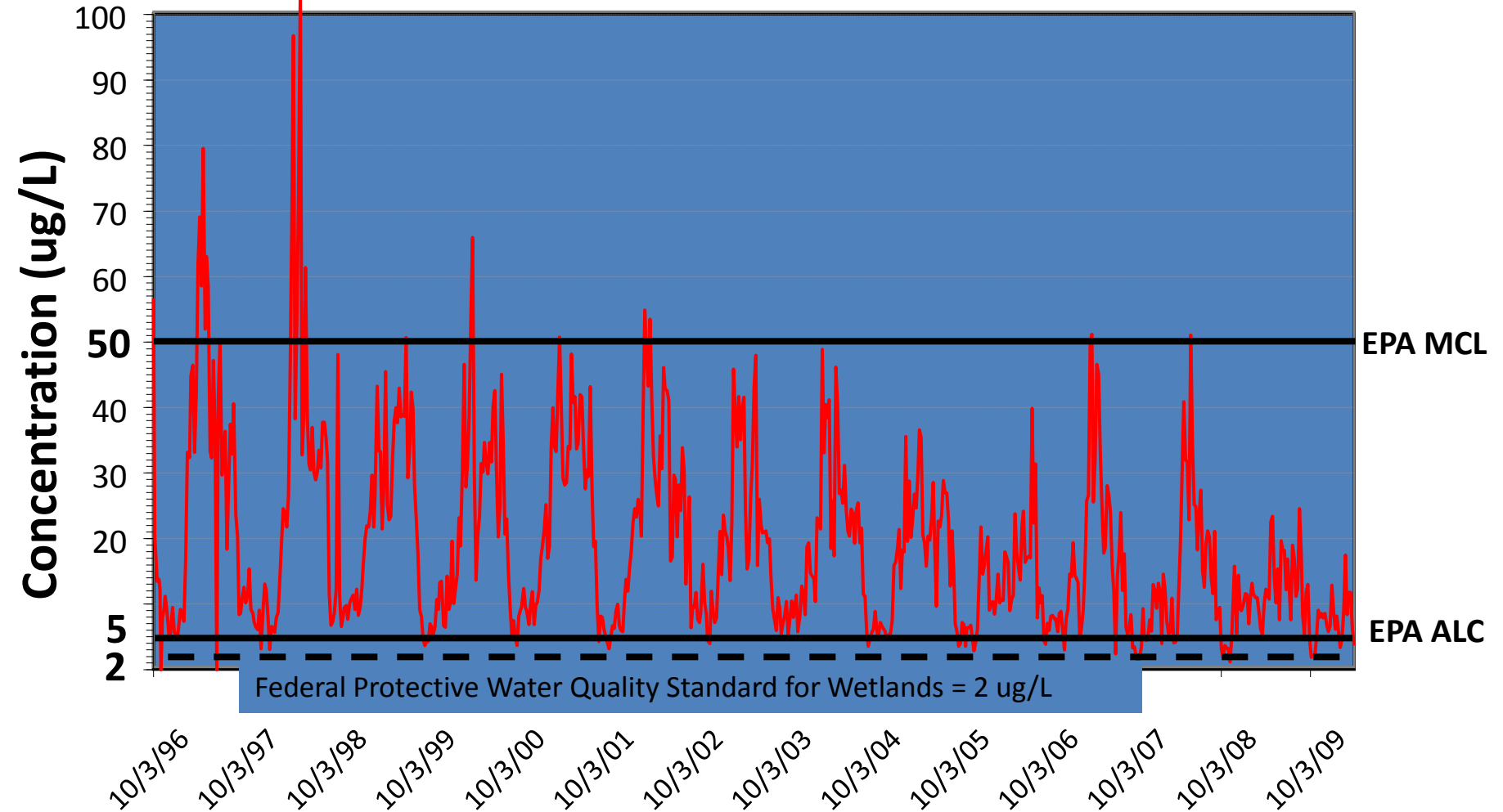


Figure 4

Lethal Concentrations of Selenium in San Joaquin River (Site H) Downstream of Mud Slough

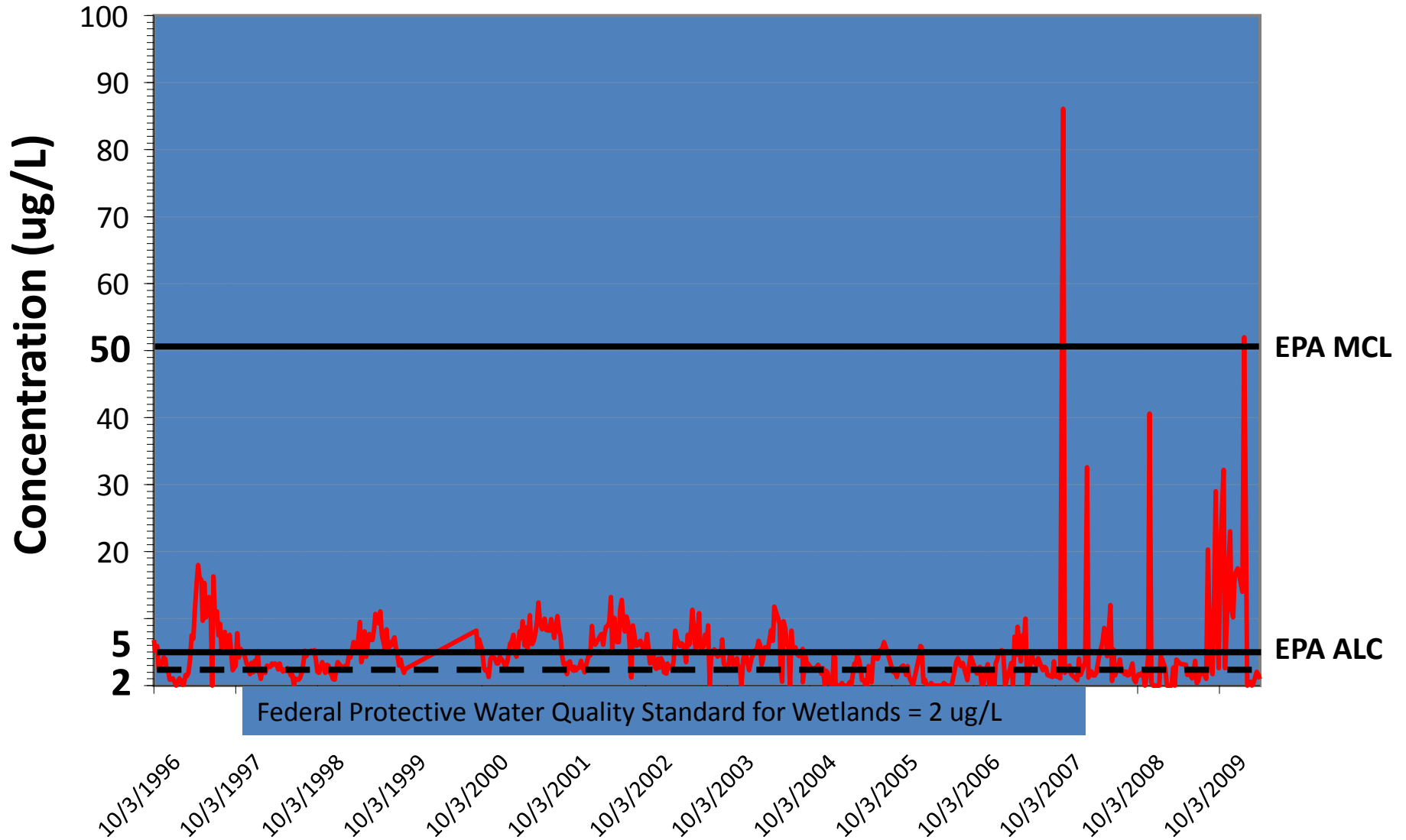
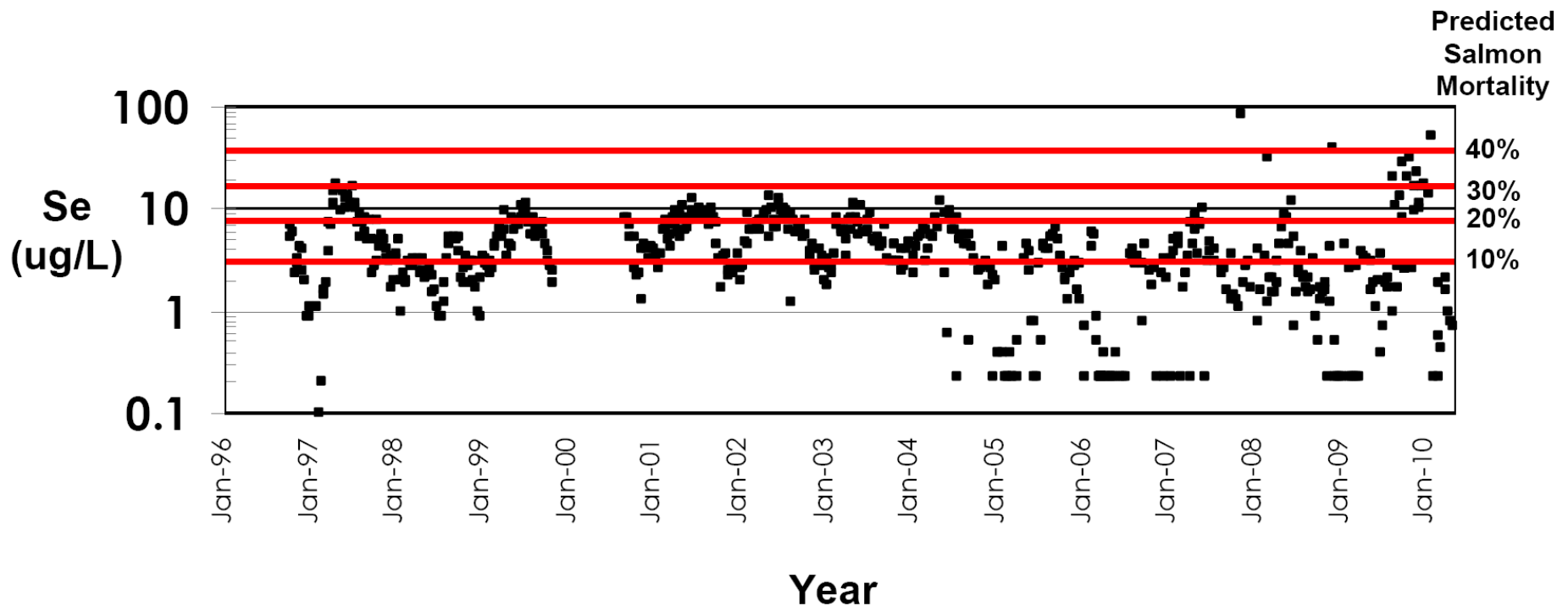


Figure 5

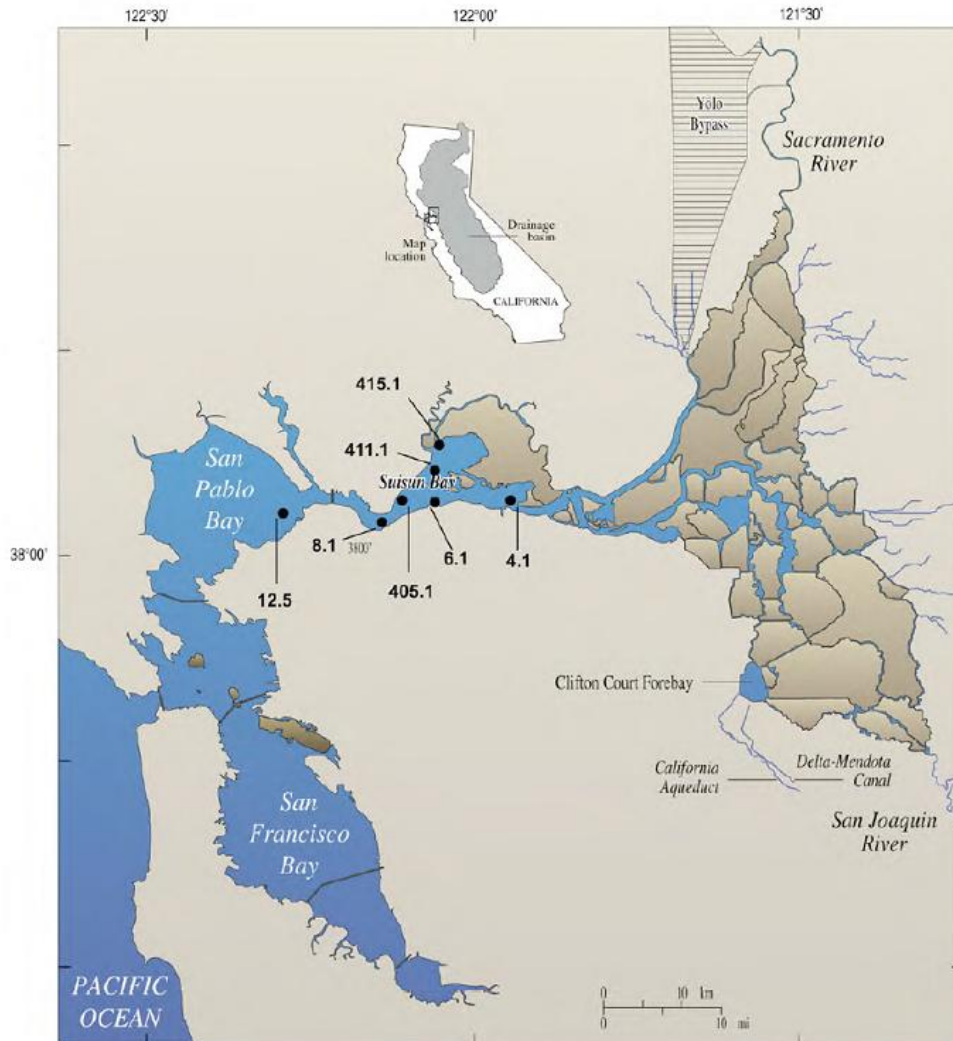
Selenium Levels in the San Joaquin River are not Safe for Salmon



Selenium concentrations measured in the San Joaquin River at Hills Ferry (data from the U.S. Bureau of Reclamation)

Figure 6

Selenium Impacts in Bay-Delta



Unsafe levels of Selenium concentrations found in Suisun Bay and Northern San Francisco Bay. (2 to 22 ppb)*

Selenium loads per day from Westside irrigators contribute approximately 10 to 30 times daily selenium load compared to the Sacramento and Oil refineries combined.**

* Kleckner, A.E., Stewart, A.R., Elrick, K., and Luoma, S.N., 2010, Selenium and stable isotopes of carbon and nitrogen in the benthic clam *Corbula amurensis* from Northern San Francisco Bay, California: May 1995b

** <http://pubs.usgs.gov/pp/p1646/>

Figure 7

Imported irrigation leaches selenium and moves it into aquifers and surface waters.

Unregulated and unmonitored, highly toxic Selenium-laden wastewater is being stored in aquifers harming beneficial uses.

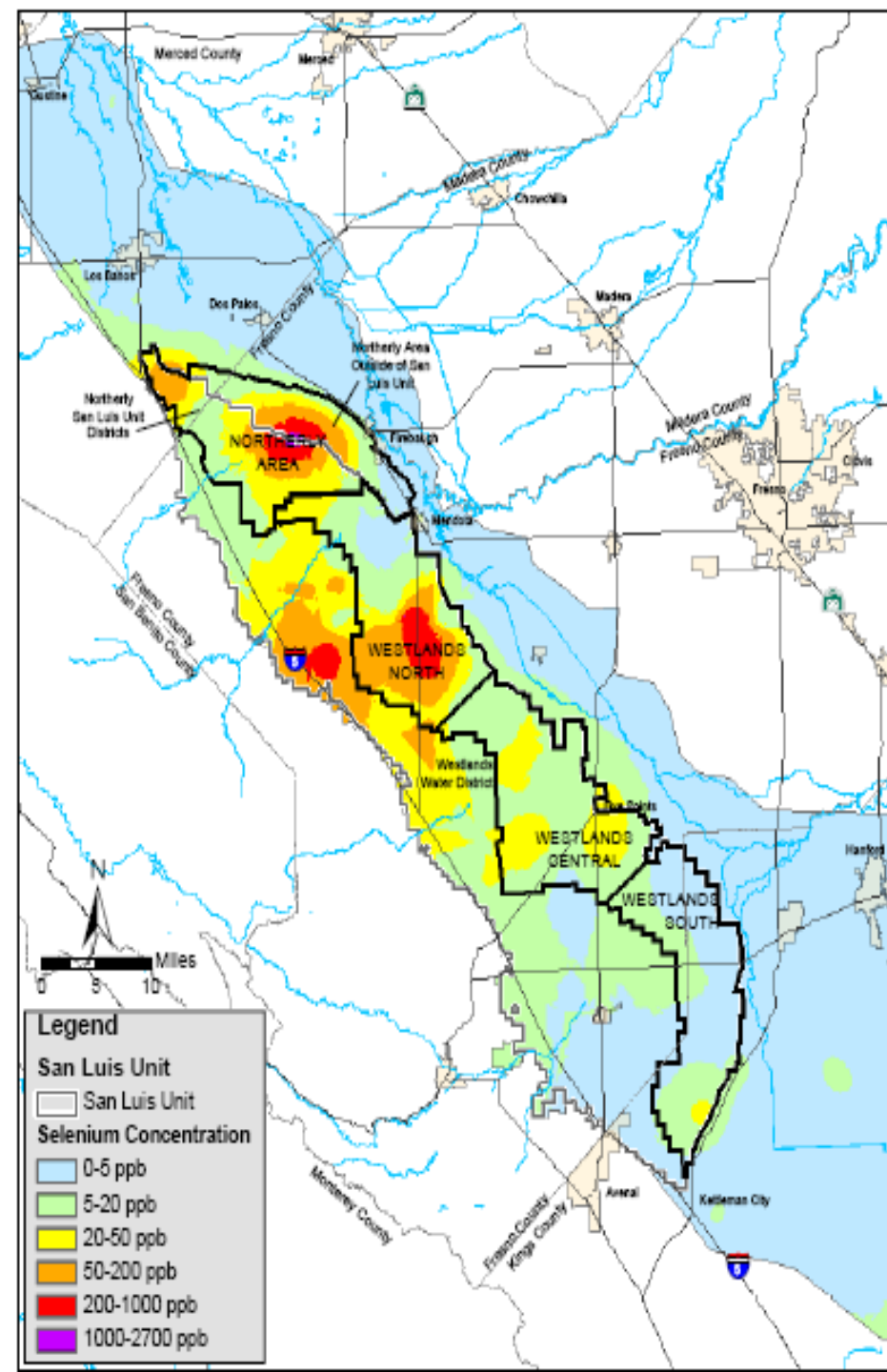


Figure 8

Ecological Threat

Don't repeat the problems found in the San Joaquin Valley in the Delta

2003 CVRWQCB Measured 1480 ppb Selenium in Shallow Groundwater Near Five Points CA.



2003 University of California Salinity Drainage Program Annual Conference: Drainage Solutions, Joseph Skorupa, U.S. Fish and Wildlife Service Available at: http://www.rcamnl.wr.usgs.gov/Selenium/Library_articles/joepond.pdf



NORTH

COAST

RIVERS

ALLIANCE



November 4, 2010

Charles Hoppin, Chairman
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

E-mail <commentletters@waterboards.ca.gov>

Subject: Petition for Reconsideration—San Joaquin River Selenium Control Plan Basin Plan Amendment, Resolution 2010-0046

Dear Chairman Hoppin and Members of the Board:

Pursuant to California Water Code Sec 1120 et seq. and Title 23, California Code of Regulations, Sec. 768 et seq., Sierra Club California, Pacific Coast Federation of Fishermen's Associations, Institute for Fishery Resources, Planning and Conservation League, North Coast Rivers Alliance, and Southern California Water Alliance (Environmental Advocates) hereby jointly petition the State Water Resources Control Board (hereinafter "Board") to reconsider Resolution 2010-0046 approved on October 5, 2010 approving amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (Basin Plan) to address selenium control in the San Joaquin river Basin (hereinafter "Basin Plan Amendment"). We adopt by reference comments and petitions filed by California Sportfishing Protection Alliance, California Water Impact Network, and AquAlliance.

STANDARD OF REVIEW

In accordance with California Water Code Section 1120 *et seq.*, and title 23 of the California Code of Regulations, Section 768 et seq., any interested party may petition the BOARD for reconsideration of a decision or order based on any of the following conditions:

- a. Irregularity in the proceedings, or any ruling, or abuse of discretion, by which the person was prevented from having a fair hearing;
- b. The decision or order is not supported by substantial evidence;
- c. There is relevant evidence, which in exercise of reasonable diligence, could not have been produced; or
- d. Error in law.

Environmental Advocates contend that BOARD Resolution 2010-0046 constituted an error in law and is not supported by substantial evidence

STATEMENT OF FACTS

On October 5, 2010, the BOARD approved the Basin Plan Amendment to the Water Quality Control Plan for the Sacramento River and San Joaquin River to extend the compliance date for implementation of the 5 parts per billion (ppb) water quality objective for selenium in Mud Slough North and the San Joaquin River from Mud Slough to the Merced River until December 31, 2019. This approval followed the May 27, 2010 approval of Resolution R5-2010-0046 by the Central Valley Regional Water Quality Control Board (hereinafter "Regional Board").

Approval of the selenium Basin Plan Amendment provides for a cumulative 24-year and 9-month time extension (1996-2019) for the compliance date in meeting the 5 ppb selenium water quality objective (4 day average) in Mud Slough and the 8-mile portion of the San Joaquin River from Mud Slough to the Merced River. The BPA allows continued discharges of highly contaminated groundwater from the 100,000 acre Grasslands Drainage Area through a portion of the Bureau of Reclamation's San Luis Drain directly into Mud Slough which flows into the San Joaquin River. Average selenium concentrations in the San Luis Drain discharges into Mud Slough are up to 50 ppb on a daily average. Selenium readings at Hills Ferry downstream on the San Joaquin River have risen in recent years, with a reading of 52 ppb in January, 2010, exceeding the drinking water standard of 50 ppb.

Environmental Advocates, as well as, members of our organizations, other environmental and Delta representatives commented both orally and in writing for the hearing May 27, 2010 before the Regional Board and before the State the Board hearing October 5, 2010 regarding the Basin Plan Amendment. Environmental Advocates raised several significant technical and procedural issues to the Board. The Board completely dismissed all of concerns in their Basin Plan Amendment approval process. Thirty-five years after massive deaths and deformities found at the Kesterson National Wildlife Refuge, the Board extended the compliance schedule for selenium discharges into Mud Slough which runs through the Kesterson Unit of the San Luis National Wildlife Refuge and the San Joaquin River until December 31, 2019, totaling nearly a quarter of a century of non-compliance with selenium water quality standards.

ERROR IN LAW

As stated above, a petition for reconsideration may be made if there is an error in the law. Environmental Advocates hereby allege that the BOARD erred in its application and consideration of Basin Plan policies, the California Environmental Quality Act, the Porter-Cologne Act, the Federal Clean Water Act, the California Endangered Species Act, the Federal Endangered Species Act, the Fish and Wildlife Coordination Act, the Migratory Bird Treaty Act, the California Water Code, the Delta Protection Act, the Reclamation Act, the California Constitution's prohibition on Wasteful and Unreasonable Use of Water (Article X, Sec 2) and state and federal anti-degradation policies before approving Resolution 2010-0046 for the selenium Basin Plan Amendment.

THE RESOLUTION IS NOT SUPPORTED BY THE EVIDENCE

A petition for reconsideration may be made if the resolution is not supported by the evidence. Environmental Advocates believe that the BOARD's decision is not supported by substantial evidence, and therefore warrants reconsideration by the Board.

Resolution 2010-0046 does not address the fact that selenium concentrations in the San Joaquin River at Hills Ferry have been increasing since 2007. BOARD Resolution 2010-0046 approves REGIONAL BOARD Resolution R5 2010-0046. Resolution R5 2010-0046 justifies the selenium Basin Plan Amendment in paragraph 8 on page 2, stating that:

In a 13 December 2006, letter to the US Bureau of Reclamation, the GAF informed the Bureau and Central Valley Water Board staff that the GBP would be unable to eliminate all surface water discharges of agricultural subsurface drainage by 30 October 2010 without increased risks of loss of soil productivity; accelerated loss of beneficial use of groundwater due to salinization; a significant decrease in farm profitability stemming from a rising water table if irrigation continues; or low or no returns if fields are dryland farmed or fallowed. Rising groundwater would also increase groundwater seepage to surface water channels and open ditches, potentially increasing selenium in channels now protected by the monitoring and management of the regional drainage program. Continued farm productivity and profitability is necessary to fund ongoing regional drainage management in this area; and continued wildlife protection is consistent with state, federal, local and GBP priorities.

The Board by adopting Resolution 2010-0046 fails to control this selenium pollution at its source. Instead the pollution is exported to the Delta estuary. The Board refused to consider controlling this Delta export of water to irrigate toxic selenium soils and then sending the polluted selenium drainage back to the river and estuary. Such pollution control and unreasonable use *is* within the State Board's authority.¹ Additionally, the Board by adopting

¹ See Racanelli Decision (*United States v. State Water Resources Control Board*, 182 Cal.App.3d 82, 130 (1986)):

Resolution 2010-0046 refuses to effectively address partially regulated and the unregulated discharges of pollutants from adjacent and north Westside upslope areas into the Grasslands Watershed.

The Board's adoption of Resolution 2010-0046 fails to comply with federal and state laws to control pollution. As the Regional Board's Staff Report acknowledged, "[a]ny proposed changes to the Regional Water Board Basin Plans must be consistent with existing Federal and State laws and regulations..." (Regional Board Staff Report, p. 23.) Both the EPA and USFWS raised concerns regarding the adequacy of the Regional Board Staff Report's analysis and the proposed amendments themselves. The points raised by the federal agencies with responsibilities over the water quality and wildlife affected by the proposed amendments underscored those raised by the Environmental Advocates in their own comments to the Board. None of the Board or Regional Board's responses adequately addressed these concerns.

Too much selenium in streams kills or deforms fish and other aquatic life, and in high levels can damage human health. Selenium is one of a number of contaminants that are discharged from the federally owned San Luis Drain directly into the waters of the state. This failure to enforce protective selenium water quality standards transfers pollution from these Grassland drainers through this federal drain to the waters of the state, harming beneficial uses of these waters for our members' recreational use, domestic water supply, public health and public trust values.

The BOARD's justification for approving the selenium Basin Plan Amendment is based on maintaining one beneficial use at the expense of other beneficial uses and a faulty assumption that regional efforts to reduce selenium contaminated discharges to Mud Slough would end if discharge prohibitions were enforced. Despite significant concerns of the United States Environmental Protection Agency ("EPA") and United States Fish and Wildlife Service ("USFWS") regarding the harmful impacts of the Basin Plan Amendment to allow increased selenium discharges for such a prolonged period and the potential for violations of federal environmental standards, the Board rejected a feasible and less risky alternative put forth by a coalition of environmental groups to limit the amendment for a period of two years.

We perceive no legal obstacle to the State Board's determination that particular methods of use have become unreasonable by their deleterious effects upon water quality. Obviously, some accommodation must be reached concerning the major public interests at stake: the quality of valuable water resources and transport of adequate supplies for needs southward. The decision is essentially a policy judgment requiring a balancing of the competing public interests, one the Board is uniquely qualified to make in view of its special knowledge and expertise and its combined statewide responsibility to allocate the rights to, and to control the quality of, state water resources. ([Water Code] § 174.) . . . We conclude, finally, that the Board's power to prevent unreasonable methods of use should be broadly interpreted to enable the Board to strike the proper balance between the interests in water quality and project activities in order to objectively determine whether a reasonable method of use is manifested.

Admittedly there is no known effective treatment process for such huge volumes of polluted selenium contaminated groundwater and no known funding exists. For these and the following reasons the Environmental Advocates believes the Board's Resolution 2010-0046 is unsupportable due to its conflict with federal and state laws and policies.

REQUEST FOR RELIEF

The Environmental Advocates hereby respectfully request that the BOARD reconsider Resolution 2010-0046 and remand the selenium Basin Plan Amendment to the REGIONAL BOARD to adopt National Pollutant Discharge Elimination Service (NPDES) permit conditions to control selenium discharges from these pipes, ditches, sumps and canals, to fully regulate all selenium discharges into the Grasslands Watershed Basin, consider alternatives such as land retirement and a shorter compliance schedule for implementing the selenium objectives for Mud Slough North and the San Joaquin River upstream of the Merced River.

Respectfully submitted this 4th day of November 2010,



Jim Metropulos
Senior Advocate
Sierra Club California



Steven L. Evans
Conservation Director
Friends of the River



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's
Federation Association Inc.



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League



Conner Everts
Executive Director
Southern California Watershed Alliance



Byron Leydecker
Chair
Friends of Trinity River

Frank Egger President
North Coast Rivers Alliance

Pietro Parravano, President
Institute for Fisheries Resources

Attachment:

Memorandum and Points and Authorities In Support of Sierra Club California, Pacific Coast Federation of Fishermen’s Associations, Institute for Fishery Resources, Planning and Conservation League, North Coast Rivers Alliance, and Southern California Water Alliance (Environmental Advocates) Joint petition for Reconsideration of Resolution 2010-0046

Points and Authorities

The Board’s adoption of the San Joaquin River Selenium Control Plan Basin Plan Amendment, Resolution 2010-0046 allows the continued violation of selenium pollution standards and other pollutants being discharged from the San Luis Drain into the San Joaquin River from the Grassland Bypass Project (GBP) by delaying the compliance time schedule in the current Basin Plan. The Basin Plan Amendment includes a revised compliance schedule for meeting selenium water quality objectives in Mud Slough (north) and the San Joaquin River (from Sack Dam to the Merced River). This revised compliance schedule includes a non-binding *Performance Goal* of 15 µg/L monthly mean by December 31, 2015, and a binding objective of 5 µg/L 4-day average for the reaches of Mud Slough (north) and the San Joaquin River by December 31, 2019.

The Environmental Advocates’ comments both before the Board and the Regional Board were not addressed. Specifically in adopting Resolution 2010-0046 the Board failed to enforce the Clean Water Act and Porter-Cologne (Water Code § 13000 *et seq.*) The Board approved the selenium BPA to allow nearly another decade in search of technology and funding that does not exist. Specifically the action fails to:

1. Regulate the point source discharge of selenium and other pollutants in accordance with the Clean Water Act through repeated waivers and basin plan amendments for over fifteen years, and extending this failure to enforce pollution control standards for almost another decade resulting in harm to the waters of the state and nation and the beneficial uses and public trust values.
2. Remedy the environmental impacts associated with deferring compliance of water quality objectives in Mud Slough (north) and the San Joaquin River; and
3. Regulate or remedy inputs of selenium contamination within the Grasslands Watershed and the Grassland Basin Project wetland supply channels that result in continued violations of water quality objectives in those channels and environmental harm to endangered species, migratory birds, fish, wildlife and human health.²

² *Review of Selenium Concentrations in Wetland Water Supply Channels in the Grassland Watershed* California Environmental Protection Agency Regional Water Quality Control Board Central Valley Region May 2000, Figure 4 page 11. See also Delta-Mendota Canal Water Quality Monitoring Program reports April-June 2010 documenting elevated levels of Mercury and Selenium.

A. The Board Failed to Enforce the Clean Water Act and Porter-Cologne (Water Code § 13000 et seq.) in Adopting Resolution 2010-0046--A State Cannot Issue Temporary Waiver from NPDES Permit.

The Grassland drainers entered into a joint powers agreement with the San Luis Delta Mendota Water Authority (“Authority”).³ Under the project’s agreement, groundwater is pumped to the surface and is discharged into the San Joaquin River via the federal San Luis Drain and Mud Slough. The discharged water contains a number of chemical constituents identified by the Environmental Protection Agency (“EPA”) as pollutants. One such pollutant discharged is selenium, occurring at levels that are toxic to fish, wildlife, and humans who rely on the San Joaquin River for a domestic water supply.

By adopting Resolution 2010-0046 and the Basin Plan Amendment, which delays enforcement of pollution control standards and fails to regulate the discharge of pollutants, the Board violates the Clean Water Act (CWA). Likewise, the Project’s operation without a National Pollutant Discharge Elimination System (NPDES) Permit constitutes an unlawful discharge of pollutants into navigable waters of the United States. State law cannot exempt the Authority from obtaining an NPDES and other necessary permits under the CWA.

In 1995 the Authority first entered into a use agreement with the Bureau of Reclamation to dump shallow untreated polluted groundwater from a four-mile long earthen ditch, through the San Luis Drain, and into Mud Slough. Though the agreement’s original terms allowed this arrangement for “two years,” and no more than “five years,” a series of use agreement extensions have made promised pollution treatment appear as a “treatment mirage.”

The technical and economic feasibility of drainage treatment is questioned in the water board’s staff report. More recently the US BOR, in contract negotiation sessions with Westlands, has indicated the cost is greater than \$12,000 to treat an acre of drainage impaired land. Such estimates also make the promised treatment unlikely.⁴ Treatment of this polluted ground water is further complicated by salt and the presence of constituents like selenium, arsenic, and boron.⁵ Yet the full range of source controls, including land retirement to

³ The Project is operated by the Bureau of Reclamation and the San Luis & Delta-Mendota Water Authority (Authority). Previous NPDES Permits to control pollution were rescinded when this “interim” project was announced. See United States Department of the Interior, Bureau of Reclamation, San Luis Drain, Merced and Fresno Counties, NPDES Permit No. CA0082368, Order No. 90-027. Also see NPDES permit to the Authority for discharge of sumps into the San Luis Drain On March 22, 1996, the Regional Board issued a NPDES Permit (Order No. 96-092, NPDES NO. CA0093917) to the Authority for the discharge of groundwater accumulated in the Drain to Mud Slough (North)

⁴ US BOR Reclamation cost estimates for drainage treatment and collection costs for the Northerly portion of Westlands Water District. 9-28-2010 Repayment Negotiations & 9 (d) Contract Negotiations.

⁵ *Technical Analysis of In-Valley Drainage Management Strategies for the Western San Joaquin Valley, California*, Open File Report 2008—1210 , By Theresa S. Presser and Steven E. Schwarzbach

regulate this discharge and the adoption of NPDES permit requirements by Environmental Advocates was ignored.

B. The Board Action Fails to Regulate Pollutants Entering Into Wetland Supply Channels at National and State Wildlife Refuges and to Enforce Federal and State Anti-degradation Policies Allowing Unreasonable Affects on the Beneficial Uses of Water in Adopting Resolution 2010-0046.⁶

The Regional Board Staff report (p. 25) acknowledges that the adoption of the Basin Plan Amendment will result in “temporary continuation of the potential impairment to warm freshwater habitat, spawning and wildlife habitat.” In fact, the Regional Board acknowledges that “with the amendments, water quality in Mud Slough (north) will remain vulnerable to degradation for up to an additional nine years, three months beyond 1 October 2010.” (*Ibid.*)

The Board Adopting Resolution 2010-0046 seemingly sides with the Regional Board Staff Report that argues this degradation will only occur in Mud Slough and therefore it is acceptable:

“The existing beneficial uses of Mud Slough (north) are irrigation (limited by naturally occurring salt and boron); stock watering; contact and non-contact recreation; warm freshwater habitat; spawning and wildlife habitat. Adopting the amendment will not change attainability of these uses relative to current conditions, but will result in temporary continuation of the potential impairment to warm freshwater habitat, spawning and wildlife habitat now occurring relative to no project.” [Regional Staff Report at p. 25]

This argument suggests that after over a decade of sanctioning the pollution of Mud Slough and the San Joaquin River, such degradation necessarily sanctions further degradation by these irrigation drains. Furthermore, this circular argument ignores the spread of selenium pollution throughout the lower San Joaquin and the Sacramento-San Joaquin Delta.

In addition, the Board Adoption of Resolution 2010-0046, does not control and violates the 2 µ/L standard for wetland supply channels and Salt Sough whenever there is sustained rainfall. The 1997 Storm Event Plan⁷ acknowledges uncontrolled storm water pollution from Panoche Creek and Silver Creek, with its terminus in and at the project boundary. During storm events, the wetland supply channels at Camp 13 Ditch and Agatha Canal gates are opened, allowing uncontrolled and polluted storm water, road runoff, and groundwater to flood into wetland channels, Mud Slough, and the San Joaquin River. Testimony and comments by the Environmental Advocates, the United States Fish and Wildlife Service and others document the

⁶ SWRCB Order No. WQ 2005-0010; SWRCB Order No. WQ 92-09, SWRCB Resolution No. 68-16 and 40 CFR § 131.12.

⁷ *A Storm Event Plan For Operating the Grassland Bypass Project*, Grassland Area Farmers and San Luis & Delta Mendota Water Authority, August 25, 1997.

pollution impacts to the beneficial uses of both public and private wetlands. The Board failed to consider regulation of this pollution in its action.

Specifically, Resolution 68-16 requires that high quality waters shall be maintained until it is demonstrated that degradation is in the best interest of the people of California; that beneficial uses will not unreasonably be affected and that water quality objectives and standards will be met. Further, waiving and failing to enforce water quality standards protective of fish and wildlife fails to comply with the Federal Anti-degradation Policy (40 Code of Federal Regulations 131.12).⁸

Beneficial uses, including domestic, agriculture, along with public health, aquatic life, migratory birds, rare fish and wildlife, and recreation, are threatened by the Board's action to waive protective selenium standards for almost another decade. USFWS documented the vast public trust resources that are threatened and we incorporate those comments by reference.⁹ These public trust resources and beneficial uses include the Grasslands Ecological Area with over 160,000 acres of Federal, State, and privately managed marsh, native pasture and riparian zones, including the largest contiguous block of wetlands remaining within the Central Valley (Sacramento and San Joaquin Valleys). Prior to the early 1900's, this area was part of a vast network of some 4,000,000 acres of wetlands spread throughout the Central Valley. Today that valley-wide network is down to 300,000 acres, of which the Grasslands area is a critical component. As much as thirty percent of the migratory birds that utilize the Central Valley frequent the watershed each winter. The area annually hosts hundreds of thousands of ducks, geese and waterbirds, and is recognized by the Western Hemisphere Shorebird Reserve Network as a place of international importance to wintering and migrant shorebirds.

The Grasslands Ecological Area has also been designated a Wetlands of International Importance under the Ramsar Convention, the only international agreement dedicated to the worldwide protection of wetlands. The Grasslands Ecological Area and vicinity also provides habitat to two known populations of the giant garter snake (*Thamnophis gigas*) (in Mendota and North and South Grasslands) as identified in the final rule listing this species as threatened (USFWS 1993) (56 FR 54053). The San Joaquin River provides habitat to the federally listed delta smelt (*Hypomesus transpacificus*), Central Valley steelhead (*Oncorhynchus mykiss*), Central Valley spring run Chinook salmon (*Oncorhynchus tshawytscha*) and green sturgeon (*Acipenser medirostris*).

These beneficial uses are threatened by pollutant levels of selenium exceeding the 2 µg/L monthly mean selenium objective in water in the Grassland wetland supply channels and 5

⁸ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826 The U.S. Fish and Wildlife Service's Biological Opinion indicates that the Poso/Rice/Almond drain areas adjacent to the Grasslands area are discharging uncontrolled drainage water into areas such as the Agatha Canal, which periodically has extremely high selenium levels that could cause reproductive failure, death and other impacts to waterfowl, fish and wildlife.

⁹ Susan K. Moore, Forest Supervisor, USFWS, May 8, 2010. Comment letter to CVRWQCB with attachments, see http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/

µg/L in the San Joaquin River upstream of the Merced River and Mud Slough North. Sources of ongoing selenium contamination in Grassland wetland channels and the San Luis National Wildlife Refuge include:

- (1) Continued contamination of the water supply in the Delta Mendota Canal from 6 sumps and groundwater pumping exchange programs;
- (2) Unregulated and unmonitored discharges of subsurface groundwater from nearby farmland into local ditches and canals that feed into the Grassland wetland supply channels; (3) and large storm events that can overwhelm the GBP channel, requiring that uncontrollable storm runoff be diverted into wetland supply channels (Beckon et al. 2007; Pavaglio and Kilbride 2007; Eppinger and Chilcott 2002). The adoption of the BPA and failure to enforce Basin Plan objectives for selenium will continue to degrade aquatic life beneficial use.

In addition the Board and Regional Board failed to address damages to downstream beneficial uses presented in testimony provided on May 27, 2010, by Tom Stokely [California Water Impact Network], Bill Jennings [California Sportfishing Protection Alliance], Osha Meserve [representing Reclamation District 999, which is within the Clarksburg Agricultural District of the Delta], and Delta landowners, and incorporated here by reference.¹⁰

Further compliance with Basin Plan objectives and their implementation program is mandatory. (*See State Water Res. Control Bd. v. Office of Admin. Law* (1993) 12 Cal. App. 4th 697, 701-02.) The proposed nearly decade-long compliance extension comes in direct conflict with crucial Basin Plan Objectives, and the proposed amendment fundamentally alters the basin plan selenium pollution controls out of meaningful existence. Waiving enforcement or “implementation” for almost a decade has the effect of sanctioning pollution that will bioaccumulate in plant material, enter the food chain, and gather in groundwater and surface water supplies so as to significantly impact beneficial uses for decades.

Finally, the Board and the Regional Board failed to show that allowing degradation is in the best interest of the people of California.

C. The Board Failed to Enforce the Clean Water Act § 404 and the Rivers and Harbors Act of 1899 § 10 When it Adopted Resolution 2010-0046.

Under the CWA Section 404 and the Rivers and Harbors Act of 1899 Section 10, alteration of waterways, including wetlands, that affect navigable waters requires a permit from the Federal government and assurance that impacts will be avoided or mitigated. This

¹⁰ Comment letters, and May 27, 2010, testimony from Bill Jennings, Tom Stokely, Patricia Schifferle, Osha Meserve, and written comments; California Water Impact Network et. al. [Coalition] April 26, 2010; Janet Hashimoto, USEPA letter dated April 26, 2010; Susan K Moore, USFWS, May 8, 2010 plus attachments; Osha Meserve representing Reclamation District 999 letter dated May 26, 2010 plus attachments. For all written comments to the CVRWQCB, See http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/

project has not been issued a 404 permit despite the acknowledged release of pollutants from groundwater sumps and canals directly into wetland channels. Further the project acknowledges unavoidable impacts on wetlands and fisheries. Yet the required compensatory mitigation in the form of replacing the lost aquatic functions is not included in this project.

Despite the Basin Plan's prohibition against the discharge of selenium without a permit, there are numerous discharges within the project and into the project that are not regulated.¹¹ The Delta Mendota Canal (DMC) sumps are located in a reach of the DMC between Milepost 100.86 and 109.5. These sumps have been identified as discharging selenium, salt, boron and other constituents to the DMC which in turn delivers water to the Grassland wetland areas¹². The Central Valley Regional Quality Control Board staff confirmed elevated levels in the DMC: "Monitoring of the DMC has shown elevated selenium levels (1-10 µ/L) in its lower reach; similarly monitoring of the Mendota Pool has shown elevated selenium levels (1-4 µ/L). In consideration of the uses of the water from the DMC and Mendota Pool, these levels of selenium are cause for concern."¹³

The USBR has identified average discharges from the BPA of 1,300 acre-feet, 732 pounds selenium and 8,268 tons of salt per year for the period July 2002 through June 2009.¹⁴ The Grassland Basin Drainers have suggested that USBR pay for the benefits of "participating in an established, ongoing drainage management project.... existing infrastructure, and permits in place" in order to address the issue of the DMC sump discharges of polluted groundwater (emphasis added).¹⁵

The Board Adopted Resolution 2010-0046, whereby the implementation schedule effectively delays enforcement of pollution control standards and an approved TMDL for almost

¹¹ Rudy Schnagl, Senior Scientist for the Central Valley Regional Board explained that subsurface polluted groundwater discharges from Westlands Water District (WWD) flow northeast toward Mud Slough, to other tributaries and to the San Joaquin River. Because of this flow pattern, some of the water that Grassland Basin Drainers manage originates from the unregulated discharge in WWD. Transcript of Proceeding, Central Valley Regional Water Quality Control Board, Agenda Item No. 10, (May 27th, 2010) pp. 89-91. This subsurface polluted groundwater flow has also been documented in United States Geological Reports. See *Simulation of Water-Table Response to Management Alternatives*, Central Part of the Western San Joaquin Valley, California, US Geological Survey Water-resources Investigations Report 91-4193.

¹² Selenium in the Delta Mendota Canal 1987-2001 U.S. Bureau of Reclamation Staff Report April 2002.

¹³ Investigation of Check Drains Discharging into the Delta-Mendota Canal, by F.W. Pierson, Thomasson and Chilcott et. al. Agricultural Unit, Central Valley Regional Water Quality Control Board. October 1987 pg 1.

¹⁴ USBR, June 2009 DMC Water Quality Monitoring Report, Tables 8a and 8b

¹⁵ San Luis Delta Mendota Water Authority, Joseph McGahan, Drainage Coordinator, Grassland Basin Drainers March 22, 2010 Letter to Michael Jackson USBOR Area Manager, South Central Area Office.

another decade and the resulting state permit, sanctions the degradation of Mud Slough, the San Joaquin River and Delta Bay estuary, and violates the Clean Water Act [CWA].

This delay in enforcement and failure to issue the required National Pollution Discharge Elimination System Permit (NPDES) constitutes an unlawful discharge of pollutants into navigable waters of the United States. It is clear this ground water discharge is a "pollutant" within the meaning of the CWA, and we contend state law cannot exempt the Authority, from obtaining (NPDES) permits and other necessary permits under the CWA. The Board dismissed testimony regarding the benefits to fish and wildlife and wetland areas if such compliance is achieved. No consideration was given to the benefits of issuing the required NPDES permit controls, strict mitigation offsets or extending permit conditions to unregulated discharges.

D. NPDES Regulatory Jurisdiction Discussion and Points of Law: The Discharge of Polluted Groundwater from Sumps Constitutes a Point Source Subject to Regulation under the NPDES Permit Program.

The first question when determining whether the Clean Water Act has jurisdiction over sumps that pump polluted groundwater into canals should be whether those sump discharge pollutants from a point source.¹⁶ There are several features of the selenium-laden and polluted groundwater sumps that create de facto point sources. For example, the sumps, pumps and discharges from various groundwater locations surrounding the lands of the Grassland drainers are identifiable point sources, as are the pesticide and fertilizer application equipment. The next question is whether Congress and EPA excluded the Grassland Basin Drainers' sumps and canal collection systems from the NPDES permit program through the "irrigation return flow" exemption. It should be noted no federal court case has stated that subsurface drainage systems – which are end of the pipe discharges – are exempted from the Clean Water Act. If Grassland drainer's sump discharges, canal collection system discharges or seepage discharges either 1) do not fit within the broad "point source" definition, or 2) are excluded as irrigation return flow, they are not covered by the Act.¹⁷

1. Ditches, Sumps, Seepage and Canals as Point Sources

There can be little doubt that many features of the typical Grassland drainer, including the collector drains, sumps, pumps canals and earthen or lined ditches through which

¹⁶ 33 U.S.C. § 1362(6) (2000).

¹⁷ The Ninth Circuit in *League of Wilderness Defenders v. Forsgren*, 309 F.3d 1181 (9th Cir. 2002), reaffirmed that although EPA has reasonable discretion to interpret the term "point source," it does not have the discretion to exempt classes of activities where those activities meet the parameters of the statutory definition. *Id.* at 1190; see also *Natural Resources Defense Council v. Costle*, 568 F.2d 1369, 1377 (D.C. Cir. 1977) (same). As a result, it is doubtful that EPA or states have the authority to specifically exclude polluted groundwater sump discharges and polluted seepage into canals for discharge into the San Luis Drain and the San Joaquin River, categorically, from the definition of point source.

pollutants are discharged seasonally throughout the year into the “four mile Grassland Bypass canal”¹⁸ which combines discharges from these sumps and pipes and then into the San Luis drain for discharge into Mud Slough and the San Joaquin River could at least theoretically fall within the definition of “point source.” In fact, the plain language definition of “point source” specifically includes “ditches,” and “discrete conveyances”¹⁹ that are common in the Grasslands Bypass Project. And, precedent has established that gullies, rills, check dams, sediment traps, and other natural or manmade conveyances or systems designed to catch runoff can also be point sources under the Clean Water Act.²⁰ After all, it is well established that Congress intended the “broadest possible definition” of the term point source.²¹

Some might argue this polluted groundwater discharged from sumps, pumps, seepage and canals is exempt citing it as agricultural return flows. We argue this is not the case.

2. The “Irrigation Return Flow” Exemption from the Definition of Point Source

The irrigation return flow exemption is a largely undefined area of law.²² However, a review of the legislative and regulatory history of, as well as case law on, the irrigation return flow exemption indicates that the Grassland Basin Drainers fall within the definition of point source, and are not exempt from the NPDES permit program.

¹⁸ Central Valley Regional Water Quality Control Board Order No. 98-171.

¹⁹ 33 U.S.C. § 1362(14) (2000).

²⁰ See, e.g., *N.C. Shellfish Growers’ Ass’n v. Holly Ridge Assocs.*, 278 F. Supp. 2d 654, 679–80 (E.D.N.C. 2003) (check dams, sediment traps, gullies and rills as part of a home development site on a wetland are point sources); *Froebel v. Meyer*, 217 F.3d 928, 938–39 (7th Cir. 2000) (recognizing that a partially destroyed dam can be a point source); *Comm. to Save Mokelumne River v. E. Bay Mun. Util. Dist.*, 13 F.3d 305, 308 & n.1 (9th Cir. 1993) (dam that discharged mine tailings in pond-water to clean water downstream was a point source); *Catskill Mountains Chapter of Trout Unlimited v. City of N.Y.*, 273 F.3d 481, 493 (2d Cir. 2001) (tunnel was a point source that transferred water from one basin to another); *Sierra Club v. Abston Constr. Co.*, 620 F.2d 41, 45 (5th Cir. 1980) (manmade sediment basin was a point source); *United States v. Earth Scis, Inc.*, 599 F.2d 368, 374 (10th Cir. 1979) (mining operation’s sump pit was a point source); *Northwest Environmental Defense Center v Marvin Brown, Oregon State Forester*, No. 07-35266 D.C. No. CV-06-01270-GMK Opinion (9th Cir. 2010) (logging road run-off that is channeled by a system of ditches and culverts into navigable waters is a point-source regulated under the NPDES, which requires a permit to limit the amount of pollution discharged to meet water quality standards.)

²¹ See, e.g., *Earth Sciences*, 599 F.2d at 373 (concluding that the broadest possible definition of point source must be adopted in order to further the congressional intent to regulate pollution emitting sources to the fullest extent possible); *United States v. W. Indies Transp. Inc.*, 127 F.3d 299, 309 (3d Cir. 1993); *Dague v. City of Burlington*, 935 F.2d 1343, 1354–55 (2d Cir. 1991).

²² 33 U.S.C. § 1342 (l)(1) (2000) (“The Administrator shall not require a permit under this section for discharges composed entirely of return flows from irrigated agriculture, nor shall the Administrator directly or indirectly, require any State to require such a permit.”).

a. Legislative History

On July 12, 1976, EPA amended the permit exemption for irrigation return flows and required a permit for “agricultural point sources.”²³ EPA defined an “agricultural point source” as “any discernible, confined and discrete conveyance from which any irrigation return flow is discharged into navigable waters.”²⁴ “Irrigation return flow” was defined as “surface water, other than navigable waters, containing pollutants which result from the controlled application of water by any person to land used primarily for crops, forage growth, or nursery operations.”²⁵

However, shortly after its promulgation, Congress obliterated EPA’s rule promulgation by creating the irrigation return flow exemption in sections 502(14) and 402(l) of the 1977 Clean Water Act Amendments.²⁶

Significantly, Congress never defined an “irrigation return flow.” Instead, a Senate Report on the 1977 Clean Water Act Amendments creating the irrigation return flow exemption reflects an affirmation of EPA’s definition of irrigation return flows as “conveyances carrying **surface** irrigation return as a result of the controlled application of water by any person to land used primarily for crops.”²⁷ This means that Congress likely only excluded tail water discharges from the NPDES requirements of the CWA, not subsurface groundwater drainage.

The legislative and regulatory history of the CWA suggests Congress did not exclude subsurface drainage when it excluded irrigation return flows from the NPDES program.

²³ 396 F. Supp. 1393 (D.D.C. 1975), *aff’d sub nom. Natural Res. Def. Council v. Costle*, 568 F.2d 1369 (D.C. Cir. 1977). See Agricultural Activities, National Pollutant Discharge Elimination System, 41 Fed. Reg. 7963, 7963 (Feb. 23, 1976) (“Although EPA is proceeding with the appeal of the decision; the Agency is still required to comply with the court order. Thus under the terms of the order . . . regulations applying the NPDES permit program to point source discharges in the agriculture and silviculture categories are required to be proposed by February 10, 1976 and promulgated by June 10, 1976.”).

²⁴ 40 C.F.R. § 125.4(i) (3) (2006); see 41 Fed. Reg. 28,493–28,496 (July 12, 1976). See also Radosevich and Skogerboe, *Achieving Irrigation Return Flow Quality Control through Improved Legal System* United State EPA document number EPA-600/2-78-184 (December, 1978) at 32. Though published by EPA in 1978, the report analyzes data only through September 30, 1977.

²⁵ *Id.* § 125.53(a) (2).

²⁶ Federal Water Pollution Control Act, Pub. L. No. 95-217, 91 Stat. 1566, 1577 (1977) (codified at 33 U.S.C. §§ 1362(14), 1342(l) (1) (2000)).

²⁷ S. REP. NO. 95-370, at 35 (1977), as reprinted in 1977 U.S.C.C.A.N. 4326, 4360 (emphasis added). The Senate Committee Report, adopted by the Joint House-Senate Conference Committee, explains the exclusion of irrigation return flows. It indicates that Congress intended to exclude surface irrigation return from the Act’s permit program: “*Permit requirements under section 402 of the act have been constructed to apply to discharges of return flows from irrigated agriculture. These flows have been defined by the Environmental Protection Agency as conveyances carrying surface irrigation return as a result of the controlled application of water by any person to land used primarily for crops.*”

Subsurface irrigation drainage that is confined in man-made conduits is no longer “un-channeled runoff” and is amenable to federal regulation as point source pollution. Further the definition of “discharge of a pollutant” includes “discharge into waters of the United States from: surface runoff which is collected and channelized by man.”²⁸

b. Failure of the State to Enforce Selenium Pollution Standards Through Implementation Delays and Rescission of NPDES Permits to Regulate the Discharge Is Arbitrary and Capricious.

First, NPDES permits employ enforceable numeric limits and best management practices as effluent limitations. Compliance with the numeric limits and best management practices means compliance with the NPDES permit, and in turn, the Clean Water Act. Assuming the permit limits and practices are established to protect water quality standards, compliance also means protection of water quality. Second, NPDES permit liability is strict.²⁹ The failure of the Board and Regional Board to regulate this discharge of pollutants by an NPDES permit is arbitrary. There is no scientific or regulatory basis for the rescission of previous NPDES permits to regulate portions of this discharge.³⁰

c. An NPDES Permit Can Prevent Pollution, Rather Than Relying on Untested Treatment Methods to Abate Pollution after it Happens

The relative ease of implementation and enforcement of the Clean Water Act’s NPDES permit scheme should operate to save the public money spent on cleaning up waterways after they are already degraded. Testimony provided by Environmental Advocates documenting the lack of treatment methods and high cost of this pollution was largely ignored by the Board. Further the Board ignored testimony that the cost of providing drainage is higher than the agricultural benefits of irrigating these lands and that no sources of funds for these expensive treatment methods have been identified or secured.

E. The Board Failed to Consider Article X, Section 2 of the California Constitution and Water Code Section 275 in the Adoption of Resolution 2010-0046

The Board is required by law to take all appropriate proceedings or actions before executive, legislative, or judicial agencies to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of water in this state. Water Code § 275.

²⁸ 40 CFR 112.3(k)

²⁹ 33 U.S.C. § 1311(a) (2000) (discharge of a pollutant to navigable waters prohibited except in compliance with a NPDES permit); *United States v. Pozsgai*, 999 F.2d 719, 725 (3d Cir. 1993); *United States v. Amoco Oil Co.*, 580 F. Supp. 1042, 1050 (W.D. Mo. 1984); *Stoddard v. W. Carolina Reg'l Sewer Auth.*, 784 F.2d 1200, 1208 (4th Cir. 1986).

³⁰ See footnote 2.

This statute has been clearly interpreted to mean that "[n]o one can have a protectable interest in the unreasonable use of water." *City of Barstow v. Mojave Water Agency* (2000) 23 Cal.4th 1224, 1242. Section 275 also gives substantial authority to determine whether a particular use, method of use, or method of diversion of water is unreasonable. But what constitutes a reasonable use of water is a question of fact that must be decided in each case. *Joslin v. Marin Mun. Water Dist.* (1967) 67 Cal.2d 132,140.

It is also true that "[w]hat is a beneficial use at one time may, because of changed conditions, become a waste of water at a later time." *Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist.*, (1935) 3 Cal.2d 489, 567. In other words, what was once considered reasonable may be considered unreasonable at present, and what is reasonable in times of abundance may be unreasonable in times of shortage. Both the SWRCB and the courts have concurrent jurisdiction to limit a water rights holder who is wasting water, using water unreasonably, or using an unreasonable method of use or an unreasonable method of diversion. *Environmental Defense Fund v. East Bay Municipal District* (1980) 26 Cal.3d 183,200; *People ex rel. State Water Resources Control Bd. v. Forni* (1976) 54 Cal.App.3d 743,753; *Imperial Irrigation District v. State Water Resources Control Board* (1990) 225 Cal.App.3d 548, 557-561.

The court in *Environmental Defense Fund*, 26 Cal.3d at 200, held that the courts have concurrent jurisdiction with the SWRCB over claims of unreasonable use under article X, section 2 of the California Constitution. Article X, section 2 provides "that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare." In *Environmental Defense Fund*, Plaintiffs alleged that diversion of water for a single use in East Bay Municipal District's service area was unreasonable in light of a lower diversion point of diversion that would protect both in stream uses and the consumptive uses of the East Bay Municipal District service customers. The court noted that, in determining whether methods of use or diversion are unreasonable, "the board must consider the relative benefit to be derived from all beneficial uses of the water concerned, including domestic, irrigation, municipal, and industrial use, as well as use for preservation and enhancement of fish, wildlife, and recreational uses." *Environmental Defense Fund, supra*, 26 Cal.3d at 196 (Water Code § 1257.)

In adopting Adoption of Resolution 2010-0046, the Board failed to adequately consider both article X, Section 2 and Water Code § 275. The Board failed to consider whether the Grassland Drainers and other west side irrigators' use of water which causes groundwater pollution and discharges that pollute wetlands and the waters of the State and Nation in violation of the CWA standards is unreasonable in light of the substantial deterioration of Delta fisheries, waterfowl, and endangered species during the period in which the standards have been ignored. The Board largely dismisses the Environmental Advocates' testimony regarding the benefit to fish and wildlife if compliance is achieved for Mud Slough, the San Joaquin River, National Wildlife Refuges and the Delta. The connection between the enforcement of strict enforcement of the selenium standards and controlling other pollutants such as salt, mercury

and boron and the health of fish and wildlife cannot be so easily dismissed without real consideration by the Board.

Conclusion

Discharges from the Grassland drainers cause serious water pollution.³¹ Despite deficiencies in biological monitoring where biological effects of selenium are monitored either too early or too late to consistently measure impacts, data show a reproductive failure and death of migratory waterfowl with the selenium content of the egg with the deformed embryo greater than 70 parts per million--A clear violation of the Migratory Bird Treaty Act.³²

Unlike other agricultural sources, Grassland Basin Drainer discharges are not diffuse sources of runoff, nor do the discharges merely consist of "irrigation return flow" as Congress apparently meant when it used that phrase. Water is pumped from underground where polluted water is discharged to canals and the federal San Luis Drain and then to the San Joaquin River.

During the growing season, pesticides and fertilizers are applied. When water is applied to these fields it flows through soils mobilizes selenium, salts, mercury, boron and other nutrient contaminants these pollutants are discharged through discrete point sources back into the navigable waters, damaging aquatic life and water quality in the process.

Board Resolution 2010-0046 effectively sanctions pollution of Mud Slough, the San Joaquin River, and ultimately the Sacramento-San Joaquin Delta, by failing to enforce science-based protective water quality standards for selenium and allowing the continued contamination of these water bodies. Too much selenium in streams kills or deforms fish and other aquatic life, including waterfowl, and is a human-health concern in drinking-water supplies. Selenium is one of a number of contaminants that are discharged from the federally-owned San Luis Drain directly into the waters of the state. This failure to enforce protective selenium water quality objectives transfers pollution from these Grassland Basin Drainers through this federal drain to the waters of the state, harming beneficial uses of these waters for recreational use, domestic water supply, public health and public trust values.

³¹ USFWS criticized the Regional Board's Staff report for failing to consider new water quality information which showed that selenium levels exceeded 20 µg/L on the San Joaquin River during at least 4 months in 2009, failing to address selenium water quality impairments and provide remedies, and failing to address cumulative impacts. In particular, the USFWS requested that the Regional Board consider the protection of Chinook salmon and steelhead in the San Joaquin River, including the reach between Sack Dam and the Merced River, in this Basin Plan Amendment. The Service believes that as written, the revised compliance schedule and lack of an enforceable water quality objective for selenium in the San Joaquin River upstream of the Merced River until December 31, 2019, is not protective of salmonids and could result in the loss of or harm to out migrating young salmon in the San Joaquin River. (USFWS Comment Letter, p. 6.)

³² Panoche Drainage District, *San Joaquin River Water Quality Improvement Project, 2008 Wildlife Monitoring Report* 9-15-2009 Jeff Seay at HT Harvey, Page 22 and Table 4. Abnormal Black Necked Silt classic selenium caused deformities with selenium measured at 74.6.

Resolution 2010-0046 substantially weakens the Basin Plan's existing program by delaying the selenium objective in these water bodies by another nine years, three months. This open-ended extension would needlessly facilitate additional discharge of selenium-contaminated water, vitiating compliance with key provisions of the Basin Plan and the Clean Water Act.³³

Both USEPA (40 CFR §131.12) and the State of California (State Water Board Resolution 68-16) have adopted Antidegradation policies as part of their approach to regulating water quality. Basin Plan amendments must ensure that the federal or State Antidegradation policies are not violated. And yet the State and Regional Water Board readily admit waiving the selenium pollution control standards for another 9 years and 3 months will degrade the waters of the state.³⁴

The justification for this enforcement delay suggests that after over a decade of sanctioning the pollution Mud Slough and the San Joaquin River, such degradation necessarily sanctions further degradation by these drainers. Furthermore, this circular argument ignores the spread of selenium pollution throughout the lower San Joaquin and the Sacramento-San Joaquin Delta.

The Clean Water Act's NPDES permit program is appropriate for addressing the problems associated with these polluted discharges. The pollutant discharges are discrete, identifiable, well-documented, and arguably, not subject to the irrigation return flow exemption.

Further, applying the NPDES permit program reduces the need for expensive litigation that may have only isolated environmental benefits that fail to address a more common and widespread problem. As a result, the Board and if necessary EPA should broadly apply the NPDES permit program to eliminate the transfer of these pollutants to the San Joaquin River and the Bay-Delta estuary.

³³ See Comments From Environmental Coalition: Sierra Club et.al. Comment letter- San Joaquin River Selenium Control Plan Basin Plan Amendment. September 22, 2010. California Sportfishing Protection Alliance et. al. Comment letter- San Joaquin River Selenium Control Plan Basin Plan Amendment. September 22,2010

³⁴ See CVRWQCB Staff Report: ~~With the amendments, water quality in Mud Slough (north) will remain vulnerable to degradation for up to an additional nine years, three months beyond 1 October 2010.~~ (Staff Report, at p. 25)
~~Continued discharge constitutes an increase in waste volume over conditions without the amendments.~~ (Staff Report, p. 26.)

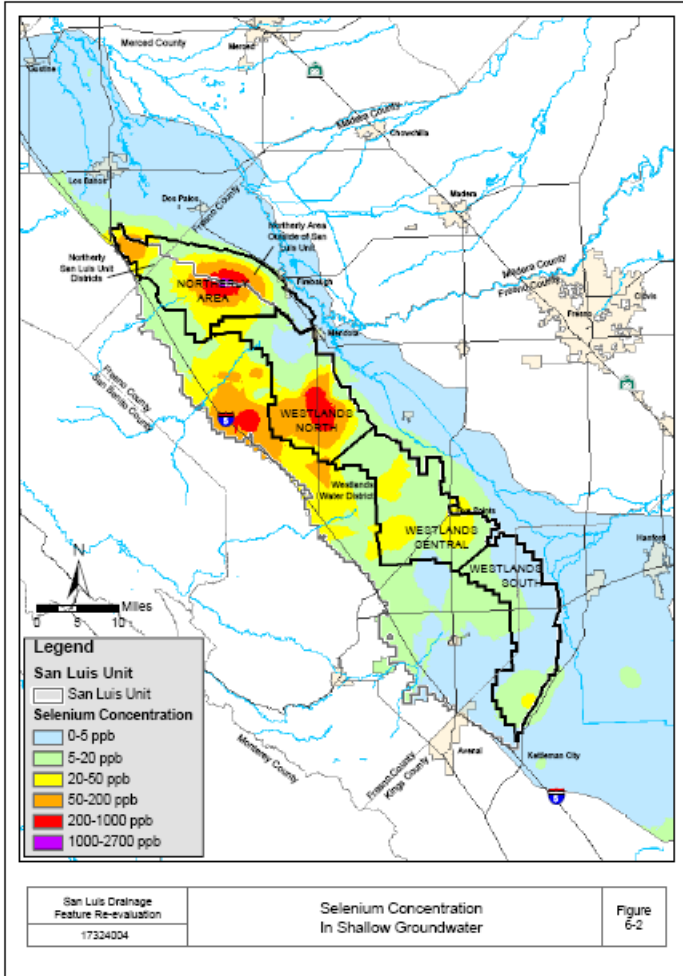


Groundwater Pumped into the DMC near Los Banos, California
U.S. Department of the Interior
Bureau of Reclamation
Mid-Pacific Region August 21, 2008

CVRWQCB Measured 1480 ppb Selenium in 2003 in Ponded Shallow Groundwater



http://www.camnl.wr.usgs.gov/Selenium/Library_articles/joepond.pdf Westlands Water District Groundwater Discharge near Five Points, Ca.



SLDR Final EIS

F_8_2

USBOR and USGS Documented levels of selenium polluted groundwater.



NORTH

COAST

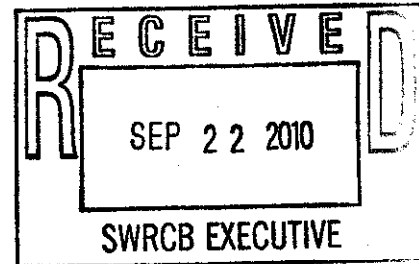
RIVERS

ALLIANCE



September 22, 2010

Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
I Street,
Sacramento, CA 95814
E-mail <commentletters@waterboards.ca.gov>



Subject: Comment letter- San Joaquin River Selenium Control Plan Basin Plan Amendment

Dear Ms. Townsend:

Thank you for the opportunity to provide input concerning the proposed San Joaquin River Selenium Basin Plan Amendment which, will allow continued selenium discharges to Mud Slough and the San Joaquin River in excess of Basin Plan Water Quality Objectives. As we understand it, the proposed action is to delay implementation of the protective selenium standard of 5 $\mu\text{g/l}$ (4 day average) Basin Plan Objective in Mud Slough (north) and the San Joaquin River from Mud Slough to the Merced River from October 1, 2010, until December 31, 2019. The amendment also proposes a **new relaxed pollution control objective of 15 $\mu\text{g/l}$ (30 day average)** interim "Performance Goal" for the same water bodies effective December 31, 2015.

Sierra Club California, Friends of the River, Friends of Trinity River, Pacific Coast Federation of Fisherman's Associations, Planning and Conservation League, North Coast Rivers Alliance, Southern California Watershed Alliance, other environmental groups and some of our members (Environmental Coalition) submitted extensive written and oral comments to the Central Valley Regional Water Quality Control Board for the

hearing on May 27, 2010. We incorporate those comments by reference. Most of the comments were either ignored completely, or insufficient responses were given by Regional Board staff.

We recommend that the proposed Basin Plan Amendment NOT be granted. The proposed Basin Plan Amendments effectively sanction pollution of Mud Slough, the San Joaquin River, and ultimately the Sacramento-San Joaquin Delta, by failing to enforce science-based protective water quality standards for selenium and allowing the continued contamination of these water bodies. Too much selenium in streams kills or deforms fish and other aquatic life, including waterfowl, and is a human-health concern in drinking-water supplies. Selenium is one of a number of contaminants that are discharged from the federally owned San Luis Drain directly into the waters of the state. This failure to enforce protective selenium water quality objectives transfers pollution from these Grassland drainers through this federal drain to the waters of the state, harming beneficial uses of these waters for our members' recreational use, domestic water supply, public health and public trust values.

The Central Valley Regional Water Quality Control Board believes that controlling this selenium pollution at its source—the export of Delta water to irrigate toxic selenium soils and then sending the drainage selenium pollution back—is not within its regulatory authority. Such control of pollution and unreasonable uses of water, however, certainly is within the State Board's authority.¹

BACKGROUND

Fourteen years ago, the Regional Board implemented the existing selenium control program, which requires compliance with a protective standard (5 µg/L) by October 1, 2010 for Mud Slough (north) and the San Joaquin River above the Merced River. The proposed amendment, if finalized, would substantially weaken the Basin Plan's existing program by delaying the selenium objective in these waterbodies by another nine years, three months. This open-ended extension would needlessly facilitate additional discharge of selenium-contaminated water, vitiating compliance with key provisions of

¹ See Racanelli Decision (*United States v. State Water Resources Control Board*, 182 Cal.App.3d 82, 130 (1986)):

We perceive no legal obstacle to the State Board's determination that particular methods of use have become unreasonable by their deleterious effects upon water quality. Obviously, some accommodation must be reached concerning the major public interests at stake: the quality of valuable water resources and transport of adequate supplies for needs southward. The decision is essentially a policy judgment requiring a balancing of the competing public interests, one the Board is uniquely qualified to make in view of its special knowledge and expertise and its combined statewide responsibility to allocate the rights to, and to control the quality of, state water resources. ([Water Code] § 174.) . . . We conclude, finally, that the Board's power to prevent unreasonable methods of use should be broadly interpreted to enable the Board to strike the proper balance between the interests in water quality and project activities in order to objectively determine whether a reasonable method of use is manifested.

the Basin Plan and the Clean Water Act, as well as state policy for water quality control.
(See Wat. Code section 13146.)

Despite significant concerns of the United States Environmental Protection Agency ("EPA") and United States Fish and Wildlife Service ("USFWS") regarding the harmful impacts of amending the waste discharge requirements to allow increased selenium discharges for such a prolonged period and the potential for violations of federal environmental standards, the Regional Board rejected a feasible and less risky alternative put forth by a coalition of environmental groups to limit the amendment for a period of two years. For the following reasons, this Environmental Coalition believes the Regional Board's decision is unsupportable due to its conflict with federal and state laws and policies. We request that the State Board instead issue a cease and desist order to stop this pollution and use its authority to regulate this contamination.

**APPROVAL OF THE OPEN-ENDED EXTENSION WOULD NEEDLESSLY
PRECIPITATE CONFLICT WITH FEDERAL AGENCIES AND FRUSTRATE CLEAN
WATER ACT COMPLIANCE.**

As the Regional Board's Staff Report acknowledged, "[a]ny proposed changes to the Regional Water Board Basin Plans must be consistent with existing Federal and State laws and regulations..." (Staff Report, p. 23.) Both the EPA and USFWS raised concerns regarding the adequacy of the Staff Report's analysis and the proposed amendments themselves. The points raised by the federal agencies with responsibilities over the water quality and wildlife affected by the proposed amendments underscored those raised by the Environmental Coalition in their own comments to the Regional Board. None of the Regional Board's responses adequately addressed these concerns.

1. Environmental Protection Agency (EPA)

The EPA's concerns, which went substantially unanswered, are of particular importance. EPA confirmed that extending the Basin Plan's compliance timetable is an "Amendment," reviewable by the EPA under section 303(c) of the Clean Water Act. Section 303(c)(2) requires the EPA Administrator to review the proposed revisions, which must among other things "protect the public health or welfare, enhance the quality of the water and serve the purposes of the Act." Where the revised standard does not meet the Clean Water Act's requirements, sections 303(c)(3) and 303(c)(4) empower the EPA Administrator to specify changes, and if needed, to adopt a new standard.

When enacted in 1972, the Federal Water Pollution Control Act Amendments intended to *eliminate* by the year 1985 the discharge of pollutants into the nation's navigable waters. (*City of Burbank v. State Water Resources Control Bd.*, 35 Cal. 4th 613, 628 (2005) [emphasis in original].) The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins ("Basin Plan") was implemented in furtherance of that goal. The Staff Report asserts that it is in compliance with the Clean Water Act because "[t]he proposed amendments will not change the water quality objectives that

now protect [Salt Slough, wetland water supply channels, and the San Joaquin River]. The amendments simply allow additional time for the objective to be met in Mud Slough [north] and the San Joaquin River above the Merced in a manner the dischargers find feasible." (Staff Report, p. 27.) This contention is untenable. The proposed amendments, if approved, would remove the protective water quality standard of 5 µg/L set to be in effect on October 1, 2010, and would authorize proceeding without a protective selenium water quality standard in place until December 31, 2019. Further, the amendment will continue the practice of merely shifting the pollutants from Salt Slough to Mud Slough and continue discharge of these highly toxic pollutants into the San Joaquin River, Sacramento-San Joaquin Delta, estuaries and bay.

Indeed, the EPA even doubts that this December 31, 2019 deadline would be met. In its comment letter, the EPA questioned the attainability of the Regional Board's basis for the extension of the compliance timeline, namely, that it would give the dischargers' time to "seek additional funding, investigate and implement appropriate drainage treatment technologies." (Staff Report, p. 7.) The EPA expressed "concerns regarding the feasibility of the Grassland Bypass Project (GBP) operators being able to implement appropriate drainage treatment technologies by December 31, 2019" and instead, "believe[d] it would be prudent for the [Regional] Board to consider other approaches to drainage management that could provide alternative means of meeting the proposed performance goal by 2015 and the final water quality objective by 2019," such as a targeted removal of lands that contribute high selenium inputs and rotational land following. (EPA Comment Letter, April 26, 2010.) The Regional Board's responses to these comments—that the dischargers would have to submit a report to the Regional Board, and that the Board cannot mandate that land be retired to comply with the water quality objectives—were inadequate. (See Responses R1a-C, R1c-C, and R2-USEPA.)

Moreover, the Regional Board's statement that "[d]ischargers must comply with the Basin Plan and their Waste Discharge Requirements, but the Board does not dictate how compliance is achieved" (R2-USEPA) does little to allay concerns about actual compliance when, after having 14 years to meet the standard, the dischargers receive a nine year, three month extension.

The EPA also called into question the Regional Board's "No Project Alternative" scenario. Under the Staff Report's No Project alternative, "the multi-agency agreements and drainage management organizational structure could dissolve since there would no longer be any need for a Use Agreement." (Staff Report, p. 20.) Only by assuming that there would be a collapse in the cooperative work in the grasslands could the Regional Board conclude that "[o]verall, long-term and cumulative impacts of the proposed alternative are anticipated to be more environmentally favorable than the No Project Alternative due to the continuation of the current framework for multiple agency coordination." (Staff Report, p. 20.) The EPA comment letter notes that because "there are other programs and commitments that could step in if necessary [such as Westside Drainage Plan and/or Irrigated Lands Regulatory Program, or "ILRP"]," the No Project scenario and the serious environmental impacts that would result from such a "collapse" in cooperative work may be "overstated." (EPA Comment Letter, April 26, 2010.)

In response to similar concerns raised by the Environmental Coalition (several of whom are signatories to this letter) the Regional Board responded: "[The] draft GBP EIS/DEIR authors informed staff that continuation of coordinated regional efforts is uncertain if the Use Agreement is not extended. The possibility that regional cooperation may disappear without the Amendments does not change the Board's authority or responsibility to regulate, but it does raise logistical and policy issues that would take time to fully work out, and environmental impacts that are minimized or avoided now through regional monitoring and management could occur during the transition to issuance and enforcement of individual orders. There would be a very real possibility of increased impacts to drainage-area wildlife while the selenium control program is transitioned from regulating a single discharge to regulating multiple discharges; as well as the anticipated impacts to agriculture from lack of adequate drainage as described in the GBP EIS/EIR." (Response to Comments, R1d-C.)

In response to the EPA's concerns, the Regional Board stated: "The Westside Regional Drainage Plan is not a regulatory document. If the cooperative regional drainage management effort dissolves, staff will consider all regulatory options, including issuance of individual WDRs or inclusion of the Grassland drainers in the ILRP." (Response to Comments, R3-USEPA.)

These responses fail to adequately address the EPA's suggestion that the ILRP could be an adequate substitute for the current cooperative agreement. And they fail to show how even with the speculated collapse of the cooperative agreement that the No Project Alternative is more environmentally damaging than having no protective selenium standards for the nine year, three month extension when admittedly the Regional Board would have other regulatory options and duties to implement.

Further, the staff report's description of what could occur under the No Project alternative indicates that regulation of these toxic contaminants could be done, but staff considers it more convenient to delay enforcement of the regulation until some unknown treatment can be developed. Both federal and state water quality statutes demand the waters of the state not be degraded, even if regulation is difficult. Discharge of pollution is not a right of drainers' use of imported water.

The EPA also outlined the potential for the Basin Plan Amendment to conflict with upcoming federal regulations. EPA indicated that it will soon publish revised CWA 304(a) aquatic life criteria for selenium. These standards will be *more stringent than even the 5 µg/L standard that would be implemented on October 1, 2010 if the more polluting amendment is not adopted*. EPA is also developing statewide wildlife criteria for selenium, pursuant to Endangered Species Act consultation with US FWS and National Marine Fisheries Service, for the California Toxics Rule. These criteria will most likely be more stringent than the revised draft national CWA 304(a) criteria, since they will be designed to protect threatened and endangered species in California.

2. The United States Fish and Wildlife Service (USFWS)

The USFWS issued nine pages of comments on the proposed Basin Plan Amendment, emphasizing its "longstanding interest in ensuring water quality in the Grasslands Ecological Area and the San Joaquin River," and its preparation of the December 18, 2009, Grasslands Bypass Project Biological opinion. (USFWS Comment Letter, received May 8, 2010.) Among other things, USFWS criticized the Regional Board's Staff report for failing to consider new water quality information which showed that selenium levels exceeded 20 µg/L on the San Joaquin River during at least 4 months in 2009, failing to address selenium water quality impairments and provide remedies, and failing to address cumulative impacts. In particular, the USFWS requested that the Regional Board consider the protection of Chinook salmon and steelhead in the San Joaquin River, including the reach between Sack Dam and the Merced River, in this Basin Plan Amendment. The Service believes that as written, the revised compliance schedule and lack of an enforceable water quality objective for selenium in the San Joaquin River upstream of the Merced River until December 31, 2019, is not protective of salmonids and could result in the loss of or harm to out migrating young salmon in the San Joaquin River. (USFWS Comment Letter, p. 6.)

The Regional Board responded that the "[one of the reports cited by USFWS] was considered in drafting the staff report; however modifications to the national criterion for selenium on which the San Joaquin River objective is based are outside the scope of the proposed Amendments." (Response to Comments, R3-USFWS.)

This response fails to address the USFWS' concern regarding the impacts of the proposed amendment on the protected species in the area directly affected by the proposed Basin Plan Amendment. The USFWS' concerns are squarely within the Regional Board's purview. As the USFWS remarked, the proposed 9 year extension and the contamination it would allow compounds the reasonable and beneficial use problem that has eluded effective resolution. Namely: *"Exceedences of the State-adopted, federally approved chronic water quality objective for selenium in the Grassland wetland water supplies are a continuing problem and are resulting in failure to protect designated beneficial uses, including use by wildlife species."* (USFWS Comment Letter, p. 3 [emphasis in original].)

The EPA and USFWS letters corroborate key problems with the proposed open-ended extension identified, and further detailed, in the Environmental Coalition comments. The proposed alternative of a two-year extension would better protect water quality and further federal laws and policies. The failure to adopt that alternative cannot be avoided simply via speculation about the failure of continued cooperation of regional stakeholders. We urge the State Board to take over the control and regulation of the selenium discharge from the San Joaquin Valley using the federal San Luis Drain to transfer this pollution to the San Joaquin River and Sacramento-San Joaquin Delta.

THE REGIONAL WATER BOARD'S APPROVAL CONFLICTS WITH STATE AND FEDERAL ANTI-DEGRADATION POLICY

Both USEPA (40 CFR §131.12) and the State of California (State Water Board Resolution 68-16) have adopted antidegradation policies as part of their approach to regulating water quality. The Regional Water Board must ensure that its actions do not violate the federal or state antidegradation policies. And yet they readily admit waiving the selenium pollution control standards for another 9 years and 3 months will degrade the waters of the state:

"With the amendments, water quality in Mud Slough (north) will remain vulnerable to degradation for up to an additional nine years, three months beyond 1 October 2010." (Staff Report, at p. 25)

"Continued discharge constitutes an increase in waste volume over conditions without the amendments." (Staff Report, p. 26.)

The Staff Report seemingly argues this degradation will only occur in Mud Slough and therefore it is acceptable:

The existing beneficial uses of Mud Slough (north) are irrigation (limited by naturally occurring salt and boron); stock watering; contact and non-contact recreation; warm freshwater habitat; spawning and wildlife habitat. Adopting the amendment will not change attainability of these uses relative to current conditions, but will result in temporary continuation of the potential impairment to warm freshwater habitat, spawning and wildlife habitat now occurring relative to no project. [Staff Report at p. 25]

This argument suggests that after over a decade of sanctioning the pollution Mud Slough and the San Joaquin River, such degradation necessarily sanctions further degradation by these drainers. Furthermore, this circular argument ignores the spread of selenium pollution throughout the lower San Joaquin and the Sacramento-San Joaquin Delta.

APPROVAL OF THE OPEN-ENDED EXTENSION WOULD FRUSTRATE IMPLEMENTATION OF KEY BASIN PLAN OBJECTIVES

Compliance with Basin Plan objectives and their implementation program is mandatory. (See *State Water Res. Control Bd. v. Office of Admin. Law* (1993) 12 Cal. App. 4th 697, 701-02.) The proposed nearly decade-long compliance extension comes in direct conflict with crucial Basin Plan Objectives, and the proposed amendment fundamentally alters the basin plan selenium pollution controls out of meaningful existence. Waiving enforcement or "implementation" for almost a decade has the effect of sanctioning pollution that will bioaccumulate in plant material, enter the food chain, and gather in groundwater and surface water supplies so as to significantly impact beneficial uses for decades.

The Regional Board admits that the "proposed time extension will . . . potentially result [] in violation of the selenium water quality objective in Mud Slough (north) and the San Joaquin River above the Merced River." (Staff Report Environmental Checklist, Section 9 "HYDROLOGY and WATER QUALITY.") The Basin Plan *prohibits* "[a]ctivities that increase the discharge of poor quality agricultural subsurface drainage." (Basin Plan, Resolution No. 96-147, p. 16.) The record shows the Regional Board's action will allow discharge of selenium contaminated water into Mud Slough, a tributary of the San Joaquin River, in excess of Basin Plan water quality objectives. The Regional Board amendment fails to take action to stop selenium discharges to Mud Slough and the San Joaquin River in excess of Basin Plan Water Quality Objectives. The failure to stop this discharge of pollution will further deteriorate the waters of the state and the Sacramento-San Joaquin Delta and its tributaries.

Furthermore, the Basin Plan requires that "[w]here the Regional Water Board determines it is infeasible for a discharger to comply immediately with such objectives or criteria, compliance shall be achieved in the shortest practicable period of time (determined by the Regional Water Board), not to exceed ten years after the adoption of applicable objectives or criteria." (See Basin Plan, at III-2.00.) The ten years has not only already been exhausted, it has been exceeded, as the objectives were promulgated in 1996. (Resolution 96-147.) Allowing additional time for compliance is a violation of the Basin Plan. (See Basin Plan, at III-2.00.)

Under the Basin Plan disposal of drainage wastewater and dilution of salt is not a beneficial use and "cannot be satisfied to the detriment of beneficial uses." (Resolution No 96-146; Basin Plan, p. II-1.00, Para. 2.) As the USFWS outlined, the extension of the compliance timeline for almost ten years will harm the other beneficial uses recognized in the Basin Plan.

The regional board staff response is woefully inadequate, as it essentially asserts the best way to achieve "compliance" is to change the Basin Plan rules or not enforce them: "It should be noted that the proposed change in the compliance schedule conforms to the time frame in the Grassland Bypass Project Use Agreement. The proposed Amendments merely allow the Use Agreement to be implemented while remaining in compliance with our Basin Plan." (R2-USFWS at p.32.)

APPROVAL OF THE SELENIUM POLLUTION WAIVER IS NOT IN COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

The Regional Board invoked the regulatory exemption from the California Environmental Quality Act ("CEQA") for the Basin Planning process, arguing that its Staff Report and checklist were adequate to meet the further documentation required under Title 23, section 2377 of the California Code of Regulations. Instead of doing its own complete environmental analysis, the Regional Board relied almost exclusively on the EIS/EIR for the Grasslands Bypass Project (2010-2019), prepared by Bureau of Reclamation and San Luis & Delta-Mendota Water Authority, to satisfy CEQA. Delta-

Mendota certified the EIR on February 8, 2009, and filed its Notice of Determination with the State Clearinghouse on October 8, 2009. The Bureau's Record of Decision issued December 18, 2009.

However, the exemption for the certified state regulatory programs is not a blanket exemption from CEQA, as the agency must still comply with CEQA's policies, evaluation criteria and standards. The required environmental review must address all activities and impacts associated with a project. (*Laupheimer v. California* (1988) 200 Cal. App. 3d 440; *Environmental Protection Information Center, Inc. v. Johnson* (1985) 170 Cal. App. 3d 604.) The Regional Board must still provide responses to significant environmental objections, and must still properly analyze alternatives (including the No Project Alternative). (*Mountain Lion Foundation v. Fish & Game Com.* (1997) 16 Cal. 4th 105, 123.)

The Regional Board failed to satisfy even these basic requirements. The Regional Board improperly discounted crucial new evidence, postdating the 2009 EIS/EIR and directed specifically at the Regional Board's review and action on the Basin Plan amendment. For example, the Regional Board failed to consider the information contained in the 2010 EPA and USFWS letters, research biologist Dennis Lemly's findings in December 2009 regarding salmonid mortality rates caused by selenium discharges in the San Joaquin River, and Thomas Maurer's 2010 assessment of salmonids. These sources, as well as other comment letters, demonstrate that in its 2010 review, the Regional Board misidentified the No Project Alternative, evaded genuine assessment of the two-year extension alternative, and understated the project's significant environmental impacts. In addition to water quality and others, those impacts include impacts on the use of floodwaters, and on the protection of aquatic life and fisheries.

APPROVAL OF THE AMENDMENT -- BASICALLY AN ENFORCEMENT WAIVER FOR SELENIUM POLLUTION -- VIOLATES LAWS PROTECTING ENDANGERED SPECIES

The Regional Board failed to conduct adequate analysis under either federal or state endangered species laws. The Regional Board's citing of federal consultation letters with the Bureau of Reclamation -- the NOAA NMFS Concurrence letter dated November 19, 2009 or the USFWS Biological Opinion dated December 18, 2009 -- is insufficient for California Endangered Species Act ("CESA") compliance. Reliance on the NOAA NMFS Consultation dated November 19, 2009 is insufficient as the letter does not analyze a waiver of the 5 µ/L selenium standard that extends until January 1, 2020. Nor does the letter take into account new evidence of additional impacts from December 2009 and early 2010 provided by USFWS and Dennis Lemly. In addition, the Water Board failed to consider the cumulative impacts of the discharge allowed under the proposed Basin Plan Amendment on the San Joaquin River and Delta ecosystem, inhabited by several federally and state listed species. The Regional Board's entire statement regarding compliance with CESA in the Draft Staff Report is as follows:

"[California Department of Fish and Game ("CDFG")] has been working closely with the Bureau and Authority to craft the 2010-2019 Use Agreement's wildlife monitoring and protection and impact mitigation requirements." (Staff Report, p. 28.) This falls far short of CESA's requirement that either the CDFG issue concurrence statements for the NMFS and USFWS Biological Opinions, or issue separate CESA clearance for Delta Smelt, San Joaquin Kit Fox, Giant Garter Snake, Swainson Hawk Sacramento River winter-run Chinook, spring run Chinook, and other state-listed species affected by the Proposed Action.

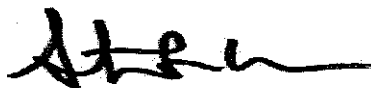
We further recommend the State Board consider taking over the regulation and control of selenium discharges so that this selenium drainage pollution is not merely exported from the San Joaquin Valley to the Sacramento-San Joaquin Delta. We urge the State Board to exercise both its water quality, water rights and public trust authority to ensure this pollution does not further degrade the waters of the state and nation. The Central Valley Regional Water Quality Control Board believes controlling this selenium pollution at its source—the export of Delta water to irrigate toxic selenium soils and then sending the drainage selenium pollution back—is not within its regulatory authority. Such pollution control and unreasonable use is within the State Board's authority.

Finally, the Regional Board refuses to effectively address and regulate Westside upslope selenium contamination. State Board action should be undertaken to complete a watershed sediment/selenium reduction program to reduce upslope selenium inputs from Westlands and surrounding irrigated areas or to control upslope selenium contaminants during storm events.² This program should include the unregulated Delta Mendota Canal sumps that are within the project area and lands to the north of the project area that still discharge into the wetland channels with impacts to endangered species and aquatic ecosystems. Further, extensions of any Selenium waiver should be contingent on compliance with protective water quality objectives for salmon in the San Joaquin River upstream of the Merced, and contingent on compliance with compliance with the 2 ppb SE objective in the Grasslands wetland channels. The interim 2 year extension recommended to the Regional Board was ignored. Such an approach would provide the opportunity to see if treatment methods actually exist that are effective. It would also provide time to investigate control measures to reduce Se pollution in the San Joaquin River at Hills Ferry that exceed drinking water standards. We include the September 22, 2010 comments of C-Win, CSPA and AquAlliance by reference.

Thank you for the opportunity to comment.



Jim Metropulos
Senior Advocate
Sierra Club California



Steven L. Evans
Conservation Director
Friends of the River

² See pages 89-91 of the May 27, 2010 transcript.

W. F. Zeke Grader, Jr.

Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's
Federation Association Inc.

Jonas Minton

Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League

Conner Everts

Conner Everts
Executive Director
Southern California Watershed Alliance

Byron Leydecker

Byron Leydecker
Chair
Friends of Trinity River

Frank Egger President
North Coast Rivers Alliance



NORTH
COAST
RIVERS
ALLIANCE



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS



WINNEMEM WINTU TRIBE

14840 BEAR MOUNTAIN ROAD • REDDING, CA • 96003
PHONE: 530-275-2737 • FAX: 530-275-4193
WWW.WINNEMEMWINTU.US



April 26, 2010

Gail Cismowski
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Re: Comments on Draft Staff Report for Grasslands Bypass Project Basin Plan Selenium Amendments to The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins

Dear Ms. Cismowski:

Thank you for the opportunity to provide input concerning the proposed Grasslands Bypass Project Basin Plan Amendment to allow continued selenium discharges to Mud Slough and the San Joaquin River in excess of Basin Plan Water Quality Objectives. As we understand it, the proposed action is to delay implementation of the 5 µg/l (4 day average) Basin Plan Objective for selenium in Mud Slough (north) and the San Joaquin River from Sack Dam to the Merced River from October 1, 2010, until December 31, 2019. It also proposes a **new** 15 µg/l (30 day average) interim "Performance Goal" for the same water bodies effective December 31, 2015.

The Grasslands Bypass Project currently discharges highly contaminated agricultural drainage water via 27 miles of the San Luis Drain into Mud Slough with a daily average selenium concentration of 54 ppb (30 day average). The Grasslands Area Farmers admittedly do not have the funds or the technology to reduce the concentration of selenium in their drainwater.¹

The signatory organizations recommend that the proposed 10-year extension to continue harmful selenium discharges into Mud Slough and the San Joaquin River from Sack Dam to the Merced River NOT be granted. Instead, we recommend that a maximum 2 year extension be granted, with a caveat that the "Best Available Technology" of land retirement be exercised along with additional monitoring and a watershed sediment/selenium reduction program to reduce upslope selenium inputs during storm events.

We also request that the Central Valley Regional Water Quality Control Board recommend that the State Board issue a cease and desist order (CDO) of surface water deliveries for irrigation of the Grasslands area and lands draining to the Grasslands area based on the technical and economic infeasibility of irrigating drainage problem lands in the Grasslands Drainage Area and the larger San Luis Unit of the CVP. In the CDO, we recommend also that the State Board make a finding of wasteful and unreasonable use of water pursuant to Water Code Section 100 and violation of the Public Trust.

The Basin Plan Amendment proposal is deficient and should be rejected by the Regional Board for the following reasons, which are explained in greater depth in the attached detailed comments:

- ❖ The Environmental Impact Report/Statement (EIR/S) certified by the San Luis Delta Mendota Water Authority and the proposed Regional Board staff Functional Equivalency Document (FED) do not meet the legal requirements of CEQA and

¹ GBP Final EIS/R, p ES-2, Section ES-2. http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4412
Accessed 4/20/10.

are not based on the Regional and State Boards' responsibilities to protect beneficial uses of water.

- ❖ The purpose and need for "continuous water quality improvement" of the San Joaquin River is not met under the Use Agreement's proposed load objectives for wet and above-normal water years until 2015 because improvements sought through the proposed project are not continuous and are essentially deferred for over 9 years without promise that water quality standard violations would be resolved even by then.
- ❖ There is no attempt to achieve compliance in the proposed project's design with the California Endangered Species Act (CESA) for the Delta Smelt, Giant Garter Snake, Swainson's hawk, San Joaquin Kit Fox and other state-listed species for the Proposed Action. There is no information in the record that the project proponents have done anything other than coordinate with the Department of Fish and Game's (DFG) Wildlife Refuge unit, but there has not been coordination with DFG's CESA unit. Coordination should not be confused with attaining protection and recovery of endangered species.
- ❖ The proposal jeopardizes restoration of the San Joaquin River's salmon runs by continuing to kill up to 50% of juvenile salmon and Central Valley steelhead due to aquatic, bioaccumulating selenium exposure. NMFS' concurrence memo under the Endangered Species Act did not consider information from U.S. Fish and Wildlife Service and selenium/salmonid research biologist Dennis Lemly that the EIS/EIR underestimates San Joaquin River juvenile salmonid selenium, exposure, bioaccumulation, and subsequent mortality.
- ❖ The Draft Staff Report is inaccurate in its assertion that all agricultural lands discharging contaminated drainage into the Grasslands Drainage Area are participating in the Grasslands Bypass Project. Some lands do not participate in the Grasslands Bypass Project and continue to discharge into wetland water supply channels.
- ❖ There is ample evidence that the Grasslands Bypass Project and the larger Westside Regional Drainage Plan are concentrating and storing selenium, salt and boron in the shallow aquifers of the region, prolonging the risk of surface water discharges with large selenium loads and regional degradation of groundwater.
- ❖ There is strong evidence contained in the U.S. Fish and Wildlife Service's Biological Opinion for the Grasslands Bypass Project and other reports of existing and continued high risk of selenium exposure to listed species and birds protected under the Migratory Bird Treaty Act from the Grasslands Bypass Project.

- ❖ The Existing Basin Plan Water Quality Objectives for selenium are inadequate to prevent bioaccumulation and harm to various terrestrial and aquatic species. The U.S. Environmental Protection Agency is in the process of issuing new selenium water quality criteria nationally and for the Bay-Delta that are more restrictive than the existing 5 µg/l water quality objective.
- ❖ Monitoring is inadequate to verify whether claims of success are actually true.
- ❖ Land retirement and cost effectiveness were not considered in the FED at all as the Best Available Technology. There are no financial or technical assurances that the Basin Plan selenium objectives will EVER be met. **The Public Trust is not being met.**
- ❖ Cumulative effects of water transfers in the lower San Joaquin River Basin in recent years coupled with increased groundwater pumping are not considered. There has been no evaluation or consideration of what is the best type and amount of groundwater pumping combined with land retirement to reduce high salty/seleniferous groundwater in the region, as recommended in the Rainbow Report.
- ❖ The mitigation water supply for additional wetland habitat within federal and State refuge areas has not been assured to be free of selenium because its source is local groundwater within drainage impaired areas. This violates the National Wildlife Refuge System Improvement Act of 1997 (PL 105-57), which stipulates that the Secretary of Interior shall under Sec 5 4(a) “assist in the maintenance of adequate water quantity and water quality to fulfill the mission of the Refuge System and the purposes of each refuge.” A more suitable mitigation water supply would be Delta Mendota Canal water from the Delta.
- ❖ There is no regional enforcement plan by the Regional Board or State Board to control application of surface water supplies to upslope lands such as the northerly area of Westlands that are contaminated with selenium and other toxic materials naturally occurring in soils. The irrigation of those upslope areas creates a hydraulic gradient of contaminated groundwater that contributes to the discharges via the Grasslands Bypass Project.
- ❖ There is no plan for monitoring or remediation of the excessive levels of mercury which Mud Slough discharges to the San Joaquin River. Mud Slough discharges 50% of the methylated mercury found in the San Joaquin River at Vernalis during the non-irrigation season, yet only provides 10% of the river’s flow during the non-irrigation season.
- ❖ There is no watershed plan to prevent or reduce selenium contaminated runoff from the upper watershed during storm events. There is strong evidence that

storm-related periodic overland sheet flow causes substantial spikes of selenium in the Grasslands area that persist and bioaccumulate.

- ❖ There is no federal Fish and Wildlife Coordination Act Report for this project; therefore, the project is not in compliance with the Fish and Wildlife Coordination Act.

In short, our organizations consider this “*Draft Staff Report for Amendments to The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins To Address Selenium Control in the San Joaquin River Basin*” to be seriously inadequate and not in compliance with the California Environmental Quality Act, the National Environmental Policy Act, the Porter-Cologne Act, the Federal Clean Water Act, the California Endangered Species Act, the Federal Endangered Species Act, the Fish and Wildlife Coordination Act, the Migratory Bird Treaty Act, the California Water Code, the Delta Protection Act, the Reclamation Act, the California Constitution’s prohibition on Wasteful and Unreasonable Use of Water (Article X, Sec 2), and other applicable laws and regulations.

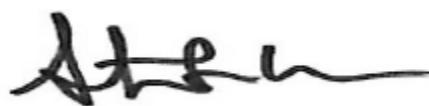
Please include our organizations and contact persons on your distribution list for all further notices related to these and all other Basin Plan Amendments affecting selenium in the San Joaquin River and Mud Slough.

Our specific comments on each point of contention are attached.

Respectfully submitted,



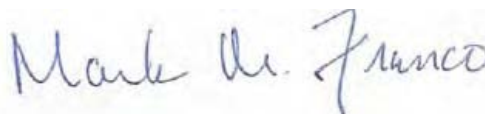
Jim Metropulos
Senior Advocate
Sierra Club California



Steven L. Evans
Conservation Director
Friends of the River



Karen Schambach, California Field
Director, Public Employees for
Environmental Responsibility



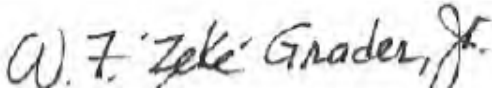
Headman, Winnemem Wintu Tribe



Carolee Krieger, President
California Water Impact Network



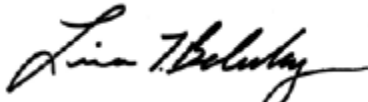
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance



Zeke Grader, Executive Director
Pacific Coast Federation of
Fishermen's Associations



Larry Collins, President
San Francisco Crab Boat Owner's Association



Lisa T. Belenky, Senior Attorney
Center for Biological Diversity
351 California St., Suite 600
San Francisco, CA94104
Phone: 415-436-9682 x 307
Fax: 415-436-9683
lbelenky@biologicaldiversity.org

Michael Warburton
Executive Director
The Public Trust Alliance
A Project of The Resource Renewal Institute



Byron Leydecker, Chair
Friends of Trinity River



Barbara Vlamis, Executive Director
AquAlliance

Frank Egger, President
North Coast Rivers Alliance

Nadananda, Executive Director
Friends of the Eel River



Mark Rockwell, D.C.
V.P. Conservation, N. Calif. Council
Federation of Fly Fishers



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League



Wenonah Hauter
Executive Director
Food and Water Watch

cc: Ken Salazar, Interior Secretary
David Hayes, Deputy Interior Secretary
Don Glaser, BOR Regional Director
Rod McGinnis, NMFS
Ren Lohofener, USFWS
Dan Nelson, San Luis Delta-Mendota Water Authority
Alexis Strauss, USEPA
Charles Hoppin, Chairman SWRCB
Karl Longley, Chairman CVRWQCB
Lester Snow, Resources Secretary
John McCamman, Department of Fish and Game
Mark Cowin, Department of Water Resources
Mark Madison, City of Stockton
Interested parties

SPECIFIC COMMENTS ON THE PROPOSED BASIN PLAN AMENDMENT

- 1. The Environmental Impact Report/Statement (EIR/S) certified by the San Luis Delta Mendota Water Authority and the proposed Regional Board staff Functional Equivalency Document (FED) do not meet the legal requirements of CEQA and are not based on the Regional and State Boards' responsibilities to protect beneficial uses of water.**

The Purpose and Need Statement for the Final Environmental Impact Statement and Report (EIS/EIR) for the Grasslands Bypass Project 2010-2019 “*To facilitate drainage management that maintains the viability of agriculture in the Project Area and promotes continuous improvement in water quality in the San Joaquin River*” was unduly narrow for the Regional Board and State Board to consider the proposed Basin Plan Amendments because it favors continued agriculture over beneficial uses of water. The range of alternatives fully analyzed was not reasonable because neither the lead agencies nor the Regional Board in the Draft Staff Report considered the possibility of land retirement as a permanent solution to selenium tainted drainage. In focusing on keeping agriculture in business in this area is to ignore the Board's mandate to protect all beneficial uses of water. Alternatives which would consider land retirement, conversion of cultivated lands to solar farms, and Integrated Farm Drainage Management (IFDM) were not considered because the Purpose and Need Statement was inherently the continuation of status quo agriculture in the Project Area, at the expense of water quality and other beneficial uses.

The proposed 9 year 3 month time extension to meet the 5 µg/l Basin Plan selenium objective and TMDL for Mud Slough (north) and the San Joaquin River from Sack Dam to the confluence of the Merced River is an egregious deferral of the State Board and Regional Board mandates to protect beneficial uses of water under the federal Clean Water Act and the Porter Cologne Water Quality Control Act.² The justification for the State action is that agricultural profits and viability will be ensured (see Draft Staff Report, p 48 of 60). The Grasslands Bypass Project has already been extended once before for 8 years with promises that Basin Plan Selenium Objectives would be met by 2009, yet now an additional 9 years and 3 months is requested based on a thin hope that technology and publicly subsidized funding will be available to construct and operate a drainage treatment facility. It is clear that the proposal is simply a stalling tactic to continue to extract as many public subsidies as possible until the land is salinized or a technological miracle occurs.

² § 13000 PORTER-COLOGNE WATER QUALITY CONTROL ACT: The Legislature further finds and declares that activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.

The EIS/R analysis includes an unrealistic No Action Alternative that skews the analysis toward the Proposed Action, rather than an Environmentally Preferred Alternative that would ultimately reduce overall creation of seleniferous agricultural drainage, not just discharges through the Grasslands Bypass Project and Mud Slough.

The California Water Impact Network (C-WIN) and the California Sportfishing Protection Alliance (CSPA) recommended throughout EIS/EIR process³ a maximum two year extension and evaluation of an alternative which includes land retirement and reinitiation of the San Luis Drainage Decision Analysis process originally launched by the U.S. Geological Survey. We believe that our recommended alternative will lead to a solution that is cost effective and technically feasible, but it has been unreasonably rejected and ignored. The C-WIN/CSPA Alternative is more likely to lead to zero discharge of subsurface contaminated agricultural drainage sooner and more continuously from the Grasslands Drainage Area to Mud Slough and the San Joaquin River than the proposed action which admittedly⁴ relies on unproven and unfunded technology. The Regional Board staff has summarily dismissed the C-WIN/CSPA proposal as the same as the No Action Alternative because of the 2 year time frame. However, the No Action Alternative contains no plan for land retirement and is therefore not the same alternative.

Staff's description of the No Action Alternative is not accurate because absent the proposed action, vigorous regulatory enforcement by the Regional Board to institute source control would alleviate the water quality problems using its authorized powers. Even the Regional Board, in its comments on the DEIS/EIR noted as follows:

"The No Project alternative seems mischaracterized. Why would the "ongoing program for drainage management" cease if the Use Agreement were not extended. If the extension is not granted, wouldn't it simply mean the discharges must employ more aggressive source control measures while the Project continues to develop to the point where all drainage can be managed to avoid violating water quality objectives?"⁵

The City of Stockton, in its September 3, 2009 comment letter on the FEIS/EIR astutely noted as follows:

"Because the No Action Alternative makes unreasonable and unsupported assumptions about agricultural and water management practices in the Project Area under the no-action scenario, many if not all of the EIS/EIR's determinations regarding the significance of Project-related environmental impacts are undermined. The failure to

³ C-WIN/CSPA Comments on the GBP EIS/R are incorporated by reference and available at <http://www.c-win.org/poisoned-lands-and-grasslands-bypass-project.html>, accessed 4/21/10.

⁴ GBP Final EIS/R, p ES-2, Section ES-2.
http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4412 Accessed 4/20/10.

⁵ GBP FEIS/R Responses to State and Regional Agency Comments p 19 of 40,
http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4432 accessed 4/20/10.

evaluate a credible No Project Alternative is a fatal flaw that requires that the EIS/EIR be revised and recirculated to evaluate a No Action Alternative that is grounded on evidence and reasonable assumptions regarding likely future management and drainage control actions in the absence of Project implementation.”⁶

The EIR/S therefore sets up an unrealistic worst case scenario for the No Action Alternative, which then predisposes the analysis to enable the SLDMWA to recommend the Preferred Alternative. Unfortunately, despite appropriate comments by Regional Board staff on the EIS/EIR, the Regional Board’s own environmental checklist on the Basin Plan Amendment does not address the deficiencies of the EIS/EIR. It simply reiterates support for continued irrigated agriculture in the Grasslands Drainage Area (environmental checklist items 2 and 9), when the Regional Board should instead be ensuring that all beneficial uses of water are protected.

The Regional Board should more meaningfully address CEQA in its environmental checklist and Functional Equivalency Document (FED). CEQA provides for an exemption from preparation of an EIR for plans, policies, or guidelines adopted under the State Board’s Water Quality Control (Basin)/208 Planning Program, so long as a written report is prepared and submitted in compliance with sections 3777-3781 of the State Board’s regulations (Public Resources Code § 21080.5; 23 C.C.R. § 3782.)

The FED does not comply with CEQA or the State Board’s regulations, because it does not analyze or mitigate the potentially significant adverse environmental impacts of the Draft Policy or identify the benefits of potential alternative approaches such as land retirement. The U.S. Geological Survey (USGS), states that “*Land retirement is a key strategy to reduce drainage because it can effectively reduce drainage to zero if all drainage-impaired lands are retired.*”⁷ The Regional Board’s FED completely ignores that well-known fact.

The Regional Board cannot approve the proposal because a feasible alternative exists—land retirement—that it has failed to consider, let alone evaluate adequately.

- 2. The purpose and need for “continuous water quality improvement” of the San Joaquin River is not met under the Use Agreement’s proposed load objectives for wet and above-normal water years until 2015 because improvements sought through the proposed project are not continuous and are essentially deferred for 10 years without promise that water quality standard violations would be resolved even by then.**

The very narrow Purpose and Need statement “*To facilitate drainage management that maintains the viability of agriculture in the Project Area and promotes continuous*

⁶ Letter from Mark Madison, Director of Municipal Utilities, City of Stockton to Judy Tapia and Joe McGahan, 9/3/09.

⁷ Open File Report No. 2008-1210. <http://pubs.usgs.gov/of/2008/1210/>; accessed 4/18/2010

improvement in water quality in the San Joaquin River” is not met, even by the proposed action because the proposed 2010-2015 load limits remain the same as existing load limits.

The selenium load limits in the proposed Use Agreement for wet and above normal years fail to show continuous improvement in the first five years of the proposed extension because they are the same as existing discharge limits for those water year types, and therefore conflict with the project purpose and need for continuous improvement of water quality in the San Joaquin River. Given that some of the largest selenium discharges occur as a result of storm runoff in wetter years, this provides little assurance of “continuous improvement” of water quality because it leaves intact the likelihood that sources of high selenium loads will be inadequately controlled during wetter years.

- 3. There is no attempt to achieve compliance in the proposed project’s design with the California Endangered Species Act (CESA) for the Delta Smelt, Giant Garter Snake, Swainson’s Hawk, San Joaquin Kit Fox and other state-listed species for the Proposed Action. There is no information in the record that the project proponents have done anything other than coordinate with the Department of Fish and Game’s (DFG) Wildlife Refuge unit, but there has not been coordination with DFG’s CESA unit. Coordination should not be confused with attaining protection and recovery of endangered species.**

The EIS/EIR and Regional Board Draft Staff Report mention, but do not demonstrate how the proposed project and basin plan amendment attain California Endangered Species Act compliance. The Regional Board’s Draft Staff Report simply states that “CDFG has been working closely with the Bureau and Authority to craft the 2010-2019 Use Agreement’s wildlife monitoring and protection and impact mitigation requirements.” The Department of Fish and Game (DFG) has been disappointingly silent throughout the environmental review. DFG will need to issue concurrence statements for the NMFS and USFWS Biological Opinions, or issue separate CESA clearance for Delta Smelt, San Joaquin Kit Fox, Giant Garter Snake, Swainson Hawk Sacramento River winter-run Chinook, spring run Chinook, and other state-listed species affected by the Proposed Action.

In regard to the need for a CESA consultation on the Delta Smelt, the USFWS Biological Opinion (USFWS BO) makes a statement that would lead a reasonable person to conclude that adverse impacts will occur as follows:

“...the Service believes that the smelt would more appropriately fall under the ‘may affect’ category, with the subsequent required analysis of whether or not the project is likely to adversely affect the species.”⁸

There is also substantial evidence in the USFWS BO indicating that harmful levels of selenium are bioaccumulating in San Joaquin Kit Fox and Giant Garter snakes due to consumption of contaminated rodents and amphibians, respectively (see discussion under item 8 below).

The Regional Board, as a State Agency, is also required to comply with CESA for approval of the Basin Plan Amendment. There is no indication that process with DFG has been initiated, let alone completed. Approval of the Basin Plan Amendment would therefore be unlawful pursuant to CESA.

4. The proposal jeopardizes restoration of the San Joaquin River’s salmon runs by continuing to kill up to 50% of juvenile salmon and Central Valley steelhead due to aquatic, bioaccumulating selenium exposure. NMFS’ concurrence memo under the Endangered Species Act did not consider information from U.S. Fish and Wildlife Service and selenium/salmonid research biologist Dennis Lemly that the EIS/EIR underestimates San Joaquin River juvenile salmonid selenium, exposure, bioaccumulation, and subsequent mortality.

The GBP EIS/EIR fails to provide public or peer-reviewed analysis when it responded to comments and substantial evidence that there are significant impacts to salmon, steelhead and other aquatic life from selenium exposure and bioaccumulation. The lead agencies’ response to comments was that there will be no significant impacts from selenium discharges to salmon restoration in the San Joaquin River, despite the analyses by William Beckon et al (USFWS)⁹ identifying substantial evidence that juvenile Chinook salmon are very sensitive to selenium discharges from the San Luis Unit of the CVP.

The reintroduction of Chinook salmon and existing Central Valley Steelhead are adversely affected by selenium discharges from the project, according to the memo to Tom Stokely of C-WIN from Dennis Lemly, Research Biologist¹⁰. Up to 50% of the juvenile salmon and steelhead in the San Joaquin River downstream of the Merced River would be killed by the continued selenium discharges. The USFWS, in an e-mail to Reclamation, also challenged the analysis and findings in the FEIS/EIR on impacts to

⁸ USFWS Biological Opinion on the Grasslands Bypass Project, December 2009, p 2-3
http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826 . Accessed 4/20/2010.

⁹http://www.rcamnl.wr.usgs.gov/Selenium/Library_articles/Beckon_and_Maurer_Effects_of_Se_on_Listed_Species_SLD_2008.pdf

¹⁰ http://www.c-win.org/webfm_send/9; ; accessed 4/18/2010

salmonids (Attachment 1). The response in the EIS/EIR disregarded both the C-WIN/CSPA and USFWS comments and concluded that the:

*"GBP is unlikely to have a significant impact on the fish reintroduced as part of the SJRRP. Because both projects would be expected to improve conditions for salmonids in the SJR and, therefore, they would not have a cumulatively significant impact."*¹¹

The EIS/EIR should be recirculated because there was no opportunity for the public or a peer review of claims in the EIS/EIR responses to comments that selenium loading and bioaccumulation of selenium in the Bay-Delta food chain and ecosystem is not a problem. Since the San Joaquin River from the Merced River to the Delta Boundary and Suisun Bay are listed as impaired for selenium under Section 303(d) of the Clean Water Act (SWRCB 2006), the EIR/S's claims are farfetched, at best. The FEIS does not address the overall problem of continued selenium loading and contamination of the food chain in the Bay-Delta. As the SWRCB noted in the 303(d) listing of waters in the North Bay, *"exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks)..."*¹²

The National Marine Fisheries Service's (NMFS) November 18, 2009 Endangered Species Act determination of not likely to adversely affect Central Valley Steelhead, Southern DPS of green sturgeon and other listed species could not have considered the comments of Dennis Lemly and the U.S. Fish and Wildlife Service (Attachment 1) that there would be significant mortality of juvenile salmonids and other species from selenium exposure. It is difficult to fathom that mortality of 50% of the juvenile Central Valley steelhead in the San Joaquin River would generate a finding of not likely to adversely affect if that information had been closely examined by NMFS.

Furthermore, given that attempts at restoration of Chinook salmon in the San Joaquin River are imminent through the San Joaquin River Restoration Program, the Regional Board should include cold water fisheries in the Basin Plan as a beneficial use of the San Joaquin River upstream of the Merced River.

- 5. The Draft Staff Report is inaccurate in its assertion that all agricultural lands discharging contaminated drainage into the Grasslands Drainage Area are participating in the Grasslands Bypass Project. Some lands do not participate in the Grasslands Bypass Project and continue to discharge into wetland water supply channels.**

¹¹ FEIS/EIR Responses to federal agencies page I-69 (page 69 of 80).

http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4415. Accessed 4/20/2010

¹² http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/2002cwa303d_listof_wqls072003.pdf p 30; accessed 4/18/2010.

The U.S. Fish and Wildlife Service Biological Opinion for the Grasslands Bypass Project (USFWS BO) identified additional lands within the Almond Drive drain (1,100 acres) and Poso/Rice drain area (7,000 acres). These lands either need to be included under the GDA or individual WDR's issued to reduce or eliminate selenium discharges. These areas continue to contaminate wetland water supply channels with selenium from agricultural drainage.¹³ The CVRWQCB incorrectly identifies that all lands within the Grasslands participate in the GBP. C-WIN and CSPA commented on the DEIS/EIR that these lands should be included mandatorily, but there has been no effort to incorporate those lands, and the CVRWQCB has not addressed this issue in the Draft Staff Report either.

The USFWS BO states that the drainage from these 2 areas is above 2 µg/L a majority of the time.¹⁴ The September Monitoring Report for the Grasslands Bypass Project shows elevated selenium levels (26.4 µg/L) in the Agatha Canal (that supplies water to South Grasslands wetlands) during the week of August 10, 2009.¹⁵ The same report also shows elevated selenium levels in the San Joaquin River at Hills Ferry for the week of August 11, 2009 (20.3 µg/L), August 19, 2009 (10.5 µg/L), September 8, 2009 (13.6 µg/L) and September 15, 2009 (29.0 µg/L). These numbers may be indicative of uncontrolled drainage from the Almond Drive and Poso/Rice areas immediately north of the Grasslands Drainage Area.¹⁶

The GBP EIS/R in 2001 and the EIS/R for the GBP Extension in 2009 noted that the proposed action may include the addition of approximately 1,100 acres of farmland to the GBP's Drainage Project Area (DPA), found immediately adjacent to the DPA, south of the SLD and east of the Grassland Bypass Channel, that currently drain to wetland channels, in the area identified by Chilcott (2000)¹⁷ as the Poso Rice Drain Area. The EIS/EIR for the GBP Extension noted the following with respect to these lands that continue to discharge drainage directly into the Grassland wetland supply channels that are outside of the DPA:

"The GDA does not include the lands that are described, and they are not under the jurisdiction of the Grassland Basin Drainers (GBD). Additionally the GBD have no authority to compel these lands to become part of the GBP. However, the GBD will work with the landowners in the areas described to encourage management of drain waters that may contain selenium that is entering wetland supply channels and specifically will

¹³ For location of Rice and Almond drainage areas, see Figure 4, p 11. Chilcott, J. (2000). *Review of Selenium Concentrations in Wetland Water Supply Channels in the Grassland Watershed*. Staff Report, CalEPA, California Regional Water Quality Control Board, Central Valley Region, Sacramento, CA.

¹⁴ USFWS BO, p 85-86. http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826. Accessed 4/20/2010.

¹⁵ http://legacy.sfei.org/grassland/reports/gbpdfs/gbp_0909.pdf , Table 13, p 14.

¹⁶ http://legacy.sfei.org/grassland/reports/gbpdfs/gbp_0909.pdf , Table 18, p 16.

¹⁷ Chilcott, J. (2000). *Review of Selenium Concentrations in Wetland Water Supply Channels in the Grassland Watershed*. Staff Report, CalEPA, California Regional Water Quality Control Board, Central Valley Region, Sacramento, CA.

*work with the 1,100 acres of lands that are identified as lands that "... could be annexed to the GDA."*¹⁸

Bureau of Reclamation water contracts specify that the recipient must comply with all applicable water quality standards and requirements, yet there was no discussion in the EIS/EIR of Reclamation's authority, only excuses why the Grasslands Drainers cannot annex those other lands themselves. The CVRWQCB does have the authority to require these discharges to comply with Water Quality Objectives.

The Regional Board should require that the Almond and Rice/Poso landowners participate in the Grasslands Bypass Project or be subject to individual Waste Discharge Requirements and penalties.

6. There is ample evidence that the Grasslands Bypass Project and the larger Westside Regional Drainage Plan are concentrating and storing selenium, salt and boron in the shallow aquifers of the region, prolonging the risk of surface water discharges with large selenium loads and regional degradation of groundwater.

The EIS/EIR identifies the following impacts in comparing Existing Conditions to the Proposed Action:¹⁹

- Increase in selenium and boron soil concentrations
- Unsaturated-zone soil salinity in the GDA doubles
- Projected net increases in the area affected by a shallow water table

The Grasslands 2010-2019 EIS/EIR also fails to mention the problem of boron in treated water and its suitability for irrigation use. Studies conducted to date indicate a need for a 36/1 dilution ratio of fresh water to treated drainage water in order to avoid crop damage.²⁰ Despite admission that no feasible or cost effective solution exists, the FEIS is optimistically unsubstantiated in its claims for a future solution.

Salt, selenium and boron savings extrapolated from Broadview Contract Assignment EA in the 2004 EA/FONSI on the Broadview contract "assignment" to Pajaro Valley Water Management District et al cites a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year (Reclamation 2004) from the cessation of irrigation on 9,200 acres.²¹ This amounts to a per acre reduction of 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of

¹⁸ GBP FEIS/R, Response to USFWS, page 55 Of 80,
http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4415, accessed 4/21/10

¹⁹GBP FEIS/EIR, p ES-9, 10, Table ES-1.
http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4412 accessed 4/20/10

²⁰ <http://pubs.usgs.gov/of/2008/1210/of2008-1210.pdf> , p 15 (22 of 44) ; accessed 4/18/2010.

²¹ USBR. Broadview Water Assignment Project Draft EA/FONSI. April 2004 p 4-2.

boron. Multiplying this times the remaining approximately 60,000 acres irrigated in the Grasslands area, permanent land retirement of the entire area could result in a maximum reduction of 111,000 tons of salt, 9700 pounds of selenium and 339,000 pounds of boron discharges to aquifers, groundwater and the GBP. Given that existing discharges of selenium through the GBP have been below 5,000 pounds for the past several years, it's clear that there is an ongoing accumulation of selenium, salt and boron in the groundwater within the Grasslands area.

USGS scientists forecast that aquifers of the western San Joaquin Valley contain so much selenium that even if the San Luis Drain were built with an annual discharge of 43,500 pounds of selenium/year with no new additions of selenium (no irrigation); it would still take 63 to 304 years to eliminate the accumulated selenium from the aquifers.²² This does not account for the remaining upslope selenium in nearby source rock and soils.

By ignoring permanent land retirement, the Grasslands Bypass Project through the proposed Basin Plan Amendments will continue to concentrate and store salt, selenium, boron and other toxic substances in the shallow aquifers of the Grasslands area. This creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River and the Bay-Delta estuary, especially in wetter years.

7. There is strong evidence contained in the U.S. Fish and Wildlife Service's Biological Opinion for the Grasslands Bypass Project and other reports of existing and continued high risk of selenium exposure to listed species and birds protected under the Migratory Bird Treaty Act from the Grasslands Bypass Project.

Black necked stilts and American avocets are two species that are covered by the Migratory Bird Treaty Act (MBTA)²³ and occur in the project area. The recent monitoring report on the Grasslands reuse area by HT Harvey and Associates²⁴ identified a deformed black necked stilt and abandoned stilt nests, in addition to the findings of selenium contamination. Other migratory waterfowl covered by the MBTA are adversely affected, such as northern shovelers.²⁵

The USFWS noted in its Biological Opinion that egg-selenium concentrations in avocet and stilt eggs collected at the San Joaquin River Improvement Project's Drainage-Reuse Area in 2008 exceeded all geometric mean selenium concentrations in similar

²² <http://pubs.usgs.gov/pp/p1646/> ; accessed 4/18/2010.

²³ [United States Code](#) Title 16, Chapter 7, Subchapter II

²⁴ HT Harvey and Associates, **San Joaquin River Water Quality Improvement Project, Phase I Wildlife Monitoring Report 2008. July 29, 2009**

²⁵ USFWS BO, p 88. http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826. Accessed 4/20/2010.

bird eggs collected at Kesterson Reservoir.²⁶ Kesterson was ultimately closed due to violation of the Migratory Bird Treaty Act.

The above-referenced HT Harvey monitoring report also identified several nesting Swainson's hawks (a State listed species) in the vicinity of the recently acquired lands for the San Joaquin River Improvement Project's Drainage Reuse Area and just to the south of the Grassland private wetlands.

8. The Existing Basin Plan Water Quality Objectives for selenium are inadequate to prevent bioaccumulation and harm to various terrestrial and aquatic species. The US Environmental Protection Agency is in the process of issuing new selenium water quality criteria nationally and for the Bay-Delta that are more restrictive than the existing 5 µg/l water quality objective.

In 2000, the USFWS and NMFS issued a joint Biological Opinion on the Environmental Protection Agency's California Toxics Rule.²⁷ In that Opinion, the Environmental Protection Agency committed to revise its national 304(a) acute and chronic aquatic life criteria for selenium and will propose revised acute and chronic aquatic life criteria for selenium in California. Further EPA committed to

*"...utilize existing information to identify water bodies impaired by selenium in the State of California. Impaired is defined as water bodies for which fish or waterfowl consumption advisories exist or where water quality criteria necessary to protect federally listed species are not met. Pursuant to Section 303(d) of the CWA, EPA will work, in cooperation with the Services, and the State of California to promote and develop strategies to identify sources of selenium contamination to the impaired water bodies where federally listed species exist, and use existing authorities and resources to identify, promote, and implement measures to reduce selenium loading into their habitat."*²⁸

Consistent with the California Toxics Rule Biological Opinion, the U.S. Environmental Protection Agency will shortly be issuing new national and San Francisco Bay selenium water quality criteria based on Section 304(a) of the Clean Water Act and the Biological Opinion for the California Toxics Rule.²⁹ The new selenium water quality criteria will be

²⁶ USFWS BO, p 90: "It is notable that the geometric mean, egg-selenium concentration in recurvirostrid eggs collected at the SJRIP Phase I area in 2008 (50.9 µg/g) exceeded all geometric mean selenium concentrations in recurvirostrid eggs collected at Kesterson Reservoir from 1983 to 1985 (Ohlendorf and Hothem 1994) as denoted in Tables 10 and 11."

²⁷ USFWS/NMFS Biological Opinion on California Toxics Rule; letter to Felicia Marcus, Region IX USEPA Administrator, March 24, 2000.

²⁸ USFWS/NMFS Biological Opinion on California Toxics Rule; letter to Felicia Marcus, Region IX USEPA Administrator, March 24, 2000. p 10

²⁹ Personal Communication with Diane Fleck, U.S. Environmental Protection Agency, Region IX, 4/7/2010.

based on consideration of bioaccumulation using the Presser/Luoma (USGS) model. The new water quality criteria are likely to be lower than existing Basin selenium water quality objectives of 2 µg/l and 5 µg/l.

The USFWS GBP BO provides documentation on the extent of contamination of various species. The USFWS BO utilized a “Lemly methodology” selenium toxicity assessment of the South Grasslands. The score was 20, which is considered a high hazard. The discussion states as follows:

*“Given the fact that giant garter snakes forage on fish and tadpoles, and these media are the most selenium-impacted of the media sampled in the South Grasslands, it is reasonable to conclude that the giant garter snake is likely adversely affected by selenium by their diet in this area”.*³⁰

Selenium sampling among small mammals and insects bodes poorly for the San Joaquin Valley Kit Fox; the USFWS GBP BO reported that:

*“HT Harvey and Associates began small mammal sampling in 2008 at the SJRIP drainage reuse area. That effort yielded the capture of 8 deer mice (*Peromyscus maniculatus*), 7 house mice (*Mus musculus*), and one western harvest mouse (*Reithrodontomys megalotis*) within the portion of the SJRIP Reuse Area that has been receiving drainage water since 2001 (existing project facility). Of those samples, 31.3% were at or above the LOAEC for selenium in dogs (e.g., 7.2 µg/g). It is likely that any kit foxes foraging at the SJRIP drainage reuse area would be exposed to elevated levels of selenium through ingestion of the resident mammal prey species.”*³¹

To continue waiving the 5 µg/l selenium Water Quality Objective in the Basin Plan for another 9 years and 3 months is inexcusable, given that the existing selenium water quality objectives are already not protective of fish and wildlife, and selenium bioaccumulation in biota is occurring. Recommending a 15 µg/l selenium (monthly mean) performance goal for Mud Slough (North) and the San Joaquin River above the Merced River in the Basin Plan Compliance Table IV- 4 will provide no protection to aquatic life and will result in harm to biological resources using those waters.

9. Monitoring is inadequate to verify that the claims of success are actually true.

There hasn't been enough monitoring to confirm success that in reducing discharges of selenium. Monitoring is currently inadequate to determine if selenium contamination of biota and downstream water quality is decreasing. In order to better determine impacts

³⁰ USFWS BO, p 116. http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826. Accessed 4/20/2010.

³¹ USFWS BO, p 124. http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826. Accessed 4/20/2010.

on Mud Slough and the San Joaquin River, year-round water quality monitoring and reporting from Site H and Site N should be reinstated. Total selenium loading in the San Joaquin River should be measured at Vernalis, but is not.

Waste Discharge Requirements WDR's require public disclosure of information, but there isn't enough information to claim success. To the contrary, the USFWS BO³² for the GBP indicates that there is an ongoing high hazard level of selenium contamination to the biota. American Avocet eggs in the San Joaquin River Improvement Project Phase 1 area exceeded criteria submitted to USEPA by a factor of 50% and are likely to exhibit reduced reproductive success. Liver selenium levels in shovelers, coots, and black-necked stilts from the South Grasslands during 2005 were also found to be significantly above background levels.

The USFWS BO also indicated that "...selenium concentrations in sediments and invertebrates are likely due to a continuing influx of selenium contamination that has not been fully abated in the area."³³

The USFWS Biological Opinion for the GBP makes it clear that selenium cycling continues within Grasslands and is attributable to historic use of agricultural drainage resulting in a reservoir of selenium in wetlands and supply channel sediments, storm-water inflows, and unregulated inflows of subsurface drainage directly into wetlands or indirectly into their supply channels.³⁴

Monitoring of rodents and aquatic and terrestrial insects in the Grasslands Drainage Area and downstream in the San Joaquin River and the Bay-Delta estuary would provide better information on selenium bioaccumulation in prey species to determine if a finding of No Significant Impacts is actually justified. Reinstatement of year-round monitoring and reporting at Sites H and N would provide better information on selenium concentrations in the Merced River. Measuring total selenium at Vernalis would allow determination the total amount of selenium in the San Joaquin River.

10. Land retirement and cost effectiveness were not considered in the FED at all as the Best Available Technology. There are no financial or technical assurances that the Basin Plan selenium objectives will EVER be met. The Public Trust is not being met.

Numerous government studies identify the high economic and environmental cost of continuing to irrigate these lands, and that the only reliable Public Trust solution to

³² USFWS BO, p 90. http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826. Accessed 4/20/2010.

³³ USFWS BO, p 88. http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826. Accessed 4/20/2010.

³⁴ USFWS BO, p 88. http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826. Accessed 4/20/2010.

reverse the drainage problem is to halt irrigation of these lands. The National Economic Development Cost/Benefit Summary for the San Luis Drainage Feature Re-Evaluation³⁵, disclosed that the alternative with the least amount of land retirement (100,000 acres for the In-Valley Groundwater Quality Land Retirement Alternative) had a negative benefit/cost summary amounting to \$15.603 million/year in 2050 dollars, or a negative \$780.15 million over the 50 year life of the project. Conversely, the alternative with the greatest amount of land retirement (300,000 acres- In Valley Drainage Impaired Land Retirement Alternative) had a positive benefit/cost summary of \$3.643 million/year in 2050 dollars, or a positive \$182.15 million over the 50 year life of the project. Reclamation's preferred alternative with 194,000 acres of land retirement and over 180,000 acres remaining in production, including the Grasslands (In-Valley Water Needs Land Retirement Alternative) lost \$10.149/million/year, or a loss of over half a billion dollars (\$507.4 million) over 50 years.

The National Economic Development Report Summary for the San Luis Drainage Feature Re-evaluation Record of Decision (SLDFR ROD) concluded that any alternative with less than 300,000 acres of land retirement would be a net economic loss. The Grasslands Bypass Project 2010-2019 EIS/EIR, by contrast, refuses to look at the overall economics through a National Economic Development-like approach, let alone consider land retirement. It narrowly looks at costs to local farmers only.

The U.S. Geological Survey has been clear that any solution to drainage problems must include land retirement. In relation to the San Luis Feature Re-Evaluation and subsequent settlement negotiations convened by Senator Feinstein, the USGS has stated that:

*"Land retirement is a key strategy to reduce drainage because it can effectively reduce drainage to zero if all drainage-impaired lands are retired."*³⁶

USGS goes on to state that *"The treatment sequence of reverse osmosis, selenium bio-treatment and enhanced solar evaporation is unprecedented and untested at the scale needed to meet plan requirements."*

Reclamation's CVPIA land retirement program has demonstrated that there can be a rapid reduction in shallow groundwater from cessation of irrigation.³⁷

The Feasibility Report for the San Luis Drainage Feature Re-evaluation (SLDFR)³⁸ recommended significant increases in subsidies for San Luis Unit contractors in order to

³⁵ San Luis Drainage Feature Re-Evaluation Final EIS, Appendix N Table N-10, p N-17 (21 of 36)
http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=2240 accessed 4/20/ 2010.

³⁶ <http://pubs.usgs.gov/of/2008/1210/> accessed March 29, 2010.

³⁷ CVPIA Land Retirement Land Retirement Demonstration Project Annual Reports
http://www.usbr.gov/mp/cvpia/3408h/data_rpts_links/index.html accessed 3/29/ 2010.

implement the Preferred Alternative for the SLDFR, which did not include maximum land retirement. The Feasibility Report also concluded that the Preferred Alternative which included providing drainage to continued irrigated agriculture the Grassland area was not financially feasible or economically justified (p 97).³⁹ The report concluded that the technology was feasible, but admitted as follows:

“Though the reverse osmosis treatment plants are not at a feasibility level design, this does not affect the finding of technical feasibility. Reverse osmosis technology is continually evolving and improving over time. The Report anticipates these improvements will be incorporated as they become available over the 50-year life of the project.”

The CVRWQCB Draft Staff Report (p 7) states as follows regarding reverse osmosis treatment:

“The EIS/EIR for the 2001 Use Agreement between the Bureau and Authority anticipated that appropriate drainage treatment technology could be identified within a few years of adoption of the agreement. Several technologies were tested but results have been mixed, with no clear Best Practicable Treatment and Control option emerging. The operators now have more information than they did in 2001, but treatment technology must still be tested and validated as appropriate for the GBP.”

Reclamation requested and was approved a National Economic Development waiver for the SLDFR preferred alternative, the In-Valley-Water Needs Land Retirement Alternative, which had an annual net loss of \$10,149,000 (\$507,450,000 over 50 years) and only retired 194,000 acres. We believe this was an economically unjustified decision to select an alternative which has a negative cost-benefit of over half a billion dollars over the 50 year life of the project compared to one that has a positive cost-benefit of over \$182 million. More land retirement should have been selected. The 79,000 acres in the Grasslands was not analyzed for land retirement in the SLDFR or the Grasslands 2010-2019 EIS/R. The only option considered for Grasslands under that process was continued reuse and eventual (and uncertain) reverse osmosis treatment, thus ensuring a negative cost/benefit economic analysis.

The economic analysis contained in the GBP EIS/EIR completely ignores land retirement and simply looks at costs to growers from the proposed action and concludes that the project is cost effective, although implementation costs will somewhat reduce farm profits.⁴⁰

³⁸ p xxvii, http://www.usbr.gov/mp/sccao/sld/docs/sldfr_report/index.html, accessed 3/29/ 2010.

³⁹ P 97, http://www.usbr.gov/mp/sccao/sld/docs/sldfr_report/index.html, accessed 3/29/ 2010.

⁴⁰ GBP FEIS/R, p 272 of 391, Section 8.

http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4412 accessed 4/20/10.

Reclamation's subsequent San Luis Drainage Feature Re-Evaluation (SLDFR) Feasibility Report concludes for Panoche, Pacheco, San Luis and Westlands water districts that:

*"None of the four water districts have the ability to fully repay its assigned capital costs of drainage service facilities. The implementation of either action alternative would far exceed their ability to repay the associated costs of the project when coupled with their existing obligations... None of the San Luis Unit contractors would be able to pay the Restoration Fund charges if [the] action alternative is implemented."*⁴¹

An adequate economic analysis by Reclamation, San Luis Delta-Mendota Water Authority and the Regional Board should include all costs to society of the proposed action, including, but not limited to water subsidies, loss of water-related resources elsewhere (salmon, recreation, etc.), crop subsidies, CVP Project Power Use subsidies, realistic reverse osmosis treatment costs, California Water Bond subsidies (Props 50 and 84), sediment management and disposal, and the costs of offsite environmental pollution such violation of Delta salinity standards and the need for and cost of freshwater dilution flows from New Melones to meet San Joaquin River salinity requirements. This level of accounting and analysis would provide the fullest accounting of the costs of alternatives associated with Grasslands Drainage Area problems, and would meet the disclosure requirements of NEPA and CEQA. As presented in the Grasslands 2010-2019 EIS/EIR and the Regional Board's Draft Staff Report, however, we contend that the economic analysis fails to meet the NEPA and CEQA requirement to provide full disclosure of proposed project impacts, including economic effects related to physical changes to the environment. A more thorough economic analysis for the GBP 2010-2019 would show that this project just doesn't make sense and that land retirement is the only cost effective and realistic alternative that would pass the balancing test of the Public Trust.

The SWRCB should consider the broadest economics approach of continued irrigation of these lands as it balances Public Trust Doctrine issues with the Grassland drainers' request of the SWRCB for continued delay in having to meet Mud Slough and San Joaquin River water quality standards for salt, boron and selenium. The EIS/EIR's optimistic claims for a future solution are unsubstantiated. Land retirement is the Best Available Technology and the most cost effective option, not the GBP's reliance on reverse osmosis.

11. Cumulative effects of water transfers and increased groundwater pumping are not considered. There has been no evaluation or consideration of what is the best type and amount of groundwater pumping combined with land retirement to reduce high salty/seleniferous groundwater in the region, as recommended in the Rainbow Report.

⁴¹ U.S. Bureau of Reclamation. San Luis Drainage Feature Re-evaluation Feasibility Report. March 2008. p 27.

There are several projects in the vicinity of Grasslands to pump shallow and deep groundwater into various aqueducts to provide irrigation water and water transfers.⁴² These are primarily Warren Act pumping or pumping by the San Joaquin River Exchange Contractors (10 and 25 year programs). While the Rainbow Report⁴³ states that land retirement and selective groundwater pumping are suitable tools to be used to reduce or eliminate drainage and high groundwater, there has been no evaluation of how existing groundwater pumping and associated water transfers affects drainage and groundwater in the Grasslands watershed.

Most of the signatories to this letter sent in a comment letter on March 29, 2010 outlining concerns with the most recent groundwater transfer Environmental Assessment by Reclamation.⁴⁴ Concerns include

- No Evaluation of Water Quality Impacts – Selenium & Other Contaminants
- Public Involvement has been curtailed
- The analysis relies on flawed data
- The need for the project is misleading
- The location of the over 23 CCID groundwater supply wells are not disclosed, along with an accurate description of the depth from which water is extracted
- There is no description or map of which conveyance facilities will be used for the water transport of this tainted water
- Neither hydrological data, nor peer-reviewed groundwater modeling of the volumes to be pumped, nor actual water quality data are provided to support the Bureau's conclusions of no significant impact
- The project does not adequately consider groundwater quality degradation
- The DEA does not provide any data to support the conclusion there will be no impact to threatened species such as the Giant garter snake, to Central Valley steelhead, winter-run Chinook salmon, or migratory birds

⁴² 1. *EIS/EIR Water Transfer Program for the San Joaquin River Exchange Contractors Water Authority 2005–2014*, dated December 2004.

2. *Groundwater Pumping/Water Transfer Project for 25 Consecutive Years Environmental Assessment/Initial Study SCH# 2007072012*, dated November 30, 2007.

3. *Transfer of up to 4,400 Acre-feet of Central Valley Project Water from Firebaugh Canal Water District to San Luis Water District or Westlands Water District Environmental Assessment*, dated April 21, 2009

4. *Central California Irrigation District Transfer of up to 15,000 Acre Feet to San Luis, Panoche, Del Puerto and Westlands Water Districts Environmental Assessment*, dated May 5, 2009.

5. *Amendment to Approve an Additional 5,500 Acre-Feet to Central California Irrigation District's Transfer of up to 15,000 Acre-Feet to San Luis, Panoche, Del Puerto, and Westlands Water Districts Supplemental Environmental Assessment*, dated July 23, 2009.

⁴³ Final Report of the San Joaquin Valley Drainage Program, September 1990). http://www.c-win.org/webfm_send/10. Accessed 4/21/2010.

⁴⁴ Attachment 2. Letter from Coalition to Shauna McDonald, USBR, March 29, 2010 re: Draft EA/FONSI for Transfer of up to 20,500 acre-feet of Central Valley Project Water from Central California Irrigation District to San Luis, Panoche, Del Puerto and Westlands Water Districts and up to 5,000 acre-feet of Central Valley Project Water from Firebaugh Canal Water District to San Luis Water District or Westlands Water District, EA-10-02March 2010.

- The impacts to the San Joaquin River Restoration Program are not considered
- No data or analysis is provided regarding the cumulative impacts from the project

The U.S. Fish and Wildlife Service also sent in comments on the above referenced Draft EA/FONSI for transfer of up to 20,500 acre-feet of CVP water from CCID to certain irrigation districts and 5,000 acre-feet of water from Firebaugh Canal Water District to certain irrigation districts. USFWS expressed similar concerns to those in the Coalition letter referenced above. The USFWS also recommended:

*“In addition, due to likely effects to water quality of wetland water supplies and associated adverse effects to giant garter snakes in the project area, the Service recommends that Reclamation initiate consultation with the Service pursuant to section 7(a) of the ESA for this project.”*⁴⁵

Some of the irrigation districts in the region have standards for water quality of pumped groundwater for water transfers, but others do not. There is no overall limitation or prescription for the volume, depth of pumping, and quality of groundwater pumped in the region. There is no evaluation of the water quality effects of groundwater pumping on the water quality of the confined or semi-confined aquifers.

While USGS states that groundwater pumping is part of the proposed solution for drainage problem lands by lowering high groundwater,⁴⁶ there is no discussion or evaluation of groundwater pumping parameters in either the EIS/EIR or the Regional Board’s Draft Staff Report Environmental Checklist. This is a glaring error that must be rectified prior to approval of the proposed Basin Plan Amendments for selenium in order to ensure that ongoing activities such as groundwater pumping and water transfers into and out of the region to not exacerbate poor water quality conditions, especially as it relates to selenium, salt and boron discharges through the Grasslands Bypass Project.

12. The mitigation water supply for additional wetland habitat within federal and State refuge areas has not been assured to be free of selenium because it would draw from local groundwater within drainage impaired areas. This violates the National Wildlife Refuge System Improvement Act of 1997 (PL 105-57), which stipulates that the Secretary of Interior shall under Sec 5 4(a) “assist in the maintenance of adequate water quantity and water quality to fulfill the mission of the Refuge System and the purposes

⁴⁵ Attachment 3, April 10, 2010 letter from Kenneth Sanchez, Assistant Field Supervisor, Fish and Wildlife Service to Shauna McDonald, Bureau of Reclamation regarding Comments on the Draft Environmental Assessment on the Transfer of Up to 20,500 acre-feet of Central Valley Project Water from Central California Irrigation District to the San Luis, Panoche, Del Puerto and Westlands Water Districts, and Up to 5,000 acre-feet of Central Valley Project Water from Firebaugh Canal Water District to San Luis and Westlands Water Districts, DEA-10-12.

⁴⁶ USGS Professional Paper 1210, p 3 (10 of 44). <http://pubs.usgs.gov/of/2008/1210/of2008-1210.pdf>. Accessed 4/21/2010.

of each refuge.” A more suitable mitigation water supply would be Delta Mendota Canal water from the Delta.

The proposed mitigation for impacts to Mud Slough, wetlands and wildlife refuges is to provide water supplies for additional wetland and marsh habitat on federal and state wildlife refuges and lands. The mitigation areas would likely be the China Island Unit of the North Grasslands State Wildlife Area and an as-yet unnamed unit of the federal wildlife refuge system. However, the plan is to use local groundwater. Groundwater in the Grasslands area is highly contaminated with selenium and is an inadequate source of water for refuges. There is no discussion in the EIS/EIR or the Regional Board's Environmental Checklist regarding selenium standards for these wetland mitigation water supplies. This is then an unmitigated impact without such a standard. Clean water supplies of Delta-Mendota Canal water from the Delta would be a suitable water supply, but that is not the proposed mitigation water supply.

Therefore, there is an unmitigated significant impact for loss of aquatic habitat in Mud Slough from the Proposed Project. The Regional Board should require mitigation water supplies of adequate water quality, or its FED will be deficient in mitigating this impact to less than significant levels.

13. There is no regional enforcement plan by the Regional Board or State Board to control the upslope hydraulic gradient of contaminated subsurface drainage created by irrigation of the northerly area within the Westlands Water District.

On October 22, 2008, Regional Board Executive Office Pamela Creedon wrote to Westlands Water District General Manager Tom Birmingham regarding the lack of resolution for San Luis Unit drainage problems:

“These discussions have raised concerns regarding the potential impact irrigation in the Westlands Water District may have on groundwaters of the State and its threat of exposure to wildlife. Irrigation water when applied to leach salts from the root zone possesses a threat to ground water quality both in the immediate area of application and adjacent areas where groundwater migrates.”

It is our understanding that the Regional Board has taken the position that the irrigated lands waiver of discharge applies and therefore stringent Waste Discharge Requirements are unnecessary.

This is contrary to information about the hydrogeology of the western San Joaquin Valley. The State Board's Water Rights Decision 1641⁴⁷ states as follows:

⁴⁷p 82-83

http://waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf; Accessed 4/21/2010.

“The drainage problem may not be caused entirely by the farmer from whose lands the drainage water is discharged. In the western San Joaquin Valley, the salts originate from the application of irrigation water and from soil minerals, which dissolve as water flows through the soil. The salts are stored in groundwater. As more water is applied, hydraulic pressures increase, water moves downgradient, and salt-laden waters are discharged through existing drainage systems and directly to the river as groundwater accretion. (SJREC 5a.) Drainage found in a farmer’s field may originate upslope and may not have risen into the tile drains on the downslope farmer’s land but for the pressures caused by upslope irrigation.” (SJREC 5a, pp. 27-29.)”

The Draft Staff Report ignores the upslope hydraulic gradient as a key source of contaminated irrigation drainage water that contains not only elevated salts and boron, but also selenium created by irrigation of the northerly area of Westlands and simply allows continued degradation of groundwater of the Grasslands watershed, ultimately resulting in continued excessive discharges of selenium into Mud Slough and the San Joaquin River, exceeding Basin Plan selenium water quality objectives.

14. There is no plan for monitoring or remediation of the excessive levels of mercury which Mud Slough discharges to the San Joaquin River. Mud Slough discharges 50% of the methylated mercury to the San Joaquin River at Vernalis, yet only provides 10% of the river’s flow during the non-irrigation season.

According to the San Joaquin Basin Mercury Study funded by CalFed (Stephenson et. al., 2005), Mud Slough contributes about 50% of the methylated mercury at Vernalis, but only provides 10% of the total water volume during the September-March period.⁴⁸ The project in no way attempts to monitor, let alone improve water quality for mercury discharges, despite requests by various commenters, including the U.S. Environmental Protection Agency.

The USFWS BO documents the mercury problem very well.⁴⁹ Eighteen miles of Panoche Creek and the San Joaquin River from Bear Creek to the Delta boundary are listed under the 2006 Clean Water Act Section 303(d) as water quality limited for mercury impairment. Mercury levels in fish from the lower San Joaquin River and Mud Slough have been found to have elevated mercury levels.

The Regional Board should require the Grasslands Farmers to initiate monitoring to determine the source of mercury in the Grasslands Drainage Area and initiate appropriate remediation.

⁴⁸ <http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentVersionID=10637>; accessed 4/18/2010

⁴⁹ ⁴⁹ USFWS BO, p 94-95. http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826. Accessed 4/20/2010.

15. There is no watershed plan to prevent or reduce selenium contaminated runoff from the upper watershed during storm events. There is strong evidence that periodic overland sheet flow causes substantial spikes of selenium in the Grasslands area that persist and bioaccumulate.

The EIS/EIR fails to incorporate a watershed/sediment management plan to **prevent** further sedimentation of the San Luis Drain and the subsequent need to remove sediment from the Drain, as requested by various commenters. Upslope land management activities such as overgrazing, cultivation of seasonal watercourses and lack of erosion control actions all contribute to periodic loading and concentration of selenium of sediment and water into the San Luis Drain, Mud Slough and the San Joaquin River.

Much of the selenium that comes into the Grasslands area is periodic storm-induced sheet flow from the northern portion of Westlands in the Panoche and Silver creek watersheds, as discussed in the USFWS BO⁵⁰, and upslope BLM lands. Stormwater discharges into the Grasslands area are specifically exempted in the Use Agreement from having to pay penalties, yet these periodic spikes of selenium are significant and in 1998, Presser and Luoma estimated that the cumulative El Nino year discharge of selenium from Panoche Creek was 8,000 lbs.⁵¹ Discharges range from 4 µg/L to 155 µg/L selenium during a February 1998 storm.⁵² These discharges contaminate wetland water supply channels, Mud Slough and the San Joaquin River.

The EIS/EIR fails to require development of a Watershed Plan to reduce the amount of toxic sediment that accumulates in the Drain. The Sediment Management Plan is complete, but does not include **preventative** Watershed Management Plan to prevent sedimentation in the first place. The Sediment Management Plan only deals with the contaminated sediment in 28 miles of the San Luis Drain. In some cases, the sediment in the San Luis Drain could be classified as Hazardous Waste (> 1000 µg/L). A Watershed Plan would be mitigation for use of the San Luis Drain and wetland water supply channels, and should be included as part of the project. It should be part of the decision and certainly required before the CVRWQCB approves the proposed Basin Plan Amendment.

⁵⁰ USFWS BO, p 86. http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4826. Accessed 4/20/2010.

⁵¹ Presser, T.S. and S. N. Luoma. (2006). *Forecasting Selenium Discharges to the San Francisco Bay-Delta Estuary: Ecological Effects of a Proposed San Luis Drain Extension*. U.S. Geological Survey Open-File Report 00-416, 196 pp. Available at: <http://pubs.usgs.gov/pp/p1646/>. Accessed 4/21/2010.

⁵² Chilcott, J. and R. Schnagl. (April 1, 2008). *Central Valley Selenium Control Program. Presentation to the North Bay Selenium Advisory Committee Meeting*. Central Valley Regional Water Quality Control Board, Central Valley Region, Sacramento, CA. 69 pp. Available at: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/northsfbayselenium/Central_Valley_Selenium_Control_Program.pdf. Accessed 4/21/2010.

Examples of measures in the watershed plan to prevent additional selenium inputs to Grasslands would be a limitation of cultivation of seasonal watercourses, sediment catchment basins, revegetation of erosive seasonal waterways, etc. Watershed protection programs are common throughout California. CalEPA and the Resources Agency have created a California Watershed Council to assist with such efforts.⁵³ This is not rocket science.

16. There is no federal Fish and Wildlife Coordination Act Report for this project; therefore, the project is not in compliance with the Fish and Wildlife Coordination Act.

Although the FEIS/R states that, “A *Fish and Wildlife Coordination Act* report will be provided at the conclusion of the NEPA process with recommendations, to Reclamation”,⁵⁴ the public record for the project⁵⁵ contains no record of a Fish and Wildlife Coordination Act (FWCA) Report from the U.S. Fish and Wildlife Service for this project. Since the FWCA requires such a report for activities that affect fish and wildlife, the project cannot possibly be in compliance with that law. The USFWS Biological Opinion for the Grasslands bypass Project is limited to review of listed species and is not a substitute a FWCA report.

⁵³ http://cwp.resources.ca.gov/cwc_about.php

⁵⁴ GBP FEIS/R, p 16-2 (345 of 391) http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4412 accessed 4/20/10.

⁵⁵ http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=3513, accessed 3/29/2010

LIST OF ATTACHMENTS

Attachment 1- E-mail from Thomas Maurer, USFWS, to Shauna McDonald, BOR, Subject: Reply to the BOR response to FWS comment #10 on the Continuation of the GBP Draft EIS/EIR. November 18, 2009

Attachment 2- Letter from Coalition to Shauna McDonald, USBR, March 29, 2010 re: Draft EA/FONSI for Transfer of up to 20,500 acre-feet of Central Valley Project Water from Central California Irrigation District to San Luis, Panoche, Del Puerto and Westlands Water Districts and up to 5,000 acre-feet of Central Valley Project Water from Firebaugh Canal Water District to San Luis Water District or Westlands Water District, EA-10-02. March 2010.

Attachment 3- April 10, 2010 letter from Kenneth Sanchez, Assistant Field Supervisor, Fish and Wildlife Service to Shauna McDonald, Bureau of Reclamation regarding Comments on the Draft Environmental Assessment on the Transfer of Up to 20,500 acre-feet of Central Valley Project Water from Central California Irrigation District to the San Luis, Panoche, Del Puerto and Westlands Water Districts, and Up to 5,000 acre-feet of Central Valley Project Water from Firebaugh Canal Water District to San Luis and Westlands Water Districts, DEA-10-12.

Tom Stokely

From: "Terry Young" <terry_young@mindspring.com>
To: "Tom Stokely" <tstokely@att.net>
Cc: "Hal Candee" <hcandee@altshulerberzon.com>
Sent: Friday, January 15, 2010 3:34 PM
Subject: FW: Reply to the BOR response to FWS comment #10 on the Continuation of the GBP Draft EIS/EIR
Hi, Tom. I have this response from Maurer on the salmon issue, but I scanned my records and I don't have anything like a formal letter. I'll keep looking and send it on to you if I find it.

Dr. Terry F. Young
6114 La Salle Ave. #328
Oakland, CA 94611
T 510-531-4053
F 510-531-4049

-----Original Message-----

From: [Thomas Maurer@fws.gov](mailto:Thomas_Maurer@fws.gov) [mailto:Thomas_Maurer@fws.gov]
Sent: Monday, January 04, 2010 10:51 AM
To: terry_young@mindspring.com
Subject: Fw: Reply to the BOR response to FWS comment #10 on the Continuation of the GBP Draft EIS/EIR

Terry,

here is the final response I sent to BOR on the salmonid and selenium issue. If you have any other questions let me know.

Happy 2010!
Tom

~~~~~  
Thomas C. Maurer  
Chief, Investigations and Prevention Branch  
Sacramento Fish and Wildlife Office  
U.S. Fish and Wildlife Service  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825  
(916) 414-6594  
fax 414-6713  
[thomas\\_maurer@fws.gov](mailto:thomas_maurer@fws.gov)  
~~~~~

----- Forwarded by Thomas Maurer/SAC/R1/FWS/DOI on 01/04/2010 10:37 AM

Thomas
Maurer/SAC/R1/FWS
/DOI To
smcdonald@usbr.gov
11/18/2009 05:43 PM cc
Kathy Wood/R8/FWS/DOI@FWS, Joy

Winckel/SAC/R1/FWS/DOI@FWS, Janet
Whitlock/SAC/R1/FWS/DOI@FWS, Daniel
Welsh/SAC/R1/FWS/DOI@FWS,
Douglas.Hampton@noaa.gov

Subject

Reply to the BOR response to FWS
comment #10 on the Continuation of
the GBP Draft EIS/EIR

Dear Shauna,

I was asked to review the Bureau's response to Service comment #10 on the Grassland Bypass Project FEIS and to provide comments to you. Since Dr. Beckon is in the Ukraine on a Fulbright Fellowship it took awhile longer to get his input and respond than I had planned.

For many reasons the Bureau response to Service comment #10 in the Grassland Bypass Project FEIS (Appendix I-02 pages I-59 to I-65) minimizes the likelihood that selenium levels in the lower San Joaquin River are impacting salmonids now and in the future.

The Bureau response misinterprets the discussion of the Hamilton et al. (1990) study by the Service in its Beckon and Maurer (2008) document. Beckon and Maurer (2008) noted USEPA's perceived deficiencies with the 60-90 day dataset in Hamilton et al. (1990) only to articulate why USEPA discounted the results. Not noted by the Bureau response is that Beckon and Maurer (2008) also discusses why the Hamilton et al. (1990) results are actually reflective of real-world selenium exposures and are useful data that USEPA should not have discounted. Beckon and Maurer (2008) then go on to note several other studies on salmonid sensitivity to selenium that support the Hamilton et al. (1990) 60-90 day exposure results and confirm that salmonids are very sensitive to selenium.

Saiki et al. (1991) clearly documents that juvenile salmonids were present in the lower San Joaquin River for periods of time that were sufficient for them to accumulate selenium to levels that may have caused mortality in as much as 25 percent of the fish rearing in these areas. There is good reason to believe that right now, and in the future, juvenile salmonids continue to be at risk.

Site H is not as problematic a sampling site as it is described for monitoring selenium levels in this stretch of the San Joaquin River. Although the site is inappropriate to use for selenium load

calculations, the historic data clearly shows that selenium concentrations here can reach high levels throughout much of the year regardless of Merced River influences. The highest selenium levels occur in the summer when Merced River flows through the side channel would not be influencing site H. Currently, sampling at site H is less frequent, and thus potential spikes of selenium may not be observed. A more detailed analysis of the data at this site may assess how well the current sampling regime would detect the highest selenium levels. Even the current reduced sampling effort shows concentrations over 9 µg/L. This is above the 20 percent mortality level and three times higher than the 10 percent mortality level for salmonids (attached chart includes more recent data for 2007).

The Bureau response to Service comments seems to imply that fish being exposed to selenium must reach an equilibrium tissue concentration before toxicity occurs, yet, this is not the case. Also, the 3.3 µg/L selenium concentration represents a direct 10 percent mortality-an extreme toxicological endpoint that puts an additional stress on an already challenged fish community. Selenium effects on other physiological functions that might influence smoltification and indirect survival are unknown but can not be discounted.

The Bureau response to Service comments also too easily brushes off steelhead as not being anymore at risk than Chinook salmon by simply comparing adult and juvenile migration patterns of steelhead to the spring-run Chinook. The references noted in Beckon and Maurer (2008) clearly show that steelhead migratory patterns are much more complicated-they are best described to be nearly year-round spawners, juveniles will hold over for many months to a year, or may not even migrate to the ocean. Beckon and Maurer (2008) referenced a study on rainbow trout, of which steelhead are a variant, indicating a 20 percent mortality of fry if female rainbow trout have a tissue selenium concentration of only 2.93 µg/g whole body dry weight. For these reasons steelhead are likely at greater risk than Chinook salmon.

In simple terms the fish will tell the story. The Service recommends that, at the very least, follow-up monitoring similar to Saki et al. (1991) should be conducted to show whether salmonids are being exposed to selenium for sufficient periods of time at the concentrations occurring in the lower San Joaquin River now and in the future.

A copy of Beckon and Maurer is also attached to this e-mail. Please don't hesitate to contact me if you have any questions.

Tom

~~~~~  
Thomas C. Maurer  
Chief, Investigations and Prevention Branch  
Sacramento Fish and Wildlife Office  
U.S. Fish and Wildlife Service  
2800 Cottage Way, Room W-2605

Sacramento, California 95825

(916) 414-6594

fax 414-6713

[thomas\\_maurer@fws.gov](mailto:thomas_maurer@fws.gov)

~~~~~

[attachment "Reply to BOR response to FWS comment #10 on GBP EIR
CHART.doc" deleted by Thomas Maurer/SAC/R1/FWS/DOI] [attachment
"Beckon_Maurer_2008_Effects_Selenium_Listed_Species.pdf" deleted by
Thomas Maurer/SAC/R1/FWS/DOI]

Attachment 2



NORTH
COAST
RIVERS
ALLIANCE



March 29, 2010
Revised

Ms. Shauna McDonald
Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Re: Draft EA/FONSI for Transfer of up to 20,500 acre-feet of Central Valley Project Water from Central California Irrigation District to San Luis, Panoche, Del Puerto and Westlands Water Districts and up to 5,000 acre-feet of Central Valley Project Water from Firebaugh Canal Water District to San Luis Water District or Westlands Water District, EA-10-02 March 2010.

Dear Ms. Mc Donald:

Thank you for the opportunity to comment on the Draft EA/FONSI for the 2 year proposed transfer of up to 30,500 acre-feet of CVP contract surface water from Central California

Irrigation District [CCID] and Firebaugh Canal Water District [FCWD] to Westlands, San Luis, Panoche, and Del Puerto Water Districts. We received no scoping notice of the proposed action and observed a notice of the DEA on March 19th with a comment period ending March 29th on the Bureau's Mid Pacific website where the DEA unavailable for at least two days during that minimal ten day comment period. Announced on March 24th the Bureau of Reclamation extended the comment deadline to April 9th for a project that is planned to commence on April 1, 2010, nine days before the close of the comment period and consideration of public comments.¹

As we understand the proposed action, CCID intends to transfer 20,500 acre-feet of CVP surface water to the lands of CCID landowners which are located in other neighboring districts. FCWD also intends to transfer up to 5,000 acre-feet of CVP surface water to the lands of FCWD landowners which are located in other neighboring districts. The lands of these multi-district owners are also in San Luis, Panoche, Del Puerto, and Westlands Water Districts. Within CCID and FCWD, the districts propose to substitute locally pumped groundwater for the transferred surface water supplies from the CVP. Both FCWD and CCID anticipate pumping high volumes of shallow groundwater, some of which is within the aquifer contaminated by selenium, agricultural drainage and other agricultural contaminants leached from the soil.

In general we find the DEA woefully deficient and insufficient to support informed decision making. Public involvement and the environmental information provided prior to the completion of the EA have been non-existent despite extensive public involvement and concern. There are numerous inaccuracies and assertions which are little more than water project developer opinions unsupported by data or facts asserting there is no impact on the environment from this project. Misleading statements are made to support an urgent need that presents a flawed analysis of available water for delivery and limits the range of alternatives considered. Six other environmental assessments involving the substitution of groundwater supplies for surface contract sales and transfers are proffered as a rationale for this project. Instead these are ample evidence that there is a systematic segmentation of the project impacts from these various projects that propose to substitute surface water contract supplies for long term groundwater pumping. We urge the document be reissued for public comment after the substantive deficiencies are fixed.

No Evaluation of Water Quality Impacts – Selenium & Other Contaminants. The DEA's most glaring omission is the Bureau's failure to analyze water quality impacts of the proposed action carefully. The Bureau makes no attempt to evaluate the quality of groundwater that would be pumped from under lands of the CCID and the FCWD to substitute for Central Valley Project surface water that the two districts would transfer to their Transfer Recipient Districts (TRDs). This groundwater occurs in an area well know for high concentrations and loads of selenium and other contaminants, each of which are easily mobilized by irrigation water from upslope

¹ http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=5243

agricultural activities. Both FCWD and CCID anticipate pumping high volumes of shallow drainage tainted groundwater from approximately 23 largely undisclosed well locations within CCID and 5 wells within FCWD that will be used to substitute for the transferred surface water supplies. Some of the tainted groundwater from FCWD would be pumped directly into the Mendota Pool where it would then enter FCWD's Intake Canal for distribution to participating landowners in the district. At the present time monitoring data for selenium and other contaminants in the Delta Mendota Canal, Mendota Pool and at Vernalis are not gathered and were not presented in this DEA, despite the fact that the Bureau has staff in its Fresno office producing monthly monitoring reports on Delta Mendota Canal water quality, including salts and selenium concentrations and loads.

The DEA acknowledges no restrictions for selenium in pumped groundwater from FCWD, and makes no attempt either to document selenium concentrations and loads from the DMC's discharge into the Mendota Pool or to assess the total concentrations and loads from the proposed action and the DMC's discharge in relation to TMDL regulations for selenium that is enforced by the Central Valley Regional Water Quality Control Board. The restrictions on levels of selenium in pumped groundwater from CCID are not defined in the DEA, even though they are clearly stated in these adopted regulations. The amount of water that is proposed to be pump from the semi-confined aquifer is much more than the San Joaquin Valley Drainage Program had recommended. It is likely that with these higher pumping volumes, the highly contaminated shallow drainage will migrate down and contaminate the wells being used.²

The DEA indicates CCID requires salt water quality levels for blended downstream quality not to exceed 700 mg/L, but the DEA does not require monitoring or reporting with regard to groundwater quality in either district to ensure this blended salt standard is achieved and the quality of the receiving waters are not degraded from the various contaminants identified in this groundwater.³ For the FCWD the DEA notes the groundwater often exceeds 3,000 mg/L of

² See SJVDP [1990] As noted in the Final Report of the SJVDP, groundwater management may be viewed as a planned degradation of the groundwater resource, even though this degradation is occurring under existing conditions. As part of the SJVDP Planning effort, a finite element model was used to develop a detailed analysis of pumping the semi-confined aquifer for management of the shallow water table (Quinn, et al., 1990). The results of the analyses showed the importance of well field design and such factors as depth of pumping, pumping rate, and aquifer properties for achieving management of the shallow water table through groundwater pumping. The final recommendations included only 8,000 AFY in a well field area of 10,000 acres with even well spacing on the quarter mile grid.

³See BOR EA/IS for 25-Year Groundwater Pumping/Water Transfer Project for the San Joaquin River Exchanges Contractors Water Authority 2007. "Along the Outside Canal west of Firebaugh, electrical conductivities ranged from about 3,700 to 6,400 micromhos in 2002 at the Snyder and Del Rey wells. Near the First Lift Canal north of Arbios, the electrical conductivity was about 5,500 micromhos in 1989. These three wells are thus located in the highest salinity area for groundwater in the Sierran Sands. The first two of the wells are in the area where the water for transfer would be developed. A number of monitor wells have been installed in the area that would develop the water for transfer by the Exchange Contractors, Westland WD, Broadview WD, and other entities. TDS concentrations were about 11,000 mg/l in groundwater at a depth of about 50 feet at FC-7, near Nees Avenue and the DMC. A TDS concentration of 9,900 mg/l was found in groundwater from a depth of about 50 feet at FC-6, near

salt. The groundwater quality data presented in the DEA is from previous groundwater investigations contained in a previous Environmental Assessment⁴ from 2000-2004 and appears to be from deep wells and not applicable to the proposed shallow drainage tainted groundwater pumping proposed in this project. The DEA, without any analysis or data declares that increasing the groundwater pumping transfer program from 15,000 acre feet per year to 40,500 acre feet per year will not have any water quality or air quality impacts nor will it “likely have little or no direct effect on groundwater levels or flow patterns within the source area over the 25-year duration” of the project.⁵

Public Involvement has been curtailed. Courts have consistently wanted to see evidence of meaningful public involvement for environmental assessments. Council on Environmental Quality [CEQ] regulations require public involvement in Environmental Assessments [EAs] to the fullest extent practicable (40 C.F.R § 1501.4(e)(2)). Providing a ten day comment period for a draft EA when the document was only available for 8 days is not sufficient, when federal agencies and their responsible entities typically apply a 15-day public comment standard prior to agency approval and implementation of proposed actions. We appreciate the additional nine days of comment period to April 9, 2010, but note the announcement seems to both grant the public an extended time period and to take away consideration of comments by keeping the federal action date of April 1, 2010.⁶ No information or input from the public in the form of scoping or stakeholder meetings were conducted to make sure there was meaningful public involvement prior to the approximately eight day comment period provided prior to the Bureau’s decision to transfer up to 61,000 acre feet of surface water over a 2-year period and substitute an equal amount of groundwater to replace this transferred contract supply.

Herndon Avenue, between the Second and Third Lift Canals. This groundwater is present in oxidized Coast Range deposits above the Sierran Sands, and also contains significant selenium concentrations. That is, selenium concentrations exceeded the drinking water standard and fish and wildlife water quality criteria”. [pp 3-62] “Few water supply wells have been completed in most of the FCWD and Camp 13 Drainage District because of the poor groundwater quality and the availability of canal water for irrigation. These wells are either deep wells (600 to 710 feet, tapping strata below the Corcoran clay) in the west part of the area that would develop the water for transfer or shallow wells in the east part (180 to 390 feet deep, tapping strata above the Corcoran clay). Wells in the City of Firebaugh and CCID wells in the area are generally less than about 250 feet deep. Better quality groundwater has generally been present between about 100 and 250 feet in depth than in other depth intervals in the east part of the area where the water for transfer would be developed.” (page3-58)

⁴ **ibid.**

⁵ Draft FONSE-10-02 March 2010 pg 5. In the 2007 EA 15,000 AFY was authorized and 30,500 AFY is authorized in this DEA for a total of 40,500 AFY.

⁶ <http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=32041>

The DEA relies on flawed data. Courts have consistently held misleading data presented as fact or failing to take “hard look” at the project’s true effect fails to inform the public of project’s environmental impact.⁷

The need for the project is misleading. As a basis for the purpose and need the DEA presents several facts that are misleading. First, while the Bureau of Reclamation did issue an allocation of 5% on February 26, 2010, this allocation has subsequently been increased closer to 25% for most South of Delta contractors.⁸ Equally while it might be technically correct that CVP contractors “south-of-Delta” experienced reduced “water supply allocations” in 2007, 2008 and 2009, most did not experience huge reductions in water deliveries and received 74% to 100% of their contract water supplies⁹. In fact Westlands Water District, the most junior water contractor received 74% of their CVP contract as of 5-13-09 from various sources including the state’s drought water bank and groundwater pumping. And in 2008 and 2009 they had surplus or carryover storage. Table 1 at page 11 of the DEA that lists the “Average SOD agricultural allocation as a percentage of the contract total” is misleading, because it does not include the actual deliveries, carryover and surplus supplies provided to these contractors. It again reiterates the inaccurate allocation figure of 5% for 2010.

The location of the over 23 CCID groundwater supply wells are not disclosed, along with an accurate description of the depth from which water is extracted. The depth cited in the DEA consequences section, suggest this is in the relatively shallow 180 to 240 feet, an area that could include selenium and agricultural drainage tainted groundwater above the Corcoran Clay. Without information on where these wells are located, the water quality impacts and impacts to wildlife, public health and air quality are not fully disclosed and therefore cannot be accurately determined by the Bureau and district administrators. This lack of information about the spatial extent of CCID wells that are integral to the proposed action compounds the Bureau’s failure to evaluate water quality impacts from pumping local groundwater supplies to substitute for CVP surface water supplies. These flaws in the DEA cast doubt on Bureau’s compliance with the purpose and intent of the National Environmental Policy Act.

Further there is no description or map of which conveyance facilities will be used for the water transport of this tainted water. The spatial location of the wells, the volume pumped and location of conveyance facilities all can have significant impacts on the environment.¹⁰ The DEA merely states, “Landowners in CCID would pump from up to 23 wells interspersed throughout

⁷ Natural Resources Defense Council v U.S. Forest Service (9th Cir. August 5, 2005) and Native Ecosystems Council v. U.S. Forest Service (9th Cir. August 11, 2005)

⁸ <http://www.usbr.gov/mp/PA/water/index.html>

⁹ Lester Snow to Senator Feinstein, May 15, 2009.

¹⁰ See Rainbow Report (San Joaquin Valley Drainage Program 1990)

CCID with a total capacity of 75 cfs..” page 5 and concludes there would be no impact on endangered species ... “because water would move in existing facilities..” pg 37. There is an aerial map of the five wells in the FCWD with well # 5 discharging directly into the Mendota Pool (Figure 3 of the DEA). It is likely the discharge of this degraded water directly into the Mendota Pool would require a permit pursuant to the federal Clean Water Act and the state’s Porter-Cologne Water Quality Control Act. Briefly at page 6 of the DEA mentions potential hearings to determine if CEQA or other aspects of the California Water Code apply. Clearly before this project proceeds, compliance with CEQA and all required permits need to be disclosed and acquired.

Neither hydrological data, nor peer-reviewed groundwater modeling of the volumes to be pumped, nor actual water quality data are provided to support the Bureau’s conclusions of no significant impact. Pumping of groundwater in the semi-confined aquifer (above the Corcoran clay layer) from drainage impacted areas while protecting the environment, public health and maintaining agricultural productivity is a complex feat, and the disclosure of all the steps the Bureau needs to take to achieve this outcome is missing from the DEA. The DEA seems to suggest the six other “related environmental analyses” completed from 2004-2009 provides adequate assurance and data, despite the segmented and different project definitions, without doing the analysis to demonstrate that is in fact the case. *Indeed, this is not the case.* The volume of water, this specific 2 year program and the 25 year time period of the overall Exchange Contractor’s water transfer program, and lack of information on well locations makes this conclusion and the document flawed. Furthermore, reliance on the 2007 EA, where two wells were pumped for 45 to 60 days at 1,000 ac feet from a different aquifer is not conclusive.¹¹

The project does not adequately consider groundwater quality degradation. Pumping such large volumes of water from the aquifer (above the Corcoran clay) will result in a steep gradient where selenium, salts and other contaminants will likely migrate.¹² Salts leached from the soil, pesticide byproducts and from the applied groundwater will also add contaminants that will further degrade the groundwater. No monitoring is required in FCWD and while the CCID

¹¹ See Hydro Report in Appendix F **ibid**. USBOR 2007 pg 139 pg 2.

¹² See “Geologic Sources, Mobilization & Transport of Selenium from the California Coast Ranges to the Western San Joaquin Valley, A Reconnaissance Study”. USGS 90-4070. Presser, Swain, Tiball & Severson. 1990

“Irrigation-Induced Contamination of Water, Sediment, and Biota in the Western United States.” USGS Professional Paper 1655, 2003. More than 40 percent of the surface water-samples exceeded the U.S. Environmental Protection Agency [USEPA] aquatic-life chronic criterion [5 micrograms per liter]. In groundwater, more than 35 percent of the selenium concentrations exceeded the MCL [50 micrograms per liter]. Because ground water can discharge to the surface where wildlife can be exposed to it the criteria used for ground water were both the maximum contaminant levels (MCL’s) for drinking water and the chronic criteria for the protection of freshwater aquatic life”. pp 1.

requires “non-detect” for selenium in the well water pumped from this project, there is no definition of what this limit is or even if monitoring is required to determine this level. FCWD will discharge directly into the Mendota Pool. There is no selenium limit and as the DEA notes groundwater often exceeds 3,000, mg/l TDS.¹³ Finally the DEA at page 22 also concludes there will be no subsidence from this groundwater pumping. No data is provided only this assurance from the project advocates, “The Mendota Pool Group reports have shown that pumping from shallow aquifers does not cause subsidence”. This is based on one year of data based on significantly different volumes of water pumped. With one district requiring monitoring of groundwater conditions and the other not, the Bureau must step in and require consistent administration of the National Environmental Policy Act, the federal Clean Water Act, and the California Porter-Cologne Water Quality Control Act to ensure that the waters of the United States and the state of California are protected through appropriate implementation of the proposed action.

The DEA does not provide any data to support the conclusion there will be no impact to threatened species such as the Giant garter snake, to winter-run Chinook salmon, or migratory birds. As mentioned FCWD will discharge directly into the Mendota Pool and yet the DEA at page 26 indicates there is no impact to the Giant garter snake or to the water quality of the Mendota Pool where flows are diverted into the Grasslands area. Again as mentioned there is no monitoring required nor data collected regarding the selenium contaminants in FCWD groundwater that will be discharged directly into the Mendota Pool nor is it clear what levels of selenium will or will not be detected in the CCID monitoring. These discharges are likely to elevate selenium, salt, mercury and other contaminant levels in these surface waters threatening migratory birds, the Giant garter snake and other wildlife.¹⁴

Further the impacts to the San Joaquin River Restoration are not considered. Much of the following statement at page 17 regarding the San Joaquin River is not accurate:

“The reach from Gravelly Ford to Mendota Pool (about 17 miles) is perennially dry except during flood control releases from Friant Dam. During the irrigation season, most of the water released from the Mendota Pool to the SJR and to irrigators is imported from the Delta via the DMC. This water has higher concentrations of Total Dissolved Solids than water in the upper reaches of the SJR, and can be affected by runoff and seepage into the canal. The reach from Gravelly Ford to Mendota Pool (about 17 miles)

¹³ DEA at page 25: “Groundwater in FCWD has generally not been pumped for direct irrigation use (without mixing), because of the high salinity (often exceeding about 3,000 mg/l of total dissolved solids) (Reclamation 2004).”

¹⁴ See Drainage Solutions: Homage to the Ponds of Folly, Joseph Skorupa, U.S. Fish and Wildlife Service. 2003 U.C. Salinity/Drainage Annual Conference March 26, 2003. WWD Peck Ranch SE 750 ug/l 50% embryo deformity rate; severe overall avian reproductive failure >70%; WWD Britz-Deavenport SE 65 ug/L 33% embryo deformity rate; WWD Red Rock Ranch SE 1,600 ug/l deformity rates 60%,5%,0%,100%; WWD Unidentified Cotton Gin Unknown degree of contamination; groundwater discharge of unknown purpose 16% embryo deformity rate.

is perennially dry except during flood control releases from Friant Dam. During the irrigation season, most of the water released from the Mendota Pool to the SJR and to irrigators is imported from the Delta via the DMC. This water has higher concentrations of Total Dissolved Solids than water in the upper reaches of the SJR, and can be affected by runoff and seepage into the canal.”

The San Joaquin River restoration project has altered this description and the impacts significantly. We agree it is likely seepage, runoff and ground-water from this project will likely contribute to the pollution found in the San Joaquin River. The San Joaquin River is listed as “water quality limited” under Section 303 (d) of the Clean Water Act for multiple constituents of concern including selenium, electrical conductivity (salt) and boron. The Central Valley Regional Water Quality Control Board, peer-reviewed analysis supporting the TMDL objectives for the San Joaquin River water quality objectives identify groundwater as providing 4% of the overall flow draining the lower San Joaquin River watershed at an average concentration of 1,600 mg/L, contributing 30% of the overall salt load.¹⁵ As noted on page 17 of the DEA “Panoche Creek in the Westlands Water District, an ephemeral stream, also flows into Mendota Pool and, during high flows in the winter and spring, high concentrations of selenium have been brought into Mendota Pool via Panoche Creek flows (North State Resources 1999).”

Finally increased surface water deliveries to the 300,000 acres of selenium laden lands and identified drainage impaired lands within Westlands Water District and the approximately 74,000 acres of selenium laden lands and drainage impaired lands within the northerly area will also bring increased groundwater seepage and migration to the San Joaquin River over this specific 2 year project and the 25 year period of the project.¹⁶ No data, monitoring or analysis of these project impacts is provided.

No data or analysis is provided regarding the cumulative impacts from the project. Selenium concentrations precipitate from solution in to sediment and over time bioaccumulate in plant material, benthic invertebrates, fish species, mammals, and fish species, including benthic feeders like sturgeon. The danger of bringing this selenium-laden water to surface and spreading it on fields or in grasslands has brought death, deformity and reproduction problems to wildlife, and the proposed action has serious potential to result in similar outcomes.¹⁷

¹⁵ August 6, 2007 CRWQCB Letter to Bob Eckart USBOR from Gail Cismowski: Comments on the Draft EA and Initial Study for the 25-Year Water Transfer Project for the San Joaquin River Exchange Contractors Water Authority.

¹⁶ See the San Luis Drainage Feature Re-evaluation Record of Decision [2006] Bureau of Reclamation. http://www.usbr.gov/mp/scao/sld/docs/sldfr_report/slfr_3-08_v02.pdf

¹⁷ The U.S. Geological Survey, in cooperation with the SJVDP and as part of the Regional Aquifer System Analysis Program completed a report on the sources, distribution, and mobility of selenium in the San Joaquin Valley, California (Gilliom and others, 1989). This report noted the following with respect to groundwater pumping in the drainage impacted area: “*The large quantity of high-selenium ground water (50 to 1000 pg/L) in the general range of 20 to 150, feet below the water table makes it desirable to use management practices that leave this water where it is, rather than bring it to the land surface or allow it to move into parts of the aquifer that*

The cumulative impacts analysis in the DEA does not include the addition of this surface water transfer along with the cumulative impacts from all the supplemental water imports that will irrigate toxic selenium lands on the Westside of the Central Valley including the various Warren Act contracts, transfers, exchanges, and assignments and these impacts on selenium drainage offsite at Westlands Water District and the various other west side districts receiving these additional supplies of water.¹⁸ In addition the four environmental assessments listed on page 3 as related environmental analyses document how this DEA and the other EA's foster a segmentation of the project need and purpose—providing supplemental water to these Westside CVP contractors—and avoids a hard look at the long term cumulative impacts from delivering imported water to irrigate selenium soils identified by the Bureau of Reclamation as

may be used for water supply. Water-table control strategies based on increasing groundwater discharge need to be carefully evaluated with respect to their potential to affect the movement of water with high selenium concentrations movement of water with high selenium concentrations."

See USBOR Draft EA/IS for 25-Year Groundwater Pumping-Water Transfer Project for the San Joaquin River Exchange Contractors Water Authority. August 27, 2007 USFWS Comments—proposed action would degrade groundwater, increase selenium concentrations in DMC sumps, lessened water quality in the Main Canal and add selenium and mercury loads into refuges and pump mercury and selenium into the Delta Mendota Canal upstream of the Mendota Pool where Mercury levels in fish are already at unsafe levels and the San Joaquin River is listed on the 2006 Clean Water Act Section 303 [d] list. Pp 1-20

¹⁸ Final WQ Data Report for the WWD 2008 Pump-In Project 09/25/2008 (PDF, 40 KB). Description: DWR Bryte Lab data final water quality report for the Westland's ...www.water.ca.gov/publications/browse.cfm?letter=F - Cached

Also see DWR Bulletin 132-95 Westlands Water District--"Turn-In" Agreements. In August 1994, the Department signed two "turn-in" agreements with Westlands Water District. Under the terms of these agreements, WWD could pump up to 100,000 acre-feet of ground water directly into the California Aqueduct from WWD's wells located alongside the aqueduct. In addition, WWD could also pump up to 50,000 acre-feet of ground water into the Mendota Pool for conveyance to the California Aqueduct through WWD's Lateral 7."

"During the term of these agreements, March 1994 through February 1995, 16,000 acre-feet of water was conveyed from the Mendota Pool to the California Aqueduct, through Lateral 7, and 84,600 acre-feet of water was pumped directly into the California Aqueduct. The total, 100,600 acre-feet was conveyed by the Department to Reaches 5 through 7 to be used within WWD's service area."

"Westlands Water District--Kings River Water. A letter agreement signed May 12, 1995, between the Department and Westlands Water District approved the acceptance into the California Aqueduct of up to 10,000 acre-feet of Kings River Water for delivery to WWD through Reaches 5, 6, and 7 of the California Aqueduct. This nonproject water will be made available to WWD through an agreement between WWD and the Kings River Water Association. The water will be released from Pine Flat Reservoir and will flow to the Mendota Pool via the Kings River and Fresno Slough. WWD will then convey the water from the Mendota Pool to the California Aqueduct through WWD's Lateral 7."

Also see: Westlands Water District. 1995. Conveyance of Nonproject Groundwater from the Mendota Pool Area Using the California Aqueduct, Draft Environmental Impact Report, Westlands Water District. pp. 303

causing harm to ground water quality, fish, wildlife and agricultural production. Water delivery to these lands that leach toxins into the ground water and surrounding surface waters is not possible without the Bureau of Reclamation's delivery system and to a large extent the water storage facilities of the federal government.

In short, our organizations consider this draft Environmental Assessment and proposed Finding of No Significant Impact (FONSI) to be seriously inadequate and out of compliance with the National Environmental Policy Act. Please include our organizations and contact persons on your distribution list for all further notices related to these and all other transfers affecting south of Delta Central Valley Project contractors.

Respectfully submitted,



Jim Metropulos
Senior Advocate
Sierra Club California



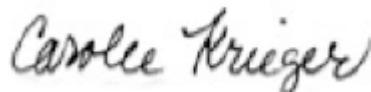
Steven L. Evans
Conservation Director
Friends of the River



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's
Federation Association Inc.



Larry Collins
President
Crab Boat Owners



Carolee Krieger
Board President and Executive Director
California Water Impact Network



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance



Bruce Tokars
Salmon Water Now



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League



Conner Everts
Executive Director
Southern California Watershed Alliance

Warren V. Truitt President
Save the American River Association
Fred Egger President
North Coast Rivers Alliance

Cc:

Dorothy R. Rice, Executive Director, State Water Resources Control Board

Pamela C. Creedon, California Regional Water Quality Control Board, Central Valley Region

Mark Cowin, Director, Department of Water Resources

John McCamman, Director, California Department of Fish and Game

Lisa Jackson, EPA Administrator

Jared Blumenfeld, Region 9 EPA Administrator

Michael Connor, Commissioner Bureau of Reclamation

Donald Glaser, Regional Director Bureau of Reclamation

Jeffrey Kightlinger, General Manager, MWD

S. David Freeman, General Manager, Los Angeles Department of Water and Power

Maureen Stapleton, General Manager, San Diego Water Authority

Richard Atwater, General Manager, Inland Empire Utilities Agency

Michael R. Markus, General Manager, Orange County Water District

Kevin P. Hunt, General Manager, Municipal Water District of Orange County

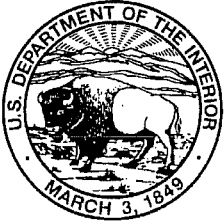
Gary Bobker, The Bay Institute

Kate Poole, NRDC

Trent Orr, Earthjustice

Antonio Rossmann, Rossmann and Moore

Interested Parties



United States Department of the Interior



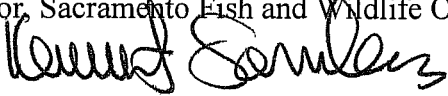
FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
81420-2010-TA-0527

9 April 2010

To: Shauna McDonald, Resources Management Division,
Bureau of Reclamation, South-Central California Area Office,
Fresno, California

From: Assistant Field Supervisor, Sacramento Fish and Wildlife Office,
Sacramento, California 

Subject: Comments on the Draft Environmental Assessment on the Transfer of Up to 20,500 acre-feet of Central Valley Project Water from Central California Irrigation District to San Luis, Panoche, Del Puerto and Westlands Water Districts, and Up to 5,000 acre-feet of Central Valley Project Water from Firebaugh Canal Water District to San Luis and Westlands Water Districts, DEA-10-12

This memorandum transmits U.S. Fish and Wildlife Service (Service) review and recommendations on the U.S. Bureau of Reclamation's (Reclamation) Draft Environmental Assessment (DEA) dated February 2010, on the Transfer of up to 20,500 acre-feet of Central Valley Project (CVP) Water from Central California Irrigation District (CCID) to San Luis, Panoche, Del Puerto and Westlands Water Districts, and up to 5,000 acre-feet of CVP Water from Firebaugh Canal Water District (FCWD) to San Luis and Westlands Water Districts. We received your press release announcing the availability of the DEA 10-12 for public comment on March 19, and the press release extending the public comment period to April 9, 2010 on March 24, 2010. The Service provides these comments and recommendations under authority of, and in accordance with, provisions of the National Environmental Policy Act (NEPA) (40 CFR Part 1500), and within associated guidance from the President's Council on Environmental Quality. Our focus in providing these comments is to assist Reclamation in its efforts to "...make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment" [40 CFR Part 1500.1(c)]. We are also providing comments on DEA 10-12 pursuant to section 7(a) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(ESA).

Based on the project description provided, our primary concerns regarding the proposed action are related to: 1) the need for adequate water quality standards and monitoring assurances, since some of the groundwater from this project will comingle with refuge water supplies, and with waters used by the giant garter snake; 2) potential further cumulative effects of this action, when combined with other reasonably foreseeable actions which have the potential to further erode the

current baseline status of the giant garter snake; and 3) because of the potential for affects on the giant garter snake we are recommending that Reclamation initiate consultation with the Service pursuant to section 7(a) of the ESA

Proposed Action

Reclamation proposes to approve the transfer of up to 20,500 acre-feet/year (AFY) of CVP water from CCID to the transfer recipient districts San Luis, Panoche, Del Puerto and Westlands Water Districts (TRDs) that will be exchanged with well water pumped from within CCID and the transfer of up to 5,000 AFY of CVP water from FCWD to TRDs San Luis and Westlands Water Districts that will be exchanged with well water pumped from within FCWD from April 1, 2010 through December 31, 2010 and April 1, 2011 through December 31, 2011. The groundwater would be pumped from CCID and FCWD from the upper aquifer, and above the Corcoran Clay layer, at a depth of between 180 to 240 feet, and blended with surface-water deliveries. For the CCID transfer, landowners would pump from up to 23 wells, interspersed throughout district into district conveyance facilities. For FCWD, landowners would pump groundwater from four wells directly into the Intake Canal and one well would discharge water directly into Mendota Pool near the Intake Canal. Some of the wells in CCID are located in the drainage-impacted area of the district; all of the wells in FCWD are located in a drainage-impacted area. The Proposed Action would free-up a commensurate quantity of water from CCID and FCWD supplies equivalent to the quantity developed from groundwater pumping.

Related Actions

Grassland Bypass Project

The Service recently completed a biological opinion on the Third Use Agreement for the Grassland Bypass Project (GBP BO), 2010 – 2019 on December 18, 2009 (Service File No. 2009-F-1036). This consultation included an updated Status of the Species and Environmental Baseline on the threatened giant garter snake (*Thamnophis gigas*) in the vicinity of the DEA's current project. The garter snake has been adversely affected by water management actions (i.e. water transfers/exchanges, and ground water pumping, which have contributed to changes in cropping patterns) in the San Joaquin Valley and the current baseline of this species in the Grasslands wetlands and Mendota Pool vicinity indicates the species is experiencing significantly declining numbers, reduced reproduction and distribution through this portion of its range.

We incorporate GBP BO by reference to these comments and ask Reclamation use the revised Environmental Baseline for the giant garter snake in their evaluation of effects in the DEA. A copy of the Grasslands Bypass Project 2010 – 2019 Biological Opinion is available at: http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=3513

San Joaquin River Exchange Contractors 25-Year Transfer Project

The Service previously commented on the 25-year Groundwater Pumping/Water Transfer Project for the San Joaquin River Exchange Contractors Water Authority (25-Year Transfer Project) on August 27, 2007 (Service File No. 07-I-1580). This project authorized a maximum groundwater pumping regime of 15,000 AFY from drainage-impaired lands in CCID and

FCWD. This program involves the use of up to 15 new wells and 5 existing wells. Groundwater is pumped from the upper aquifer above a depth of 350 feet (above the Corcoran clay) but below the drainage-impaired shallow groundwater, blended with surface water deliveries into two CCID canals (Outside and Main) to ensure adequate water quality for irrigation needs, and then delivered downstream for agricultural use and refuge water supplies. The pumped groundwater would substitute for CVP surface water delivery primarily from the Delta Mendota Canal (DMC).

Because the current project considered in the DEA involves groundwater pumping and exchanges that are similar to those considered in the 25-year Transfer Project and involve some wells in drainage-impacted areas, we incorporate our comments here by reference and ask that Reclamation consider these comments when revising and finalizing the DEA. A copy of the Service comments on the 25-year Transfer Project is available at: http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=3034

Meyers Groundwater Banking Project

The Service previously provided comments on the Meyers Farms Family Trust Exchange Contract (related to operations of the Meyers Groundwater Banking Project (Meyers GWB)) on August 13, 2007 (Service File No. 07-TA-1458). The Meyers GWB involves storage and exchange of CVP water facilitated by the operation of a water bank adjacent to Mendota Pool. The bank is a privately owned facility located east of the Fresno Slough branch of Mendota Pool. The bank stores Kings River flood flows and CVP water, and at a later date, based on hydrological conditions and demand, a like volume of CVP water would be pumped from the bank and returned to Mendota Pool for exchange with Reclamation in the following manner: (1) extracted water would be delivered to end users who divert water from Mendota Pool, and (2) Reclamation would exchange the water pumped from the San Luis Reservoir and San Luis Canal.

Because the Meyers GWB involves groundwater pumping and exchanges into the Mendota Pool similar to the pumping from well #5 in FCWD described in the DEA for this project, we incorporate this memo here by reference. Specifically, we ask that Reclamation consider the effects of the Proposed Action in the DEA in combination with the Meyers GWB, and other projects described in this memo in the Cumulative Effects section of the DEA.

Mendota Pool Group 10-Year Exchange Agreement

The Service previously conducted an ESA review of the Mendota Pool Group 10-Year Exchange Agreement EIS (MPG Exchanges) on January 13, 2005 (Service File No. 04-I-1482) and concluded that that project, with the environmental commitments included in the EIS, may affect but would not likely adversely affect the giant garter snake within the project area. Because the MPG Exchanges involve groundwater pumping and exchanges into the Mendota Pool similar to the pumping from well #5 in FCWD described in the DEA for this project, we incorporate this memo here by reference.

Specifically we ask that Reclamation review and adopt the design constraints and environmental commitments made in the FEIS for the MPG Exchanges (USBR 2005) for any well water pumped into the Mendota Pool from this project including:

- Pump well water into Mendota Pool only when flow in Fresno Slough is to the south.
- Well water with Total Dissolved Solids (TDS) concentrations greater than 2,000 mg/L will not be pumped into the Mendota Pool. During the fall months, when there is reduced flow in the Mendota Pool and water quality at the Mendota Wildlife Area is most critical, well water with TDS higher than 1,200 mg/L TDS will not be pumped into Mendota Pool.
- Selenium in well water pumped into Mendota Pool will not exceed 2.0 µg/L.

Central Valley Project Improvement Act

The 102nd Congress passed multipurpose water legislation the Central Valley Project Improvement Act (CVPIA) Public Law 102-575, which was signed into law October 30, 1992. Title 34 of the CVPIA mandated changes in management of the CVP, particularly for the protection, restoration, and enhancement of fish, wildlife, and associated habitats. To help further guide these changes, the CVPIA, in section 3402(f), identified that one of its purposes is to “achieve a reasonable balance among competing demands for CVP water, including the requirements of fish and wildlife, agricultural, municipal and industrial and power contractors.” The conditions of CVP water transfers were defined in Section 3405(a)(1) of the CVPIA and we ask that Reclamation consider the following relevant provisions and revise the DEA as follows:

1. *No transfer will be authorized unless the transfer is consistent with State law, including but not limited to provisions of the California Environmental Quality Act (CEQA) (§3405(a)(1)(D)).*

Service Comments and Recommendations: The DEA does not reference any CEQA documentation for this project and a quick search on CEQANet on April 5, 2010 revealed that no CEQA documentation had been filed with the State Clearinghouse for this project from FCWD, CCID, the San Joaquin River Exchange Contractors Water Authority or the San Luis Delta Mendota Water Authority.

2. *No transfer will be authorized if it results in a significant reduction in quantity or quality of water currently used for fish and wildlife purposes... alternative measures and mitigation activities will be developed and implemented as integral and concurrent elements of any such transfer to provide fish and wildlife benefits substantially equivalent to those lost as a consequence of such transfer ((§3405(a)(1)(L)).*

Service Comments and Recommendations: Some of the groundwater from this project will comingle with refuge water supplies, and with waters used by the giant garter snake. Reclamation should consider these impacts and develop measures to compensate for these effects to fish and wildlife resources.

3. *No transfer will be authorized unless it is determined that such transfer will have no significant long-term adverse impact on groundwater conditions in the transferor's service area ((§3405(a)(1)(J)).*

Service Comments and Recommendations: The DEA does not analyze the potential for degradation of the production wells by downward migration of the contaminated shallow groundwater. Aquifer degradation has been identified as an anticipated effect of groundwater pumping in or near drainage impacted areas in the western San Joaquin Valley (Quinn et al., 1990; Quinn 1991; SJVDIP 1999; SJVDP 1990; USBR 2004). Because at least some of the wells in the project are located within the drainage-impacted areas of CCID and entirely within the drainage-impacted area of FCWD, Reclamation should consider the potential for groundwater degradation in the DEA. We further recommend, that Reclamation more broadly evaluate the implications of groundwater degradation on an ecosystem level (including, but not necessarily limited to listed species impacts) associated with this project such as future impacts to water quality of refuge water supplies in the Grasslands and Mendota Pool.

Biological Opinion on Implementation of CVPIA

The Service completed a biological opinion on the implementation of the CVPIA on November 21, 2000 (Service File No. 98-F-0124) (CVPIA BO). The following language is excerpted from page 2-50 of the CVPIA BO, Reclamation and Fish and Wildlife Service Commitments for New and Continuing Project Actions:

The actions identified in this section VI have been developed by Reclamation and the Service to conserve listed species and address impacts resulting from past and continuing actions related to the operation and maintenance of the CVP and implementation of the CVPIA. The programs implemented pursuant to the CVPIA are intended to provide mitigation of past CVP effects on fish, wildlife, and associated habitats, including listed species and critical habitat.

It is critical that these commitments be considered in any future consultations regarding Reclamation and Service actions because they are an essential part of the Environmental Baseline condition. Proper evaluation of the incremental effects of Reclamation and Service actions cannot be undertaken without a proper accounting of these measures and provisions. Subsequent tiered consultations addressing future actions or programs carried out by Reclamation (e.g., contract renewal) shall consider what incremental effect, if any, such action or program causes in addition to the effects included in the existing environmental baseline and not impacts that may result from past actions of operation and maintenance of the CVP.

The CVPIA BO provided guidance on coordination between Reclamation and the Service regarding Conjunctive Use Projects (page 2-58): *“Within the affected groundwater basin, CVP water deliveries can also allow increased agricultural or urban development using groundwater (either within or outside designated service areas) by directly recharging the aquifer or indirectly freeing groundwater supplies for other users. Future conjunctive use projects*

involving Reclamation will be coordinated with the Service's Sacramento Fish and Wildlife Office Endangered Species Division to address effects to listed species."

The current project described in the DEA fits the description of a Conjunctive Use Project in the CVPIA BO. Although Reclamation provided notice of availability of the DEA for this project, no coordination with the Service was completed regarding effects to listed species prior to the release of the DEA.

Specific Comments

Proposed Action is not well defined

The proposed action in the DEA provides incomplete information pursuant to NEPA on the scope, location, and associated impacts of the project. The Service believes that there are several aspects of the proposed action that are not adequately described and/or analyzed in the DEA. As a result, it is difficult to fully assess the impacts of this project on water quality of surface water bodies that are used by the giant garter snake. The Service recommends that the DEA for this project be revised to address the following deficiencies:

Location of wells in CCID

The locations of the 23 wells in CCID are not provided in the DEA. The DEA does provide an aerial photograph of the five well locations in FCWD. Depth of wells is described in Environmental Consequences section as relatively shallow, from 180 to 240 feet. This depth corresponds to the shallow, poorer quality water in the aquifer above the Corcoran clay (as depicted in the 25-year San Joaquin Exchange Contractor Groundwater Pumping/Transfer EA, USBR 2007). Reclamation should revise the DEA and include a map that discloses the location of the 23 wells in CCID that will be involved in this project and a description of which wells are within the drainage-impaired lands of CCID.

Information on which conveyance systems will be impacted

No map or description of the CCID conveyance facilities is provided in the DEA, the only language describing where the pumped water would go within CCID is on page 5, "*Landowners in CCID would pump from up to 23 wells interspersed throughout CCID with a total capacity of 75 cfs...*" and from page 37, "*...because water would move in existing facilities, there would be no effect on endangered species.*" However, in an e-mail to Reclamation dated March 24, 2010, Chris White of CCID noted that some of the wells in CCID would pump into conveyance facilities that are used to deliver refuge water (White *in litt.* 2010). Four wells in FCWD would be pumped into the District's Intake Canal; well #5 would discharge directly into Mendota Pool (Figure 3 of the DEA). Therefore, there is potential that well water both from CCID and FCWD could reach and impact surface waters where giant garter snakes are present (e.g., Grasslands wetlands and Mendota Pool). Reclamation should delete the sentence on page 37 of the DEA concluding "*no effect*" to listed species, and revise the document to disclose which conveyance systems and downstream waters could potentially receive this pumped groundwater.

Quality of extracted water

Water quality data (electrical conductivity (EC) and TDS) is presented in the DEA for CCID's Main Canal (for the years 2000 to 2004) on page 14 (Tables 4 and 5). However, there is no information provided with respect to the recent quality of groundwater (TDS, selenium or mercury) that has been pumped from the same aquifer (above the Corcoran clay) in CCID or FCWD. Similar projects involving pumping of groundwater in FCWD and CCID have been implemented since 2007. For FCWD, the DEA also notes on page 3 a similar transfer action took place in 2009: *"This action was identical to the corresponding proposed action analyzed in this document, except that the amount of water was 600 acre-feet less, the action took place only from April through September 2009, and a fifth well that would pump into Mendota Pool was not included."* And for CCID, the DEA notes that, *"The action was identical to the corresponding proposed action analyzed in this document, except that the amount of water was less [5,000 AF less], and the action took place only from March 2009 through December 2009."* Yet, there is no water quality data presented in the DEA from either the 2009 groundwater transfers or from the 25-Year Transfer Project (USBR 2007). Without this water quality information, it is not possible to assess the impacts of the proposed action on downstream surface water quality.

Reclamation should provide recent data on water quality from comparable wells in CCID and FCWD in the DEA. In addition, Reclamation should summarize water quality data in the Main Canal before and after implementation of similar previous groundwater transfer programs in CCID and FCWD.

Commitments on quality of groundwater pumped

Water quality commitments for groundwater pumped from this project differ between CCID and FCWD. The CCID requires "non-detect" for selenium in the well water pumped from this project, but does not define what the detection limit for selenium is (i.e., there are different detection limits depending on which analytical methodology is employed). The CCID also established a maximum of 1,500 mg/L TDS in well water pumped into their district conveyance facilities, and commits to not exceed 700 EC (in $\mu\text{S}/\text{cm}$) in downstream blended water quality. But there are no monitoring or reporting requirements, and as noted above, no water quality data of extracted water from previous groundwater exchanges/transfers involving CCID, or downstream water quality is presented in the DEA.

FCWD has poorer quality water (the entire district is drainage-impaired). The DEA notes that groundwater often exceeds 3,000 mg/L TDS. Four of the wells in FCWD would pump directly into the district's Intake Canal for use on agricultural lands and would not affect surface waters. One well, well #5 in FCWD will pump water directly into the Mendota Pool. There are no water quality commitments for water pumped from wells in FCWD.

We recommend that Reclamation adopt the water quality commitments from the MPG EIS (USBR 2005) for well water pumped into Mendota Pool. For any groundwater pumped into or affecting the quality of refuge water supplies, or waters occupied by giant garter snake, the Service recommends that Reclamation require this water not exceed 2 $\mu\text{g}/\text{L}$ selenium. This selenium standard is consistent with requirements of other Reclamation groundwater exchange

programs including the MPG EIS and with the DMC Pump-In Program (USBR 2010). Further, to address effects to downstream uses, the DEA should include a list of applicable water standards/objectives (e.g., TDS concentrations for irrigation suitability in CVP contracts, selenium objectives in Grassland Marshes, etc) and identify how the proposed Project will ensure that groundwater pumping into supply canals will not affect the achievement of those standards. This project, as well as other groundwater pump-in projects affecting refuge water quality, should include a monitoring and reporting requirement for TDS, selenium and mercury. Finally, the DEA should consider the refuge water directive of Section 3406(d) of the CVPIA, requiring firm water supplies of suitable quality to maintain and improve wetland habitat on units of the National Wildlife Refuge System in the Central Valley of California, Los Banos and North Grasslands wildlife management areas; and on the Grasslands Resources Conservation District.

Analyses of Environmental Consequences are incomplete and/or insufficient

Effects analysis of water quality impacts incomplete

On page 22 of the DEA, it is assumed that FCWD's groundwater pumping into district conveyance and into Mendota Pool would not increase TDS by more than 30 mg/L. Reclamation should provide water quality data or analysis to support this conclusion in the DEA. The DEA notes that CCID requires 700 EC ($\mu\text{S}/\text{cm}$) downstream blended quality, but provides no description of how that is measured or reported and provides no recent water quality data from similar groundwater pump-ins to support this conclusion.

Land use analysis is incomplete

Land use is described for only half of the districts involved in this project. There are no land use descriptions for CCID, Panoche, and Del Puerto WD's. Yet on page 24, the DEA concludes that "*There would be no land use changes in CCID.*" And on page 28 the DEA finds, "*The giant garter snake, because of extensive losses of suitable natural wetlands, now relies on rice fields in parts of its range. Some rice is grown in portions of some of the districts involved in these proposed actions...The Proposed Action also would not change the land use patterns of the cultivated or fallowed fields that do have value to listed species...There would be no loss of acres of land planted with rice as a result of these proposed actions.*" No rice acreage is denoted in the DEA for FCWD or CCID, and no data is provided to support the conclusion.

Water quality analysis assumes no effect to giant garter snake

On page 28 of the DEA Reclamation concludes that diminished water quality in the supply water would have no effect on the giant garter snake, "*TDS would remain at or below 700 mg/L, which would be low enough to protect the giant garter snake both in Mendota Pool and in suitable habitat in the Grasslands wetlands. Requirements by CCID for non-detect levels of selenium, and the fact that FCWD will not approve any water transfer involving a substitution of groundwater that FCWD believes would interfere with their ability to meet water quality objectives imposed by the Central Valley Regional Water Quality Control Board would protect the giant garter snake from effects of elevated selenium. There would be no loss of acres of land planted with rice as a result of these proposed actions.*" There is no data or analysis to support the conclusion that TDS at or below 700 mg/L would be adequate to protect the giant garter snake. Further, there is no monitoring or reporting program to ensure that wetland water supplies remain at or below 700 mg/L TDS.

Increasing salinity in wetland water supplies could have deleterious effects to the habitat used by the giant garter snake. This was pointed out in a comment letter from the California Department of Fish and Game on the Meyers GWB (CDFG 2005), a project that allows groundwater pumping into the Mendota Pool, *“The water to be extracted from MFWB would be more saline and contain different minerals than that present within the Delta-Mendota Canal/Mendota Pool/Fresno Slough system. This extracted water could degrade existing water quality within the Mendota Pool system, particularly if the banked water is returned to the Fresno Slough during dry or critically dry years as planned. The Project appears to exchange high quality delta water for water that would be degraded as a result of integration with the impaired groundwater in MFWB vicinity. The EA states that Mendota Pool is included in the “2002 Clean Water Act Section 303(d) List of Water Quality Limited Segments,” and that the salinity in Mendota Pool is “generally acceptable for both agriculture and aquatic life.” Any actions that further impair the water quality of Mendota Pool should be avoided due to the potential impacts on aquatic life and the terrestrial species that depend on this biota.”*

Effects to San Joaquin River Restoration are not considered

The DEA notes on page 17 that the reach of the San Joaquin River from Gravelly Ford to Mendota Pool *“is perennially dry except during flood control releases from Friant Dam.”* This appears to be old language and should be updated with current information from the San Joaquin River Restoration Program.

Listed species effects not adequately analyzed and Formal Section 7 Consultation is warranted

The DEA concludes on page 37 that, *“Since there would be no ground disturbance, no adverse water quality changes in garter snake habitat, and because water would move in existing facilities, there would be no effect on endangered species.”* The Service does not concur with this conclusion. Although project impacts are difficult to fully evaluate due to incomplete information provided on the Proposed Action in the DEA, because the project would authorize pumping of lower quality water into conveyance or surface waters that provide water to wetland habitats occupied by giant garter snakes, the Service believes that this project could adversely affect giant garter snakes in the Grasslands wetlands and Mendota Pool vicinity. As a result, the Service recommends that Reclamation initiate formal consultation under the ESA for effects to giant garter snakes and their habitats.

Cumulative Effects Analysis is incomplete

The DEA does not consider the effect of this project cumulatively with other existing projects. For example, other projects in the vicinity of the Proposed Action include: the San Joaquin River Exchange Contractor’s 10-year Transfer Program, the San Joaquin River Exchange Contractor’s 25-Year Transfer Project; MPG Exchanges; Meyer’s GWB; San Joaquin River Restoration Program and the Grassland Bypass Project Extension, 2010-2019. Of particular concern is the effect of the Proposed Action in the DEA combined with the effects of other projects on the achievement of water quality objectives and Total Maximum Daily Loads (TMDLs) in the Grassland wetland supply channels and the San Joaquin River. Further, the

DEA does not consider the effect of this groundwater pumping project with other similar projects on regional groundwater degradation.

The proposed action, in concert with other groundwater pumping projects, lessens water quality in the Main Canal (owned by CCID) which provides refuge water supplies to much of the Grasslands wetlands. As the Service noted in comments on the San Joaquin River Exchange Contractor's 25-Year Groundwater Pumping/Water Transfer Project, "*...the proposed action is expected to lessen water quality in the Main Canal (the supply source to some wildlife management areas in the Grasslands) by 30 to 70 $\mu\text{S/cm}$ EC during March through October of non-critical years and up to 90 $\mu\text{S/cm}$ EC during critical years (equating to roughly an 8-12% increase in EC/TDS concentrations). A TDS increase of 8 to 12% in the Main Canal would cascade through the delivery systems resulting in an increase of TDS delivered to Refuge units which already receive water at and above water quality standards...could cumulatively compromise the ability of the Grasslands Refuges to meet their obligations to comply with the SJR Salt TMDL.*" The 25-Year Transfer Project EA/IS assumed that extracted water would be approximately 2,000 mg/L TDS, and authorized up to 15,000 AFY of groundwater pumping. The proposed action would authorize an additional 25,500 AFY of groundwater pumping/exchanges. Of that, 20,500 AFY would be authorized to be pumped within CCID with a commitment that TDS of extracted water not exceed 1,500 mg/L TDS. An additional 5,000 AFY would be authorized to be pumped from FCWD, it is unknown what portion of that 5,000 AFY would be pumped directly into Mendota Pool from well #5. Although there are no water quality commitments for groundwater pumped from FCWD wells, the DEA notes that TDS often exceeds 3,000 mg/L TDS.

Reclamation should discuss the relationship between the Proposed Action and past, present and future reasonably foreseeable projects in the Cumulative Effects Section of the EA. Specifically, Reclamation should provide additional information on cumulative impacts of past and present and reasonably foreseeable future projects on achievement of water quality objectives and TMDLs in the Grassland wetland supply channels and the San Joaquin River.

Conclusion

In conclusion, the Service recommends that the DEA be revised to address the information deficiencies identified in this memo and be recirculated for public comment. In addition, due to likely effects to water quality of wetland water supplies and associated adverse effects to garter snakes in the project area, the Service recommends that Reclamation initiate consultation with the Service pursuant to section 7(a) of the ESA for this project.

We appreciate the opportunity to review this DEA. If you have any questions or comments about this memo, please contact Ms. Susan Jones or Ms. Joy Winckel of my staff at (916) 414-6600.

Shauna McDonald

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cc:

Laura Fuji and Eugenia McNaughton, United States Environmental Protection Agency,
San Francisco, CA

Theresa Presser, United States Geological Survey, Menlo Park, CA

Kim Forrest, U.S. Fish and Wildlife Service, San Luis National Wildlife Refuge Complex,
Los Banos, CA

Rudy Schnagl, Central Valley Regional Water Quality Control Board, Sacramento, CA

Julie Vance, California Department of Fish and Game, Fresno, CA

Bill Cook, California Department of Fish and Game, Los Banos, CA

David Widell, Grassland Water District, Los Banos, CA

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- [USBR] U.S. Bureau of Reclamation. 2004. Water Transfer Program for the San Joaquin River Exchange Contractors Water Authority 2005-2014 Final Environmental Impact Statement/Environmental Impact Report. Prepared for USBR Mid-Pacific Region, Sacramento and Fresno, and the San Joaquin River Exchange Contractors Water Authority by URS Corporation, Oakland, CA. 17 sections and 5 appendices.
- [USBR] U.S. Bureau of Reclamation. 2005. Mendota Pool Group Final Environmental Impact Statement for the Mendota Pool 10-Year Exchange Agreements. USBR Mid-Pacific Region, Sacramento, and Fresno, CA, 7 chapters and appendices.
- [USBR] U.S. Bureau of Reclamation. 2007. Final Environmental Assessment/Initial Study, Groundwater Pumping/Water Transfer Project for 25 Consecutive Years. USBR, Sacramento and Fresno, CA and the San Joaquin River Exchange Contractors Water Authority, Los Banos, CA. 7 sections. Available at: http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=2771

[USBR] U.S. Bureau of Reclamation. 2010. Final Environmental Assessment Two-Year Exchange Agreements and/or Warren Act Contracts for Conveyance of non-Central Valley Project (Groundwater) in the Delta- Mendota Canal – Water Year 2010 through Water Year 2011, EA-09-169. USBR, Fresno, CA, 49 pp. and appendices. Available at: http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=5336

In Litteris

White, C.L. March 23, 2010. Electronic mail from General Manager, Central California Irrigation District, to Shauna McDonald, Environmental Specialist, U.S. Bureau of Reclamation, South Central California Area Office, Fresno, CA. E-mail responded to questions on DEA 10-12.



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180

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COAST
RIVERS
ALLIANCE



March 2, 2010

Russ Freeman
Westlands Water District
3130 North Fresno Street
Fresno CA 93793-6056

RE: Scoping Comments for Westlands Water District [Westlands] Proposed “Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct”¹. The project proposes to discharge up to 100,000 acre feet of groundwater into the State Water Project California Aqueduct, a Drinking Water Supply for Approximately 20 Million People.

Thank you for the opportunity to comment on the proposed scope of the Environmental Impact Report [EIR] to be prepared by Westlands Water District [Westlands]. Westlands, a federal Central Valley Project contractor, proposes to use up to 100,000 acre feet of the capacity of the State Water Project [SWP] California Aqueduct, operated by the California Department of Water Resources, to transport groundwater. We understand from the proposed project description that “Westlands’ laterals and private pipelines will pump well water directly into the SWP California Aqueduct in both Fresno and Kings Counties within Westlands boundaries.” Our three comments, explained below, are that

Westlands is not the appropriate Lead Agency for this project, the EIR has a wide range of complex water-quality and water-management issues to evaluate, and the trend of piecemeal evaluation of the impacts of such projects needs to stop.

DWR should be the Lead Agency Rather than Westlands:

Our first comment is that we object to Westlands as the Lead Agency. California Environmental Quality Act [CEQA] Guidelines section 15367 and Section 15051 require that the California Department of Water Resources, as the operator of the California Aqueduct and who has responsibility to protect the public health and safety and the financial security of bondholders with respect to the aqueduct, is the more appropriate lead agency. Providing 100,000 acre feet of conveyance capacity to Westlands raises issues about how this project action may have impacts to other State Water Project Contractors.

CEQA requires DWR, the only entity with the requisite statewide authority and expertise, to assume its proper role as lead agency. In *PCL v DWR*, the court found that DWR's attempt to delegate that authority impermissibly insulates the department from "public awareness and possible reaction to the individual members' environmental and economic values." (*Planning and Conservation League et al. v Department of Water Resources* (2000) 83 Cal.App.4th 892, 907, citing *Kleist v. City of Glendale* (1976) 56 Cal. App. 3d 770, 779.)

Further, an environmental impact report, with all its specificity and complexity, is the mechanism prescribed by CEQA to ensure informed decision making and to expose the decision-making process to public scrutiny. (*No Oil, Inc. et al. v. City of Los Angeles et al.* (1974) 13 Cal.3d 68, 86; *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1123.) The EIR is, as the courts have said repeatedly, the "heart of CEQA, an environmental alarm bell, and a document of accountability." (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392 [*Laurel Heights*].) The potential impacts from using the State Water Project's California Aqueduct to transport Westlands ground water supplies to various counties needs the objectivity and expertise of an agency with statewide experience in analyzing and disclosing environmental impacts. The quality of this groundwater that is the subject of the proposed transfer is known to be severely degraded with contaminants.² The underlying premise of the transfer—that high quality water supplies in the State Water Project may be degraded to make polluted water marketable for a private interest—is against the public interest and should be thoroughly assessed by means of an independent objective and complete evaluation in an EIR. The potential impacts to drinking water, treatment costs, aquatic impacts, and sediment loads within the California Aqueduct have far reaching implications to millions of Californians. This environmental analysis needs to have a statewide circulation and a statewide audience.

Additionally, the California Aqueduct is a "water of the State and water of the Nation" and, consequently, Westland's would need an NPDES permit (National Discharge Elimination System) permit under the federal Clean Water Act to discharge pollutants (i.e., selenium, boron, salt, etc.) into the aqueduct. Any environmental document must disclose and discuss all applicable permits.

Westlands, although a public agency, represents the corporate interests of approximately 350 common ownerships.³ Westlands has not demonstrated the credibility and objectivity needed to carry out the analysis and environmental impacts associated with this project. It has consistently acted in its corporate landowner interests against the public interest. For example, it recently sought a waiver from environmental laws and water right laws so that it could jump to the head of the water supply line

during the third year of a drought despite its junior water contract status. This corporate self interest is again on display in this project. For example the stated purpose for using this publicly financed conveyance system is to provide Westlands, a federal contractor, with a more efficient transport system. What is left unsaid is that corporate interests within Westlands will receive a benefit from blending their contaminated groundwater with cleaner supplies. What is patently unclear is how this action will benefit the public interest and public drinking water supplies.

The EIR Must Consider a Complex Range of Water Quality and Water Management Impacts:

The EIR should include evaluation of the proposed action's impact on the following:

1. The SWP water supplies caused by the introduction of degraded groundwater into the California Aqueduct.
2. The variability over time and among wells in the quality of ground water, and changing impacts on the California Aqueduct over time.
3. The quantitative assessment on California's water supply, including increased treatment costs and public health costs, due to increases in selenium, salts, boron and other contaminants that will persist during the twenty five year term of the proposed action.
4. Subsidence impacts to the aqueduct from pumping up to 100,000 acre feet annually.
5. The bioaccumulation of contaminants in the sediments of the aqueduct.
6. The precedent-setting significance of degrading the quality of water in the California Aqueduct.

The EIR Must Stop the Trend of Piecemeal Evaluation of Impacts and Include Broad Assessment of this Project in Relation to Westlands' Past and Current Uses of State Water Facilities:

There is a disturbing trend of piecemeal environmental analysis of the use by Westlands of the California Aqueduct for conveyance non project water. Typically, negative declarations or exemptions from CEQA have been issued by Westlands, or at the behest of Westlands, for their benefit. Typically, objections are brushed aside or documents are not made available to the public in a timely manner for review and comment. Most of these water transfers and exchanges in and out of Westlands could not take place without the use of the SWP California Aqueduct. Two specific examples illustrate the piecemeal actions and analysis:

1. **Discharging Groundwater into the California Aqueduct for Westlands Use or Storage in Kern County:** At different times Westlands has discharged contaminated groundwater into the California Aqueduct for use in the district or for storage in Kern County.⁴ Despite elevated levels of selenium, salt and boron, dumping this groundwater into a canal that serves drinking water for approximately 20 million people was deemed to have no environmental impact.⁵ In 1995, however, previous efforts by Westlands' to use the California Aqueduct to pump in lower quality groundwater to be blended with higher quality Delta water were halted due to concerns by DWR and other agencies, that Westlands' groundwater could degrade the water quality in the canal.⁶ Recently Westlands declared that this use of the California Aqueduct for non-project water conveyance would have not any environmental impacts.⁷

- 2. Transfer of State Water Project Water to Westlands:** On December 29, 2009, Tulare Lake Basin Water Storage District concluded that transfer of SWP water to Westlands of up to 10,000 acre feet for 15 years would have no environmental impact. In fact, since 2004, Westlands has taken advantage of temporary rules to get around the law requiring disclosure of environmental impacts from transferring SWP water to Westlands and substituting other surface water or groundwater. This had been done despite State Water Resources Control Board rules that “temporary change orders” should be temporary. For approximately the last five years, environmental disclosure rules have been waived using the temporary change provisions. Protests by the Central Delta Water Agency were brushed aside and the cited impacts to the Delta, other SWP project users and increased drainage pollution to the groundwater and San Joaquin River were dismissed because the transfers were for only one year.⁸

In response to these protests the SWRCB stated, “With regard to the delivery of water to WWD pursuant to this Order, the State Water Board understands that agricultural deliveries to WWD may ultimately increase the subsurface flow of saline groundwater to the San Joaquin River. However, this process would take up to 10 to 20 years for water applied today to accrete to the San Joaquin River and be measured within the southern Delta.”⁹

The Negative Declaration, issued four days after Christmas 2009, sanctioned this transfer of SWP water to Westlands for 15 years. No analysis of the impacts was provided. These water transfers of SWP project water, other transfers of water from surrounding districts, and application of water to toxic lands in Westlands has been demonstrated to create pollution.¹⁰ And yet the CEQA documents failed to disclose and analyzed these aspects. Irrigators within Westlands indicated they needed this extra water because their water contracts only allow delivery of 1.3 AF per acre under their CVP contracts and they have switched from cotton to almond orchards which demand at least 4 AF per acre.¹¹

All of these recent actions have been approved by waiving the California Environmental Policy Act, or declaring that the water transfers provide greater efficiency, and therefore claiming that environmental disclosure rules are unnecessary. This proposed action of allowing up to 100,000 acre feet of groundwater to be discharged into the California Aqueduct annually will export pollution costs from Westlands to other water districts or drinking-water suppliers and result in a direct public health risk. Assurances that the groundwater quality does not exceed drinking water standards will not adequately protect public health because many contaminants, such as the most commonly used pesticides in the area, do not have drinking water standards. Nor are many of the pesticide contaminants even monitored. These risks and a full environmental impact analysis need to be included in this environmental analysis.

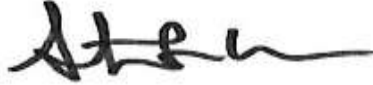
Because of these concerns, we urge the Department of Water Resources to be the Lead Agency for this Environmental Impact Report. This is the only way that decision makers can be fully informed as to the environmental impacts of discharging up to 100,000 acre feet of Westlands groundwater into the California State Aqueduct, which supplies drinking water to approximately 20 million people. The cumulative impacts of the wide range of uses of SWP water and SWP Conveyance facilities by Westlands

must be analyzed in this EIS. The definition of the scope of this project has been artificially narrowed to avoid full disclosure and informed decision making.

Respectfully submitted,



Jim Metropulos
Senior Advocate
Sierra Club California



Steven L. Evans
Conservation Director
Friends of the River



Barbara Barrigan-Parrilla
President
Restore the Delta



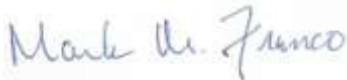
Larry Collins
President
Crab Boat Owners Association Inc.



Carolee Krieger
Board President and Executive Director
California Water Impact Network



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance



Mark Franco
Headman
WINNEMEM WINTU TRIBE



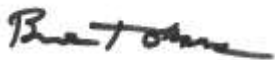
Charlotte Hodde
Water Program Manager
Planning and Conservation League



Conner Everts
Executive Director
Southern California Watershed Alliance



Barbara Vlamis
Executive Director
AquAlliance



Bruce Tokars, Co-Founder
Salmon Water Now

Warren V. Truitt, President
Save the American River Association
Fred Egger, President
North Coast Rivers Alliance

Cc:

Mark Cowin, Director, Department of Water Resources

John McCamman, Director, California Department of Fish and Game

Lisa Jackson, EPA Administrator

Jared Blumenfeld, Region 9 EPA Administrator

Michael Connor, Commissioner Bureau of Reclamation

Donald Glaser, Regional Director Bureau of Reclamation

Timothy Brick, Chairman, Metropolitan Water District

Jeffrey Kightlinger, General Manager, MWD

S. David Freeman, General Manager, Los Angeles Department of Water and Power

Maureen Stapleton, General Manager, San Diego Water Authority

Richard Atwater, General Manager, Inland Empire Utilities Agency

Michael R. Markus, General Manager, Orange County Water District

Kevin P. Hunt, General Manager, Municipal Water District of Orange County

Gary Bobker, The Bay Institute

Kate Poole, NRDC

Trent Orr, Earthjustice

Antonio Rossmann, Rossmann and Moore

Ryan Alexander, Taxpayers for Common Sense

Interested Parties

ENDNOTES

¹ See: Notice of Preparation, State Clearinghouse February 1, 2010.
www.westlandswater.org/www/.../about.asp?...About%20the%20Project

² Final WQ Data Report for the WWD 2008 Pump-In Project 09/25/2008 (PDF, 40 KB). Description: DWR Bryte Lab data final water quality report for the Westland's
...www.water.ca.gov/publications/browse.cfm?letter=F - Cached

³ Nicholas Brozovic et. al. "Trading Activity In An Informal Agricultural Water Market: An Example From California," Department Of Agricultural and Resource Economics University of California 2001. Pg 1.

⁴ See DWR WWD 2008"Pump-In" Project. DWR WATER QUALITY SUMMARY 2008 WWD SWP PUMP-IN PROJECT

⁵ Final WQ Data Report for the WWD 2008 Pump-In Project 09/25/2008 (PDF, 40 KB). Description: DWR Bryte Lab data final water quality report for the Westland's
...www.water.ca.gov/publications/browse.cfm?letter=F - Cached

⁶ From Westlands Water District March 2009 Report, "Deep Groundwater Conditions Report December 2008". Page 8.

Also see DWR Bulletin 132-95 Westlands Water District--"Turn-In" Agreements. In August 1994, the Department signed two "turn-in" agreements with Westlands Water District. Under the terms of these agreements, WWD could pump up to 100,000 acre-feet of ground water directly into the California Aqueduct from WWD's wells located alongside the aqueduct. In addition, WWD could also pump up to 50,000 acre-feet of ground water into the Mendota Pool for conveyance to the California Aqueduct through WWD's Lateral 7."

"During the term of these agreements, March 1994 through February 1995, 16,000 acre-feet of water was conveyed from the Mendota Pool to the California Aqueduct, through Lateral 7, and 84,600 acre-feet of water was pumped directly into the California Aqueduct. The total, 100,600 acre-feet was conveyed by the Department to Reaches 5 through 7 to be used within WWD's service area."

"Westlands Water District--Kings River Water. A letter agreement signed May 12, 1995, between the Department and Westlands Water District approved the acceptance into the California Aqueduct of up to 10,000 acre-feet of Kings River Water for delivery to WWD through Reaches 5, 6, and 7 of the California Aqueduct. This nonproject water will be made available to WWD through an agreement between WWD and the Kings River Water Association. The water will be released from Pine Flat Reservoir and will flow to the Mendota Pool via the Kings River and Fresno Slough. WWD will then convey the water from the Mendota Pool to the California Aqueduct through WWD's Lateral 7."

Also see: Westlands Water District. 1995. Conveyance of Nonproject Groundwater from the Mendota Pool Area Using the California Aqueduct, Draft Environmental Impact Report, Westlands Water District. pp. 303

⁷ State Clearinghouse Number 2009091128, September 30, 2009. "Westlands WD proposes to divert up to 50,000 AF of 2009-10 Central Valley Project supplies for delivery to Semitropic Water Storage

District's [SWSD] banking facilities in Kern County prior to March 1, 2010. SWSD is a member of Kern County Water Agency and partial owner of the Kern Water Bank.

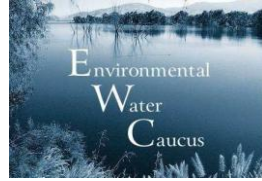
⁸ SWRCB Order WR 2009-0026-DWR page 2.

⁹ Ibid. page 2.

¹⁰ According to the December 2000 United States Geological Survey Open File Report 00-416, even if irrigation of drainage problem areas were halted today, it would take 63 to 300 years to drain contaminated water from the Western San Joaquin Valley's aquifer underlying contaminated soils in WWD. The report reiterates the findings in the Rainbow Report [USGS, Gilliom et.al. 1989] that a 950 thousand acre highly toxic region – more toxic than currently exists - in the Western San Joaquin Valley within the next 40 years will result from continued irrigation with CVP water. To a layperson, although technically not accurate, this reality is tantamount to the Bureau using scarce developed water resources to create a massive, 950,000 acre Superfund Site in the Western San Joaquin Valley. This strongly supports retirement of affected lands and non-irrigation covenants on these toxic lands.

¹¹ Letter from Robert Cooke, Chief, State Water Project Analysis Office to Victoria Whitney, Chief Division of Water Rights, SWRCB. May 7, 2008, "Petition for Temporary Change to Allow the Transfer of State Water Project Water from the Tulare Lake Basin Water Storage District to Westlands Water District in the U.S. Bureau of Reclamation's service area". Page 4.

II. Enforcement of Environmental Protection Laws



CA Save Our Streams Council



October 18, 2021

Karla Nemeth, Director
California Department of Water Resources
P.O. Box 942836, Room 1115-1
Sacramento, CA 94236-0001
Email: Karla.Nemeth@water.ca.gov

Elaine Sobeck, Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100
Email: Eileen.Sobeck@waterboards.ca.gov

Patrick Pulupa, Executive Officer
California Regional Water Quality Control Board,
Central Valley Region
1020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114
Email: Patrick.Pulupa@waterboards.ca.gov

Clay Rogers, Assistant Executive Officer
California Regional Water Quality Control Board,
Central Valley Region
1685 E Street
Fresno, CA 93706
Email: Clay.Rogers@waterboards.ca.gov

David Albright, Manager
U.S. EPA, Region 9
Groundwater Protection Section, WTR-4-2
75 Hawthorne Street
San Francisco, CA 94105
Email: albright.david@epa.gov

Damian Higgins
FWS NRD Regional Office
U.S. Fish and Wildlife Service
2800 Cottage Way, Suite W-2610
Sacramento CA 95825-1846
damian_higgins@fws.gov

Re: Lack of CEQA & NEPA Compliance for San Luis & Delta-Mendota Water Authority DWR Grant Agreement No. 460001384 [Westlands Water District's Agricultural Aquifer Storage and Recovery (ASR) Project at Broadview Water District]

Dear Director Nemeth, Executive Director Sobeck, Mr. Pulupa, Mr. Rogers, Mr. Albright and Mr. Higgins:

We write regarding the failure of Westlands' Broadview ASR project to comply with state and federal environmental laws. Despite assurances of compliance by Westlands Water District (Westlands), the Grantee has failed to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Under the Grant Agreement and DWR grant rules the Grantee and local project sponsors must demonstrate compliance with all applicable requirements of CEQA and, if applicable, NEPA. DWR is the agency responsible for ensuring compliance with CEQA for each individual project included in the grant agreement. We urge DWR not to concur with Westlands' CEQA compliance claims. The \$809,263 grant awarded in August 2021, with construction scheduled by December 2021, violates state law in that it fails to meet the CEQA and NEPA requirements and lacks the required California Endangered Species Act (CESA) and Endangered Species Act (ESA) consultations.

As background, in 2020 the California Department of Water Resources (DWR) announced final State grants for Round 1 Integrated Regional Water Management (IRWM) Implementation. Included with the State grants awarded in the San Joaquin River funding area is the aforementioned grant to Westlands Water District (Westlands) for the Broadview Aquifer Storage and Recovery (ASR) Project.¹ In August 2021, Westlands, through the San Luis Delta Mendota Water Authority, secured the grant to design and construct facilities for the injection of water into the upper and lower aquifers within Broadview WD.^{2,3}

On June 24, 2021, Westlands notified DWR that the Broadview ASR project has CEQA coverage under the Westlands WD ASR Mitigated Negative Declaration (MND). Westlands adopted a MND for an ASR program within the district October 4, 2019 (SCH # 2019089109).⁴ Modeling used to support the MND for the Westlands ASR program, however, did not include any wells in Broadview WD (as depicted in Figure 3 of the MND on page 13) and did not consider potential hydraulic and surface water impacts of an ASR program in Broadview. Moreover, the modeling in the MND did not include analysis of mobilization of existing contaminated shallow groundwater present in the upper aquifer to adjacent lands, aquifer zones, drainage systems, or surface waters as a result of injection into the upper aquifer.

In addition, the Westlands ASR MND references the Water Quality Control Plan for the Tulare Lake Basin, yet the Broadview ASR, because of its potential to impact downstream surface waters, should be governed by water quality requirements in the San Joaquin River Basin Plan, not the Tulare Lake Basin Plan. We also note that Westlands received State IRWM grant funding for the Broadview ASR project from the San Joaquin River funding area, not the Kern Tulare funding area. Finally, the Westlands ASR MND only considered drinking water MCLs in extracted water, including a 50 µg/L selenium objective which will not be protective of fish, wildlife, nor migratory birds.

Compounding the lack of environmental review for this specific project, Westlands submitted a technical report of waste discharge that also failed to analyze these significant nuisance, pollution, and water quality concerns. The Central Valley Regional Water Board (RWQCB) issued a Monitoring and Reporting Program (MRP) on March 18, 2020, for the Westlands ASR (R5-2020-0809). No CEQA review has been completed for the MRP program that covers impacts from injecting water into the Broadview WD well site established in January 2021 under the DWR grant. Further, the MRP fails to require monitoring of changes in the water table in shallow wells in Broadview ASR project and changes in flows into the tile drains, downslope lands, and surface water. Injecting water into the upper aquifer is predicted by Westlands to increase hydraulic pressure by an average of 60 ft near the base of the upper aquifer. This injection-caused increase in pressure in the deeper parts of the upper aquifer may cause movement of contaminants known to exist in the shallow part of the upper aquifer into downslope drains, canals and/or surface water supplies, including those supplied to public and private wetlands in the Grasslands Ecological Area. The monitoring program ignores these potential impacts of injecting water into the upper aquifer underlying these drainage impacted lands of Broadview WD.

In addition, the MRP monitoring requirements for extracted water from the Westlands ASR focuses solely on drinking water impacts, does not require selenium monitoring to ensure fish and wildlife beneficial uses are protected, and does not ensure protection of existing surface waters from the discharge of this groundwater back into the California Aqueduct or Delta Mendota Canal or other canals.

Westlands, the largest federal irrigation contractor in the nation, proposes as part of this project to discharge contract water into the Broadview ASR project. And, at some later date, Westlands proposes to extract this groundwater for discharge in either the Delta Mendota Canal or California Aqueduct or some other canal for transfer to irrigate crops within Westlands. In the Westlands' 2019 MND, the California Department of Fish and Wildlife commented that NEPA and ESA consultation are needed due to the diversion of these waters that are ecologically critical to fish and wildlife.⁵ We could not locate any federal NEPA compliance or ESA consultation for this project. In addition, we also could not locate any federal EPA injection well permit for this project or NEPA analysis for this injection project.

The undersigned organizations have long-standing interests in the agricultural drainage problems on the west San Joaquin Valley because contaminants in drainage discharges have profound effects on the San Joaquin River, San Francisco Bay Delta Estuary and the environment, including effects to downstream waterways, aquatic life, and migratory birds. Further, Westlands' Broadview District lands have historically contributed to this drainage discharge through participation in the Grassland Bypass Project (GBP). We hereby include our comments on the GBP and related projects by reference.⁶

Background on Broadview WD

Broadview, which is now owned by Westlands, is located on the west side of the San Joaquin Valley and approximately five miles west of Firebaugh, in Fresno County, adjoining and just north of Westlands Water District. According to the San Luis Drainage Feature Re-evaluation

EIS (SLDFR), the entire Broadview WD is drainage impaired.⁷ Broadview WD participated in the GBP until 2005. Broadview WD was effectively retired from irrigation in 2005 when Reclamation approved the Central Valley Project Assignment of Broadview's water contract to Westlands (USBR 2006). Prior to the contract assignment, Reclamation reported that lands within Broadview had shallow water tables, with groundwater averaging 5-10 feet below ground surface. About 6,500 acres of tile drain systems have been installed in Broadview WD.⁸ Tile water generally contains high concentrations of dissolved salts and high concentrations of other substances of concern, particularly selenium (USBR 2006). Water quality data for shallow groundwater in Broadview, which feeds the drains when they are active, was described by Reclamation (USBR 2006) as:

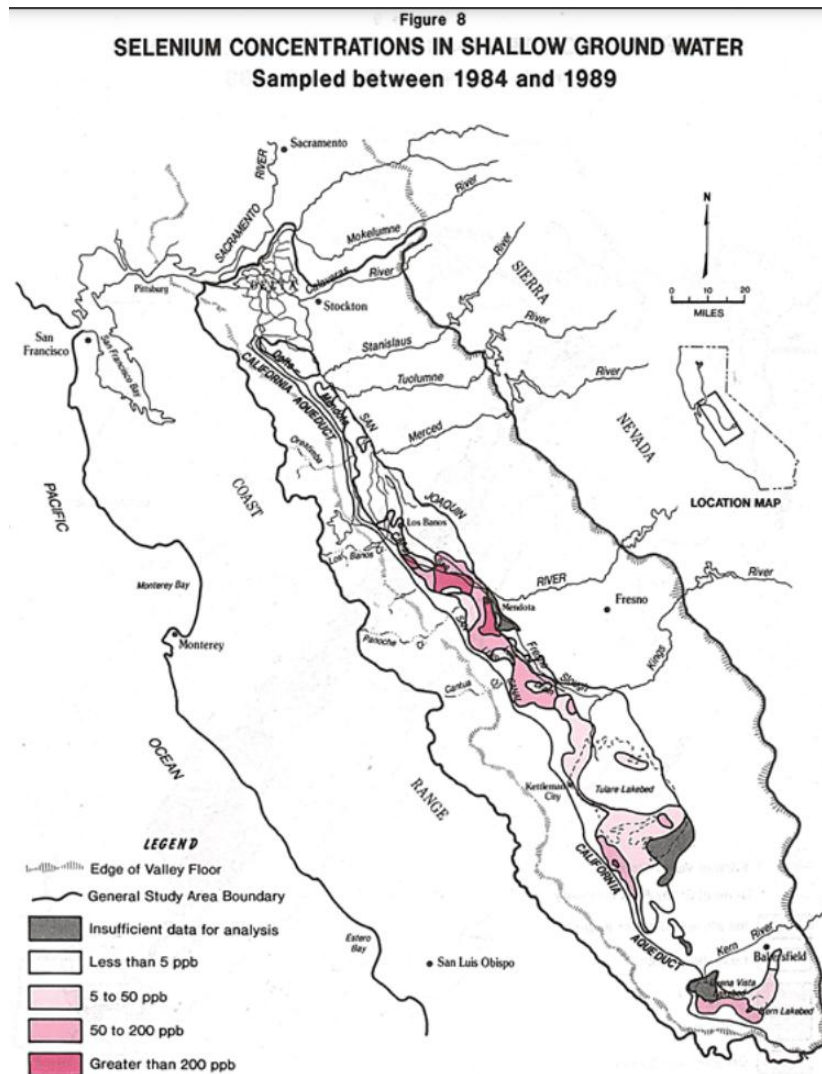
- Salinity: 5,000 to 10,000 dS/m
- Selenium: concentrations greater than 200 µg/L

The USBR's 2004 Broadview Water Contract Assignment Draft Environmental Assessment cited Summer's Engineering as predicting a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year from the cessation of irrigation on 9,200 acres of agricultural land in Broadview Water District as per Table 4-1 below (USBR 2004). This amounts to a per acre reduction of 0.28 AF of drainage, 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of boron. The retirement of Broadview WD from irrigation likely accounted for much of the reductions in selenium loading, and most of the reductions in drainage volume, boron, and salt reported by Summers Engineering.⁹

**TABLE 4-1
DRAINAGE AND WATER QUALITY EFFECTS OF PROPOSED ACTION ON THE
SAN JOAQUIN RIVER**

	Existing Conditions	Under Proposed Action Conditions	Estimated Reduction Attributable to Proposed Action
BWD Drainage to San Joaquin River (afy)	3,700	1,100	2,600
BWD Estimated Salt Production (tons/yr)	24,300	7,300	17,000
BWD Estimated Selenium Production (lbs/yr)	2,140	640	1,500
BWD Estimated Boron Production (lbs/yr)	74,000	22,000	52,000

Source: Summers Engineering, 2003



See Federal Drainage Rainbow Report that documents how hydraulic pressure from lower areas in the upper aquifer can mobilize contaminants.
(See <https://esrp.csustan.edu/projects/lrdp/documents/rainbowreport.pdf>)

Downslope effects of Broadview ASR were not evaluated in Westlands ASR MND or MRP

Numerous Bureau of Reclamation documents have noted downgradient groundwater flows that could adversely impact areas downslope of Westlands.^{10,11} Further, in written testimony to the SWRCB on the effect of the shallow drainage problem upslope of the Firebaugh and CCID on downslope drainage conditions (Deverel 1998), Dr. S. Deverel noted that, “Continuing water conservation measures that reduce loads throughout the western Valley will reduce the deep percolation and flow to drains in some areas. However, this results in storage of salts in the subsurface that slowly move downwards and to the northeast. The rate of downward movement of water is about 1 foot per year. Groundwater flows laterally at rates of about 10 to 1000 feet per year.”

“The increasing hydraulic gradients cause increasing volumes of the higher salinity water to move towards the drain laterals, thus increasing the loads and concentrations.”

“The flow to drains and residence time in groundwater of drainage water influences how changing water management practices will change the salt load in the drainage water. Because it often takes groundwater several years to several decades to flow to drainage ditches and laterals, the effects of changing the concentration of the salinity of the irrigation water takes a long time to show up in the drainage water. However, the hydraulic effects are immediate...”

Westlands’ ASR MND and the RWQCB MRP requirements do not consider the impacts from injecting surface water supplies into drainage prone areas in Broadview WD, including movement of existing contaminants in the shallow groundwater and flow into nearby and downslope drains and surface water. Also not identified in the Westlands ASR MND are locations of wells to be used in Broadview, where extracted water from the Broadview ASR will be used.

Injection into these contaminated areas with documented drainage contaminant issues may have significant impacts on downstream surface water supplies, and fish and wildlife resources. This action by Westlands threatens to degrade good quality surface water (that is injected), create downslope pollution and a condition of nuisance, and violate the State’s Antidegradation Policy, SWRCB adopted Resolution 68-16.¹² The MRP ignores the impact that injecting water will likely move existing contaminated groundwater to surface supplies, drains and canals.

Selenium Drinking Water Objective is not Protective of Fish and Wildlife

The Westlands ASR MND includes the MCL for selenium of 50 µg/L in Table 5, Water Quality Objectives and Current Groundwater Quality which is derived from California Code of Regulations Title 22 §64651.50. As the undersigned organizations noted in comments submitted to the RWQCB on the Triennial Review of the Water Quality Control Plans for the Sacramento and San Joaquin River Basins and the Tulare Lake Basin,¹³ *“Because selenium bioaccumulates in aquatic ecosystems to levels that are harmful to fish and their predators, the Title 22 selenium objective is not protective of the fish and wildlife beneficial uses...”* The State has adopted a water-quality objective for selenium of 2 ug/L for the Grasslands wetland supply channels in the Sacramento and San Joaquin Rivers Basin Plan and the USEPA recommended an objective for selenium of 1.5 ug/l for lentic aquatic environments. The U.S. EPA’s recommended 1.5 ug/L for lentic waters was set at an 80% protection level, so a substantial number of U.S. waters (20%) will require even lower selenium concentrations for protection of designated fish and wildlife uses. (<https://www.epa.gov/system/files/documents/2021-08/selenium-freshwater2016-2021-revision.pdf>). For example, EPA determined in 2016 that the freshwater upper Bay/Delta, (downstream of potential Broadview WD drainage discharges) would require a selenium water quality standard of 0.2 ug/L (a site-specific standard far below the generic 1.5 ug/L recommendation; <https://www.federalregister.gov/documents/2016/07/15/2016-16266/water-quality-standards-establishment-of-revised-numeric-criteria-for-selenium-for-the-san-francisco>).

The MRP for the Westlands ASR fails to include any monitoring requirements for selenium in groundwater or extracted water. Injecting water into drainage impacted groundwater aquifers will create increased hydraulic pressure and will likely cause movement of contaminants in the upper aquifer into downslope drains, canals and/or surface water supplies.

Conclusion

DWR should not concur with Westlands' proposed CEQA compliance documents. These grant funds should be rescinded until a full EIR and EIS are completed. Proceeding to construct this project in December 2021 would fail to consider a full range of alternatives, including prohibition of discharge into the upper aquifer. Alternatives should also include strict restrictions on the quality of water being injected. Drinking water MCLs will not protect beneficial uses of these aquifers in the future.

Compliance with CEQA and NEPA demand that the Westlands Broadview ASR project fully evaluate and mitigate the effects of well injection of surface water on shallow groundwater conditions in Broadview WD along with impacts to downslope districts and waterways. The 2019 MND failed to consider cumulative impacts and impacts from other projects. For example, the GBP CEQA/NEPA, SLDFR FEIS and GBP WDRs all assumed that lands within Broadview WD would be retired from irrigation. Before implementing the Westlands Broadview ASR project, impacts from the injection of surface water to the water table and hydraulic pressure to downslope lands and surface waterways should be modeled and assessed. If the water table rises and such flows are increased because of increased pressure at depth of injection, then adverse effects on surface water quality would result due to the high levels of salinity and trace elements, including selenium, in the shallow groundwater. Detailed monitoring should be required of shallow ground water levels in the vicinity of the injection wells and of flow and water quality in any drains or surface waters.

In addition to an EIR and EIS to fully evaluate these potential environmental impacts, we recommend that the SWRCB and RWQCB meet with USGS, USFWS, and university selenium and drainage experts to discuss implications of the Broadview ASR project and the cumulative impacts of Westlands proposed ASR project on other drainage impaired lands.

Thank you for your consideration.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net

Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org

Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net

Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com

Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org

John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com

Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com

Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net

Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com

Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com

Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Susan Harvey
President
North County Watch
ifsusan@tcsn.net

Endnotes

¹ See: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Work-With-Us/Grants-And-Loans/IRWM-Grants/Files/Prop-1-Implementation/Final-Awards/Final-Awards-List-San-Joaquin-River_ay20.pdf

² The San Luis and Delta Mendota Water Authority's Westside-San Joaquin Integrated Regional Water Management Plan (IRWMP) did not include a Broadview ASR Project. See: <https://sldmwa.org/integrated-regional-water-management-plan/> The only project identified in the IRWMP in Broadview WD was a Broadview Water District Drainage Water Treatment Project, described in Appendix D page 5 of the IRWMP.

³ In the application for the IRWM State grant (page 1-1), the SLDMWA acknowledged that the Broadview ASR Project was being submitted under a different name from that used in the Westside-San Joaquin IRWMP project list, and referred to the Westlands ASR. Westlands applied for \$750,000 of State funding for the Westlands ASR in the Tulare/Kern funding area but was not awarded a grant See @ page 1: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Work-With-Us/Grants-And-Loans/IRWM-Grants/Files/Prop-1-Implementation/Final-Awards-List--Tulare-Kern_ay20.pdf

⁴ For the NOD see: <https://ceqanet.opr.ca.gov/2019089109/3/Attachment/UMymrt>
For the MND see: <https://ceqanet.opr.ca.gov/2019089109/2/Attachment/QdGzdr>

⁵ <https://ceqanet.opr.ca.gov/Project/2019089109> See CDFW comment letter September 30, 2019 pg 20.

⁶ Coalition comments on the Grassland Bypass Project's Technical and Monitoring Report Pursuant to California Water Code Section 13267. September 10, 2021. See:

Coalition comments to Governor Newsome on the Discharge of Contaminated Groundwater Using Loopholes Created by Emergency Executive Order1 Likely to Harm Downstream Beneficial Uses and Drinking Water Supplies--Arsenic and Selenium Concerns __ Objection to Proposed CEQA Exemption for Westlands Water District's Groundwater Pump-ins into the California Aqueduct. May 25, 2021. See:

Coalition scoping comments on the Notice of Preparation of an Environmental Impact Report for Westlands WD's proposed Groundwater Pumping and Conveyance Project. April 10, 2021. See:

Coalition comments on the Triennial Review of the Water Quality Control Plan for Sacramento River and San Joaquin River Basins and the Tulare Lake Basin. May 10, 2021. See: <https://calsport.org/news/wp-content/uploads/CVRWQCB-Triennial-Review-Cmts-CSPA-et.-al.-05-10-21.pdf>

Coalition comments on Grassland Bypass Project Drainage Management Plan, Including Components of the Westside Regional Drainage Plan and the Long-Term Stormwater Management Plan. February 1, 2021. See: https://calsport.org/news/wp-content/uploads/PCL-PCFFA-et-al-Cmts-to-the-CV-Regl-Bd_GBP-Drainage-Mgmt-Plan_2-1-21-.pdf

Coalition comments on Westlands pump-in project, 9.30.2020: See: https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-9-30-2020_WWD-SLC-Pump-in-2020-IS_ND_Cal-Aqueduct-Corrected.pdf

Coalition comments on USBR's Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area. December 23, 2019. See:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

Comments of Pacific Coast Federation of Fishermen's Associations (PCFFA) and the Institute for Fisheries Resources (IFR), and the signatory organizations Re: Comments on Tentative Waste Discharge Requirements (WDRs) for Surface Water Discharges from the Grassland Bypass Project in Merced and Fresno Counties. November 5, 2019. See: <https://calsport.org/news/wp-content/uploads/Fishing-Conservation-Grps-Cmt-Letter-CVRWQCB-WDRs-for-Federal-SLD-Grassland-Drainers-Discharge-11-6-19-1-2.pdf>

Coalition comments on Grassland Bypass Project Long-Term Storm Water Management Plan EIR Addendum and Initial Study--A Full EIR-EIS is Required. September 9, 2019. See:

<https://calsport.org/news/wpcontent/uploads/PCL-et.-al-Cmt-Letter-GBP-Stormwater-Plan-CEQA-09-09-2019-3.pdf>

Coalition comments of environmental, fishing and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. See: <http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-Ca-Selenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf>

Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker, June 22, 2015. See:

https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf

Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR, September 8, 2014. See: <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbp-land-retirement.pdf>

Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project, June 30, 2014. See: <http://calsport.org/news/wp-content/uploads/Final-coalition-comments-on-Draft-GBP-WDR-6.30.14.pdf>

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CSPA, CWIN and AquAlliance submit Comments to State Water Board Regarding Grassland Bypass Project and Basin Plan Amendment. September 22, 2010. See:

https://calsport.org/cspa_files/CSPA_CWIN-SJR%20SeleniumCont.pdf

Sierra Club et. al. Comments: Grassland Bypass Project & San Joaquin River Selenium Basin Plan Amendments September 22, 2010.

https://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/sjr_selenium/comments092210/jim_metropulos

⁷ See Table C1-3, Current Projections of Area Needing Drainage Service: Northerly Area, SLDFR FEIS Appendix C, page C-3, at this link: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

⁸ SLDFR FEIS @ page 12-16, available at this link:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2232

⁹ See Figure 6 on page 13 of WDR R5-2019-0077, Grassland Drainage Area – Selenium Discharge and Targets derived from Summers Engineering, Inc. Grassland Bypass Project Surface Water Monitoring. Order R5-2015-0094, Annual Monitoring Report 2018, available at this link:

https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2019-0077.pdf

¹⁰ See SLDFR FEIS @ page 6-26, available at this link:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

¹¹ See San Luis Unit Long Term Contract Draft Supplemental EIS dated 2006, Appendix B @ pg 11, available at this link: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2143

¹² See: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1968/rs68_016.pdf

¹³ See: Coalition comments on the Triennial Review of the Water Quality Control Plan for Sacramento River and San Joaquin River Basins and the Tulare Lake Basin. May 10, 2021.

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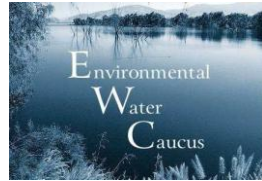
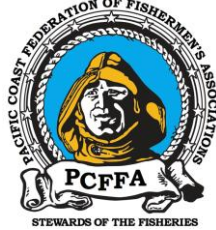
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CA Save Our Streams Council



September 15, 2021

Ms. Rain Emerson
U.S. Bureau of Reclamation
South-Central California Area Office
1243 N Street
Fresno, California 93721
Email: remerson@usbr.gov

Comments on the Draft Environmental Assessment (DEA) for the Homer LLC Multiyear Banking and Transfer Program (CGB-EA-2021-052).

Dear Ms. Emerson:

Thank you for the opportunity to comment. We have reviewed the subject DEA and find that it is incomplete regarding analysis of environmental impacts in several areas, which we address in detail in comments below. At the heart of the National Environmental Policy Act (NEPA) is an accurate, specific definition of the project and the purposes to be served. Neither are provided in this DEA: The type of water, the specific quantities, specific locations and other details in this blank check DEA that covers much of the Central Valley are not provided or disclosed. Further, the DEA lacks sufficient data to determine compliance with NEPA, provisions of State of California water quality laws under Porter Cologne and the federal Clean Water Act, the federal Endangered Species Act and State of California Endangered Species Acts (ESA and CESA), and the California Environmental Quality Act (CEQA). The Homer LLC Multiyear Banking and Transfer Program (Homer Project or Project) is a substantial and

complex project involving numerous groundwater banking facilities in and outside of the San Joaquin Valley that clearly requires a comprehensive Environmental Impact Statement (EIS) to properly address potential impacts and alternatives to the proposed project. The project proponent driven by private special interests is not the entity to carry out the environmental impact review. Finally, despite previous requests the undersigned organizations, all of whose members and organizations are potentially impacted by this project were not notified of the opportunity to comment. A mere listing on the USBR website is insufficient public notification for a project of such broad impact and complexity.

The National Environmental Policy Act (NEPA) compels an informed process. NEPA requires that federal decision makers be informed of the environmental consequences of their decisions and undertake an assessment of the environmental effects of their proposed actions prior to making decisions.¹ An informed decision document under NEPA should include all relevant data, including past monitoring data along with analysis of that data, to help inform the public and decision makers as to impacts and guide future implementation of the project.

There are significant data gaps that hinder the public and decision makers' from making an informed decision regarding the potential environmental consequences of allowing up to an additional 120,000 acre feet (AF) of Central Valley Project (CVP) water to be transferred to Homer Project assets to be stored in up to 9 groundwater banks and then extracted and conveyed to numerous potential contractors both within and outside of the San Joaquin Valley and outside of the CVP Place of Use (POU). The DEA fails to provide an adequate description of and need for the project, alternatives to the Project are not considered, and cumulative impacts are completely ignored. The DEA is vague with respect to the type of waters that can be transferred to the Project, where the water is coming from and going to, and references 9 groundwater banks that Homer LLC has assets in (5 of which are not approved by Reclamation), and no explanation is provided why this project is needed over the existing South of Delta and Friant transfer programs.

Also completely neglected are the impacts from discharging this groundwater into State and Federal canals and potentially substituting or exchanging it with water exported from the Delta Estuary or other exchanges that have the potential to impact the American River, Yuba River, Sacramento River and Shasta Dam operations. Page 7 of the DEA discusses the use of exchanges to deliver Homer Project water, *“As there are currently no facilities that could reverse pump water up the California Aqueduct or the Friant-Kern Canal, return of previously banked CVP water to districts located upstream of Reclamation-acknowledged banking projects (e.g., South of Delta Contractors and Friant Contractors in Tulare and Fresno Counties) would occur only via exchange among districts.”*

There is substantial evidence that groundwater pumping including this project have caused and—if permitted again, will continue to cause—water pollution, land subsidence, increased water supply costs to others, and further damage to Federal and State canals including the California Aqueduct. The DEA fails to provide a complete assessment of the impacts of this project, fails to provide any evidence of NEPA or CEQA, ESA or CESA consultations or analyses having been completed for the Reclamation Acknowledged Water Banks that the Homer Project is involved with, fails to include any Warren Act Contracts² associated with the Homer Project even though the DEA states on page 5 that,

¹ https://ceq.doe.gov/docs/get-involved/Citizens_Guide_Dec07.pdf

² The Warren Act (Pub. L. No. 61-406) authorizes USBR to enter into contracts to impound, store, or convey non-CVP water in federal facilities, when excess capacity is available. Warren Act Contracts are issued by Reclamation to allow movement of non-federal water through federal facilities.

“Any non-Project water introduced into Federal facilities will require a Warren Act contract and must meet Reclamation’s then-current water quality criteria prior to introduction”,³ fails to provide any historic data on transfers and exchanges that have involved Homer LLC; fails to include effects of prior groundwater recovery associated with the Homer Project on subsidence damages to State and Federal canals including the California Aqueduct, and provides no information on prior water quality data, from previous groundwater recovery associated with the Homer Project assets. Without these environmental analyses, the public is left in the dark about what the environmental impacts of the full scope of the Project will be including the operation of groundwater banking facilities with Homer LLC assets.

The DEA, as presented, does not support a “fair argument” that this project does not have significant environmental impacts. A full Environmental Impact Statement (EIS) is required so that the environmental impacts, as well as costs and damage to infrastructure and downstream beneficial uses, can be adequately analyzed and described to the public and decision makers.

Our organizations provide these comments on Reclamation’s DEA for Homer LLC Multiyear Banking and Transfer Program. In accordance with NEPA, Reclamation, as the Federal lead agency, made this DEA available for a 30-day public comment period closing on September 16, 2021.⁴ Our comments are organized in two parts: (1) a summary of the project as described in the DEA as background for our critique, and (2) a critique of the project, monitoring requirements, and environmental analysis.

SUMMARY OF PROJECT AS DESCRIBED BY RECLAMATION IN THE DEA

Under the Proposed Action, Reclamation would approve a series of annual transfers of up to 120,000 acre-feet (AF) per year of available CVP water supplies to districts where Homer operates over a 9-year period. According to the DEA, Homer LLC banks and delivers water to farms throughout the San Joaquin Valley, as well as several districts that are outside of the San Joaquin Valley and outside of the State permitted CVP Place of Use (POU). The Districts with Homer Project Assets and operations are listed in Table 1 of the DEA and copied below. Homer participates in nine water banking programs in Kern and Tulare Counties. According to the DEA on page 3, *“All of these water banking programs are Reclamation-acknowledged or in the process of becoming acknowledged and are approved to receive CVP water.”* Yet five of the water banks listed in Table 2 of the DEA (and copied below) have not yet been officially acknowledged (approved) by Reclamation.

Historically, Reclamation annually approved transfers of CVP water supplies from Friant Division CVP contractors and/or South-of-Delta CVP contractors to-and-from various water agencies on behalf of Homer LLC. Homer LLC is requesting long-term approvals for transfers of available CVP water from Reclamation under a proposed multi-year transfer and banking program. The proposed multi-year transfer and banking program would allow Homer to bank supplies made available during wet years for withdrawal during dry years. The specific amounts, types of water--surface or ground--source of the water and where the water is delivered have not been disclosed. The purpose of the Project is to provide Homer with operational flexibility and to facilitate better management of available water supplies to meet existing water supply needs. No analysis of alternatives are examined or provided the public to meet this stated project purpose.

³ DEA page 5, *“Any non-Project water introduced into Federal facilities will require a Warren Act contract and must meet Reclamation’s then-current water quality criteria prior to introduction.”*

⁴ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=50324

CVP water acquired by Homer could be delivered for direct use, or to Reclamation-acknowledged banking projects, in the following ways:

- Friant CVP water could be delivered via the Friant-Kern Canal and the Cross Valley Canal. The Friant CVP water would either be directly used or banked for later recovery and use.
- South-of-Delta CVP water, including Cross Valley Contractors' South-of-Delta CVP water, could be delivered via the Delta Mendota Canal, the California Aqueduct, and the Cross Valley Canal. The water may or may not be stored and scheduled in San Luis Reservoir. The south-of-Delta CVP water would be either directly used or banked for later recovery and use.
- San Joaquin River Restoration Program Recaptured/Recirculated Friant CVP water could be delivered from the San Luis Reservoir via the California Aqueduct, the Delta Mendota Canal, and the Cross Valley Canal. The Recaptured/Recirculated water would either be directly used or banked for later recovery and use.

Page 2 of the DEA notes, "*As indicated on Table 1 Homer has operations in Berrenda Mesa Water District, which is outside of the CVP place of use. Transfers of CVP water to this district have historically been carried out under an order for a temporary change in place-of-use from the State Water Resources Control Board (SWRCB).*" We note that 3 other districts in Table 1 are also outside of the CVP POU including: Antelope Valley East Kern Water Agency, Littlerock Creek ID, and Palmdale WD. There is no mention of the need for a temporary change of POU for these districts in the DEA or Table 1.

Table 1. Districts with Homer Assets and Operations

Name	Surface Water Supplies	CVP POU ?	SWP POU ?	Homer Assets & Operations
Lower Tule River Irrigation District (ID)	CVP Friant Division contractor, CVP Cross Valley Canal contractor and Tule River supplies	Yes	No	Land, farming, recharge facilities, water transfers and exchanges
Pixley ID	CVP Cross Valley Canal contractor and Deer Creek supplies	Yes	No	Water transfers and exchanges
Porterville ID	CVP Friant Division contractor and Tule River supplies	Yes	No	Land farming, water rights, water banking, ⁵ recharge facilities, water transfers and exchanges
Saucelito ID	CVP Friant Division contractor and CVP Cross Valley Canal contractor ⁶	Yes	No	Land farming, water banking, water transfers and exchanges
Shafter Wasco ID	CVP Friant Division contractor	Yes	Yes	Land, water banking, water transfers and exchanges
Tulare ID	CVP Friant Division Contractor and Kaweah/St. Johns River supplies	Yes	No	Water rights and water exchanges
Antelope Valley East Kern Water Agency	SWP contractor	No	Yes	Land, water rights, water banking, farming, water transfers and exchanges
Berrenda Mesa Water District (WD)	Member unit of the Kern County Water Agency (KCWA)	Temp orders ⁷	Yes	Land, farming, water banking, recharge facilities, water transfers and exchanges
Littlerock Creek ID	SWP contractor and Littlerock Creek	No	Yes	Water banking, water transfers and exchanges
Palmdale WD	SWP contractor	No	Yes	Water banking, water transfers and exchanges
Rosedale-Rio Bravo Water Storage District (WSD)	Member unit of the KCWA	Yes	Yes	Water banking, water transfers and exchanges
Semitropic WSD	Member unit of the KCWA and Poso Creek	Yes	Yes	Water banking, water transfers and exchanges
Wheeler Ridge-Maricopa WSD	Member unit of the KCWA	Partially	Yes	Land, water banking, water transfers and exchanges
North Kern WSD	Kern River supplies	Yes	Yes	Land, water banking, water transfers and exchanges
San Luis WD	CVP San Luis Unit contractor	Yes	No	Water transfers and exchanges
Del Puerto WD	CVP Delta Division contractor	Yes	No	Water transfers

⁵ Recharge facilities accrue Sustainable Groundwater Management Act (SGMA) benefits only. Water banks include recovery to areas outside of the Groundwater Sustainability Agency (GSA).

⁶ Through a subcontract with Tulare County.

⁷ KCWA obtains temporary consolidated place of use orders from the State Water Resources Control Board.

Table 2. Homer Water Banking Facilities

Water Banking Facility	CVP POU?	SWP POU?	Reclamation Acknowledged?
Berrenda Mesa Water Bank	Yes	Yes	Pending
Deer Creek–Friant Kern Canal Water Bank (Saucelito ID)	Yes	No	Pending
Mettler Water Bank (Wheeler Ridge Maricopa WSD)	Yes	Yes	Pending
North Kern WSD Water Bank	Yes	Yes	Yes
Pioneer Water Bank (Berrenda Mesa WD account)	Yes	Yes	Yes, as part of Kern Water Bank
Rosedale Rio Bravo WSD Water Bank	Yes	Yes	Yes
Semitropic WSD Water Bank	Yes	Yes	Yes
Shafter Wasco ID Water Bank	Yes	Yes	Pending
Tule River–Friant Kern Canal Water Bank (Porterville ID)	Yes	No	Pending

SPECIFIC COMMENTS AND RECOMMENDATIONS

Inadequate NEPA Analysis and Data to Support the Conclusion of No Environmental Impact.

The effects of Homer Project transfers and groundwater banking have not been analyzed individually or cumulatively in the DEA, are taking place concurrently with other CVP Districts’ water transfer sales approved by Reclamation, and the total cumulative acre-feet of these transfers is not disclosed. The DEA also fails to provide any explanation as to how the Project and its action components, including groundwater extraction and conveyance both in Basin (San Joaquin Valley) and out of Basin will comply with State and local laws and regulations, such as the Sustainable Groundwater Management Act (SGMA) and county groundwater ordinances, and comply with water quality requirements and protection of existing beneficial uses.

The Definition of the Proposed Action is inadequate.

The DEA fails to provide an adequate description and need for the project. The DEA is vague with respect to the type of waters that can be transferred to the Project, where the water is coming from and going to, and references 9 groundwater banks that Homer LLC has assets in (5 of which are not yet acknowledged by Reclamation). The DEA @ pg 5 notes, “Homer anticipates that it may acquire up to 120,000 AF of CVP water in a 12-month period for either direct delivery for irrigation of existing crops, for storage in Reclamation-acknowledged banking projects and above ground reservoirs or may be exchanged for SWP and/or other supplies, as available. Similarly, Homer anticipates it may recover, exchange, or **transfer-in place**, subject to approval of the overlying Groundwater Sustainability Agency responsible for groundwater management within the area of transfer, if required, up to 120,000 AF from Reclamation-acknowledged banking projects in a 12-month period.” Terms such as “transfer-in place” are not defined in the DEA.

Further, three districts outside of the San Joaquin Valley, and outside of the CVP POU are listed as districts with Homer Project assets or operations. The DEA fails to describe how CVP water can be delivered to these districts outside of the State-permitted POU for the CVP.

The scope of analysis is inadequate

The DEA is deficient because it fails to disclose and analyze the entire Project, and therefore it does not comply with requirements of National Environmental Policy Act (“NEPA”), 42 U.S.C. §4321 et seq.

NEPA requires federal agencies to prepare a detailed environmental impact statement on all “major Federal actions significantly affecting the quality of the human environment...” 42 U.S.C. §4332(2)(C). The purpose of this mandatory requirement is to ensure that detailed information concerning potential environmental impacts is made available to agency decision makers and the public before the agency makes a final decision. *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). The Homer Project is a substantial and complex project involving transfers from numerous sources to numerous groundwater banking facilities and potential recipients in and outside of the San Joaquin Valley, conveyance in State and/or Federal facilities, exchanges with water exported from the Delta Estuary or other exchanges that have the potential to impact the American River, Yuba River, Sacramento River and Shasta Dam operations, and potential to harm fish, wildlife, and other instream beneficial uses. These broad impacts clearly require a comprehensive Environmental Impact Statement (EIS) to properly address potential impacts and alternatives to the proposed project. Given the complexity the California Department of Water Resources also must complete an EIR analysis pursuant to CEQA. A joint EIR/EIS would help to inform the public and decision makers of the environmental impacts from such a large, complex and geographically expansive project.

Under NEPA’s procedures, an agency may prepare an EA in order to decide whether the environmental impacts of a proposed agency action are significant enough to warrant preparation of an EIS. An EA must “provide sufficient evidence and analysis for determining whether to prepare an [EIS]” (id.) and must demonstrate that it has taken a “‘hard look’ at the potential environmental impact of a project.” *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998) (internal quotation marks omitted). However, the U.S. Court of Appeals for the Ninth Circuit has cautioned that “[i]f an agency decides not to prepare an EIS, it must supply a convincing statement of reasons to explain why a project’s impacts are insignificant.” *Id.* (internal quotation marks omitted). So long as there are “substantial questions whether a project may have a significant effect on the environment,” an EIS must be prepared. *Id.* (emphasis added and internal quotation marks omitted). Thus, “the threshold for requiring an EIS is quite low.” *NRDC v. Duvall*, 777 F. Supp. 1533, 1538 (E.D. Cal. 1991).

Here, Reclamation failed to take a hard look at the environmental impacts allowing the addition of up to 120,000 AFY of CVP water to be transferred to Homer Project assets in 9 water banks, and then potentially extracted and delivered through private, State and Federal canals to numerous recipient water districts both in and outside of the San Joaquin Valley, providing virtually no meaningful information to ascertain the environmental effects of the proposed project, including specifically the sources of transfer water, where groundwater pumping would occur, and what the existing conditions at those locations look like, now, in the midst of drought.

As provided below, there are substantial questions about whether the Project including the transfer and groundwater extraction and conveyance to various water users, will have significant effects on the region’s environmental and hydrological conditions. There are also substantial questions about whether the Homer Project will have significant adverse environmental impacts when considered in conjunction with the other related water projects underway and proposed in the region. Reclamation simply cannot, consistent with NEPA, allow these foreseeable environmental impacts to escape full analysis in an EIS for the Homer Project.

The DEA Fails to Consider a Reasonable Range of Alternatives

The DEA includes only the Proposed Action and the No Action Alternative, and therefore, failed to consider a reasonable range of alternatives for the Homer Project. The DEA’s analysis is predicated on

the false assumption that the no-action alternative will not change CVP operations and not reduce their environmental impacts. The DEA @ pg 5 states, “Under the No Action Alternative, Reclamation would not approve a series of transfers to districts where Homer operates for up to 120,000 AF per year of available CVP water supplies over a 9-year period. Instead, Homer would need to request separate approvals from Reclamation as each water management action opportunity becomes available. Each action would require separate environmental review and approval from Reclamation; a process that may take enough time to render the proposed transfers unfeasible or could impact their ability to maximize available water supplies to sustain existing agricultural operations during dry years.” The entire point of a no-action alternative analysis is to compare what will happen if the project is implemented to what will happen if it is not. Reclamation’s “meaningless” analysis in the DEA improperly “assumes the existence of the very plan being proposed,” and thus violates NEPA.⁸

Further, there are other transfer programs that could be utilized to acquire water for the Homer Project including South of Delta (SOD), San Joaquin River Exchange contractors, and Friant water contractors. These three CVP transfer programs authorize the cumulative total of up to 555,000 AF/year of CVP water for transfer:

- SOD Accelerated Water Transfer Program Mar 2021-Feb 2026: 150,000 AFY⁹
- Friant Division and Cross Valley Contractors Accelerated Water Transfer Program - Contract Years Mar 2021-Feb 2026: 255,000 AFY¹⁰
- San Joaquin River Exchange Contractor Transfers 2014-2038: 150,000 AFY¹¹

The Homer Project would authorize an additional 120,000 AFY of CVP water transfers to Homer assets annually for 9 years. That would increase the cumulative total transfers of CVP water involving SOD and Friant CVP contractors to up to 675,000 AFY. The DEA fails to justify the need or consider the environmental impacts of these additional 120,000 AFY of CVP transfers for the Homer Project. Further, the DEA fails to explain why Homer assets can’t purchase water under existing transfer programs.

In addition, Reclamation can authorize transfer of unstored waters under Section 215 of the Reclamation Reform Act, Public Law 97-293. Section 215 authorizes Reclamation to provide temporary water service contracts (215 contracts) for unstorable flows (Section 215 water) as a result of (1) an unusually large water supply not otherwise storable for project purposes; or (2) infrequent and otherwise unmanaged flood flows of short duration. It is unclear if the Homer Project will include Section 215 contracts with Reclamation as there is no mention of these types of contracts in the DEA.

The DEA relies on Environmental Commitments without any means of Verification or Enforcement

The DEA includes environmental commitments @ pgs 8-9 that Homer LLC will implement the following environmental protection measures to avoid or reduce environmental consequences associated with the Project:

⁸ See: PCFFA, 655 Fed.Appx. at 598.

⁹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=48244

¹⁰ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=48124

¹¹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=9086

- *The water would not be used to place untilled or native lands into production, or to convert lands that have been fallowed or untilled for three or more years.*
- *The Proposed Action cannot alter the flow regime of natural waterways or natural watercourses such as rivers, streams, creeks, ponds, pools, wetlands, etc., so as to have a detrimental effect on fish or wildlife or their habitats.*
- *The Proposed Action shall not change the land use patterns of the cultivated or fallowed fields that do have some value to listed species or birds protected by the Migratory Bird Treaty Act (MBTA).*
- *Return of banked water is required to meet Reclamation's then-current water quality requirements.*

The DEA is silent with regard to monitoring or enforcement of these environmental commitments. Without actual data to verify the current environmental baseline conditions, and reporting requirements of future Project implementation, these environmental commitments do not meet NEPA compliance. The consequences of non-compliance of these environmental commitments need to be disclosed. The feasibility of the proposed mitigation measures and monitoring need to be disclosed and achievable.

The DEA Fails to Consider Cumulative Impacts

In assessing the significance of a project's impact, Reclamation must consider "[c]umulative actions, which when viewed with other proposed actions have cumulatively significant impacts.

Here, Reclamation completely failed to consider any cumulative impacts in the DEA. There is absolutely no discussion of the other transfer programs in the San Joaquin Valley where the Homer Project historically acquired CVP transfer water. There are numerous Reclamation approved actions that involve transfers and exchanges in the Project vicinity that are not identified or analyzed cumulatively in the DEA. Cumulative impacts from these pump-ins into the Cross Valley Canal, conveyance to the California Aqueduct, and potential exchanges are not disclosed or analyzed. We adopt by reference our comments from previous exchanges and transfers and previous scoping comments.¹² Numerous water

¹² See Coalition comments on Draft EA/FONSI for Groundwater Pump-ins into the Friant Kern Canal to certain participating Friant Division contractors and North Kern WSD Enabled by Reclamation annual Warren Act Agreements/Contracts starting @ pdf pg 30:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=50209

See Coalition comments on Westlands pump-in project, 9.30.2020: https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-9-30-2020_WWD-SLC-Pump-in-2020-IS_ND_-Cal-Aqueduct-Corrected.pdf

See also comments provided http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=14341

“Resnicks’ Westside Mutual Water District member lands in Westlands Water District to the AEWS service area and Westside Exchange Program are not disclosed nor analyzed. Nor are the impacts to Madera County from the potential groundwater transfers likely contemplated under the proposed action. The existing Exchange Program involves delivery of Arvin’s supplies to Westside member lands as exchange water, based on a 1 for 1 or “bucket for bucket” basis, up to 50,000 acre-feet (AF).”

See 30,000 acre-feet of groundwater proposed to be transferred to Westlands et. al. from the Mendota Pool

<http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=49107>

See also North Valley Regional Recycled Water Program-- <http://www.nvrrecycledwater.org/description.asp> *The NVRWP could produce and deliver up to 32,900 acre-feet per year of tertiary-treated recycled water to the drought-impacted west side. This water can be used to irrigate food crops, public and privately-owned landscaping,*

actions such as groundwater pump-ins and exchanges into the California Aqueduct have the potential to cumulatively degrade the quality in the Aqueduct and affect beneficial uses associated with Aqueduct water supplies.¹³ These impacts either separately or taken together are likely to have significant impact on water quality, fish and wildlife.

No data from previous pump-ins is provided to support Reclamation's conclusions of no impact in the DEA. Finally, there is insufficient analysis of the cumulative impact of discharging these contaminants into drinking water, wildlife refuge supplies, or downstream fish and wildlife beneficial uses.

Historic Data on transfers involving Homer LLC is Absent from DEA

Reclamation notes in the DEA on page 3 that, "*Historically, Reclamation annually approved transfers of CVP water supplies from Friant Division CVP contractors and/or South-of-Delta CVP contractors to-and-from various water agencies on behalf of Homer. In order to better manage available and future water supplies, Homer has requested long-term approvals for transfers of available CVP water from Reclamation under a proposed multi-year transfer and banking program.*" Yet no historic data on water transfers involving Homer LLC is provided in the DEA. The public and decision makers have been deprived once more of knowledge or connection to previous years of water transfers involving Homer Project assets, pumping and other groundwater impacting events, such as recent changes in groundwater elevations and groundwater storage, and effects of subsidence to infrastructure including canals.

Missing Analyses on Project Groundwater Banks

Reclamation Acknowledged Banks

There is a complete lack of analysis in the DEA on the groundwater banks being used as part of this project. Four groundwater banks are identified in Table 2 as being "Reclamation acknowledged." Reclamation's Groundwater Banking Guidelines for Central Valley Project Water¹⁴ notes in Appendix A that, "*The acknowledgement of an additional Bank, other than those listed below, requires analysis through the NEPA process. The analyses will include, but is not limited to, the groundwater storage capacity, recharge rates, ability to recover, recovery rates, water quality, groundwater flow and movement, water losses, degree of aquifer confinement, and impacts associated with the operation of the Bank.*" Yet, no reference to any NEPA analyses for these four groundwater banks is provided in the DEA. Reclamation should include the links in the DEA to the NEPA analyses that were completed for the Reclamation acknowledged Banks for this Project including: North Kern WSD, Rosedale-Rio Bravo WSD, Semitropic WSD and Kern Water Bank Authority.

and for industrial uses. This basin transfer would alter San Joaquin River Flows and flows to refuges, and the South Delta Bay Estuary. The project would deliver up to 59,000 acre-feet per year (AFY) of recycled water produced by the cities of Modesto and Turlock via the Delta-Mendota Canal (DMC), a feature of the Central Valley Project owned by Reclamation. Instead of discharging fresh treated water into the San Joaquin River, recycled water would be conveyed from Modesto and Turlock through pipelines from their wastewater treatment facilities, crossing the San Joaquin River, ending at the DMC.

¹³ See: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Water-Quality/Documents/2018-Turn-In-Report.pdf>
<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>
<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

¹⁴ Updated 10.24.2019. See: <https://www.usbr.gov/mp/waterbanking/docs/groundwater-banking-guidelines-cvp-water.pdf>

Pending Reclamation Acknowledged Banks

Further, five groundwater banks are listed in Table 2 as having “pending” Reclamation acknowledgement. How can Reclamation approve this Project before NEPA analyses have been completed for these “pending” groundwater banks? Reclamation should complete the NEPA analyses for water banks involved with this Project before the DEA is finalized. Reclamation should include links to these NEPA analyses for the “pending” groundwater banks including: Berrenda Mesa WSD, Deer Creek-Friant Kern Canal Water Bank (Saucelito ID), Mettler Water Bank (Wheeler Ridge Maricopa WSD), Shafter Wasco ID Water Bank, and Tule River-Friant Kern Canal Water Bank (Porterville ID).

Water Districts with No Identified Reclamation Acknowledged Banks

Table 1 lists three contractors outside of the San Joaquin Valley (non-SJV contractors) that Homer LLC has water banking assets associated with these contractors: Antelope Valley East Kern Water Agency, Littlerock Creek ID, and Palmdale WD. The DEA fails to associate these contractors with Reclamation acknowledged groundwater banks so the public is left not knowing what water banking facilities would be utilized for these contractors. Reclamation should identify which groundwater banks are utilized by the non-SJV contractors and provide links to the NEPA analyses completed for these groundwater banks.

Compliance with ESA and CESA is Absent

No consultation with USFWS or CDFW on the effects of this Project under the ESA or CESA was completed. The DEA includes a Table 4 of Federally Listed Threatened and Endangered Species on pages 11- 24. Of the species in Table 4, 59 Federally or State-listed species have the potential to occur in the Project action area. Reclamation concluded on page 25 of the DEA that, “*With the implementation of the environmental commitments included in Section 2.2.2, Reclamation has determined that there would be “no effect” to proposed or listed species or designated critical habitat under the Endangered Species Act of 1973, as amended (16 U.S.C. §1531 et seq.) and no take of birds protected under the Migratory Bird Treaty Act (16 U.S.C. §703 et seq.) and The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c).*” No biological data or monitoring is provided in the DEA to support such a “no effect” conclusion.

The DEA provides no clear enforcement mechanism(s) for the environmental commitments @ pgs 8-9. Without actual data to verify the current environmental baseline conditions, and reporting requirements of future Project implementation, these environmental commitments are of little value. The consequences of non-compliance of these environmental commitments need to be defined and implementable.

Compliance with Federal Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act (California Code Section 7 and related provisions) is Absent.

As the USEPA (EPA) noted in comments submitted on another groundwater pumping program into the California Aqueduct, the discharge of groundwater with potentially high salt, boron, chromium, arsenic, selenium, and other metals would be subject to the National Pollution Discharged Elimination System (NPDES) permitting requirements pursuant to the federal Clean Water Act. Further EPA noted, “*Permits will need to be designed to ensure the discharges do not cause or contribute to exceedences of applicable State water quality standards or degradation of designated beneficial uses.*”¹⁵

The Clean Water Act prohibits the discharge of "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. Such a permit would contain limits on what can be discharged, monitoring, and reporting requirements, and other provisions to ensure that the discharge does

¹⁵ See: <http://calsport.org/news/wp-content/uploads/EPA-comments-Westlands-WD-EIR-NOP-3-4-10.pdf>

not harm water quality or human health. The term point source is also defined very broadly in the Clean Water Act. It means any discernible, confined, and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure, or container.¹⁶ Yet, no compliance with the federal Clean Water Act has been provided for groundwater inputs into the California Aqueduct such as those from the Cross Valley Canal and associated with the Homer Project.

Further, we note that no Waste Discharge Requirements (WDRs) have been issued for this project. Waste Discharge Requirements established pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13263) permit discharges that “could affect the quality of waters of the state” – both surface and groundwater. These permits shall take into consideration beneficial uses to be protected, water quality objectives required for that purpose, other waste discharges, and the need to prevent nuisance. Some WDRs can also serve as a CWA NPDES permit (Wat. Code, § 13377; Chapter 5.5, Wat. Code, § 13370 et seq.).¹⁷

Because groundwater inputs into the California Aqueduct can impact municipal use of this water downstream, this Project should seek a WDR or NPDES permit. Without the necessary permits, the public is precluded from analyzing the permit and conditions to ensure protection and non-degradation of water supplies under the NPDES or WDR permit and potential mitigation measures.

Water Quality Standards and Monitoring Requirements are Absent

The DEA @ pg 29, “*Any water returned from banking facilities or transferred from non-CVP sources will meet Reclamation’s then current water quality standards and monitoring requirements, which conform with federal and state drinking water standards... Water delivered into the Cross Valley Canal or other facilities will meet the then-current water quality standards of those facilities.*” Yet, no water quality requirements for any of the potential conveyance facilities are included in the DEA. The public and decision makers are left in the dark regarding the environmental consequences to beneficial uses from the discharge of pollutants into federal and state canals that serve various beneficial uses that are not protected by drinking water standards.

The DEA should be withdrawn and replaced with an EIS that includes a monitoring plan (QAPP) for public comment review and more robust groundwater water quality monitoring requirements to protect downstream beneficial uses including endangered species, migratory birds, and fish and wildlife in addition to increased costs for domestic water supply treatment costs due to the discharge of pollutants like arsenic, boron, nitrates and selenium.

No Groundwater Water Quality Data from Homer Assets is Provided in DEA

No data on groundwater quality from Homer Project associated groundwater banks is provided in the DEA. The DEA fails to include any water quality data from previous groundwater pump-ins on water quality from each participating well/bank, quantity of groundwater pumped by each well/bank, depth to groundwater of each well prior to pumping, or contaminant mass balance in Federal or State canals. Data on the previous performance groundwater extractions from Homer associated groundwater banks is essential information missing from the DEA. These data are also important to inform decision makers and the public about the cumulative impacts of this action. Further, with respect to groundwater inputs into the California Aqueduct, it is important to estimate mass balance contaminant loading from these discharges to ensure that discharges do not harm downstream beneficial uses.

¹⁶ See: <https://www.epa.gov/npdes/npdes-permit-basics>

¹⁷ See: https://www.waterboards.ca.gov/board_reference/docs/wq_law.pdf

This lack of water quality data does not support the adoption of an EA/FONSI for environmental impacts of this Project. As emphasized for other issues as well, the DEA should be withdrawn and replaced with an EIS that includes all this critical information and related analysis for public comment review.

Groundwater that is pumped into the California Aqueduct from the Cross Valley Canal Could Affect Beneficial Uses Associated with the California Aqueduct.

The groundwater inputs into the California Aqueduct (including those from the Cross Valley Canal) and Project exchanges¹⁸ could affect quality of water delivered to Kern NWR. The CVPIA refuge water supply for Kern National Wildlife Refuge (NWR) comes from the California Aqueduct and is diverted near Check 29. Kern NWR provides habitat for rare species including the federally listed Buena Vista Lake Ornate Shrew (Endangered). Numerous water actions such as groundwater pump-ins and exchanges into the California Aqueduct have the potential to cumulatively degrade the quality of refuge water delivered to Kern NWR. Past data on the percent of flow in the Aqueduct (POA) comprised of groundwater pump-ins in the fall of 2014 and early 2015 indicate that the groundwater pump-ins have at times contributed 100% of the flow in the Aqueduct at Check 21 as depicted in the Figures 3-1 and 3-2 from DWR 2015¹⁹ and Figure 3-1 from DWR 2016²⁰ reports. Some of these time periods overlap with refuge water deliveries to Kern NWR.

Further, groundwater inputs from the Homer associated groundwater banks (including those that pump into the Cross Valley Canal) could be conveyed south through the California Aqueduct and stored in four reservoirs (Pyramid Lake, Castaic Lake, Silverwood Lake, and Lake Perris). The aqueduct and these four reservoirs are regulated under four Regional Water Boards jurisdictions. Designated fish and wildlife beneficial uses of the Aqueduct and downstream reservoirs are listed in Table 3.

Table 3. Fish and Wildlife Beneficial Uses Associated with CA Aqueduct south of Pump-in Project

Waterbody Name	WARM	COLD	SPWN	WILD	RARE
California Aqueduct ²¹				E	
Castaic Lake ²²	E	I	E	E	E
Pyramid Lake ⁵	E	E		E	E

¹⁸ See pg 7 of DEA: “As there are currently no facilities that could reverse pump water up the California Aqueduct or the Friant-Kern Canal, return of previously banked CVP water to districts located upstream of Reclamation-acknowledged banking projects (e.g., South of Delta Contractors and Friant Contractors in Tulare and Fresno Counties) would occur only via exchange among districts.”

¹⁹ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

²⁰ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

²¹ See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

²² See Beneficial Use Designations of Inland Surface Waters, Los Angeles Regional Water Board: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/2020/Chapter_2/Chapter_2_Table_2-1/Chapter_2_-_Table_2-1.pdf

Silverwood Lake ²³	E		E	E	
Lake Perris ²⁴	E	E		E	E

E: Existing beneficial use.

I: Intermittent beneficial use.

WARM: Warm Freshwater Habitat - Uses of water that support warm water ecosystems including but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

COLD: Cold Freshwater Habitat - Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

SPWN: Spawning, Reproduction, and/or Early Development - Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

WILD: Wildlife Habitat - Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

RARE: Endangered Species - Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

The Homer Project should be protective of downstream beneficial uses of the water from the California Aqueduct and these impacts need to be disclosed and addressed in a full EIS that would replace this deficient DEA. Further, the cumulative impacts of these groundwater inputs along with other groundwater pump-in projects that affect water quality of the California Aqueduct needs to be analyzed.

Drinking Water Standards for Selenium are not Protective of Downstream Fish and Wildlife Beneficial Uses.

On page 29 of the DEA Reclamation states, “*Any water returned from banking facilities or transferred from non-CVP sources will meet Reclamation’s then-current water quality standards and monitoring requirements, which conform with federal and state drinking water standards.*” The State of California and the USEPA have established a Maximum Contaminant Level (MCL) for selenium in drinking water of 50 µg /L MCL.²⁵ This drinking water criterion is not protective fish and wildlife beneficial uses and could lead to harm of endangered species, migratory birds using the Pacific Flyway and other fish and wildlife that rely upon waters from the California Aqueduct.

On July 13, 2016, the Environmental Protection Agency (EPA) released a Final Updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water.²⁶ The final criterion supersedes EPA’s 1999 CWA section 304(a) recommended national

²³ See: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/ch2_bu.pdf

²⁴ See: https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2019/New/Chapter_3_June_2019.pdf

²⁵ See: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/perchloratemcl/R-16-04-PHCRegText.pdf
And <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations#Inorganic>

²⁶ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

acute and chronic aquatic life criteria for selenium. The 2016 criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. The federal register notice identified revised chronic selenium criteria in water for lentic waters (e.g., meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps) and lotic waters (e.g., rivers and streams). EPA's revised chronic selenium criterion for lentic waters of a monthly mean of 1.5 µg /L is the criterion that should be applied to water in the California Aqueduct to protect fish and wildlife beneficial uses.

These complex issues related to impacts on fish and wildlife beneficial uses require a full analysis of the proposed Project and potential project alternatives that could better minimize environmental risks. This should be done as part of a full EIS and consultation with CDFW and USFWS is essential.

Warren Act Contracts/Agreements and the Agreement with DWR allowing water to be conveyed in the Aqueduct are not Included in the DEA.

The DEA on page 5 notes, "Any non-Project water introduced into Federal facilities will require a Warren Act contract and must meet Reclamation's then-current water quality criteria prior to introduction." It is unclear what Federal facilities are involved with conveyance of Homer Project water. This needs to be clarified in the DEA. Further, the proposed Warren Act Contracts/Agreements should be included with the DEA and made available for public review.

Further, adding to the incomplete project description and definition of the project, there should be an Agreement with DWR (DWR Agreement) for introduction and conveyance of local groundwater in the California Aqueduct. The DWR Agreement is likewise not provided for public review. Without these documents, the public is prevented from seeing key information regarding the contractual requirements of this action. Omitting these key documents keeps the public in the dark regarding the project definition, baseline, and potential contractual remedies available to downstream beneficial uses that could be harmed by the degradation of water quality in the California Aqueduct.

Conclusion

The DEA does not adequately assess the potentially significant environmental impacts from the Homer LLC multiyear banking and transfer program. In addition, there are reasonably available alternatives that have not been considered and should be analyzed to reduce the potentially significant environmental impacts. Absent from the document is any assessment of the cumulative impacts, including third party impacts and impacts to fish, wildlife, and water quality. Required permits and compliance with the Clean Water Act to allow discharge of contaminants into the waters of the State and Nation have not been provided; nor have necessary consultations with federal and state wildlife agencies concerning potential endangered and threatened species impacts. The Warren Act Contracts/Agreements and associated Contract Exhibits and Agreement with DWR governing the discharge into the Aqueduct from 2021-2022 is absent and therefore could not be reviewed.

Prior to commencing with the proposed project, which will likely harm downstream uses, a complete EIS is required that includes, among other things, a QAPP that ensures waters of the State and Nation are not degraded, compilation and analysis of prior groundwater water quality data, flow rates and quantities pumped from participating wells from previous pump-ins, the Warren Act Contracts/Agreements and Exhibits, the Agreement with DWR allowing discharge into the Aqueduct, documentation of Clean Water Act permit compliance, and full analysis of alternatives and cumulative impacts. This information should be included in the EIS that replaces the EA. We object to the adoption of a FONSI for this project.

Thank you for the opportunity to comment. Please add our names to Reclamation's electronic notification lists for environmental documents regarding water supplies or contracts or conveyance.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



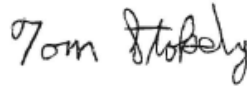
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



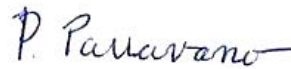
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



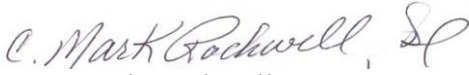
Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.org)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



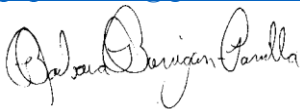
Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Susan Harvey
President
North County Watch
ifsusan@tcsn.net



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



CA Save Our Streams Council



June 11, 2021

Ms. Rain Emerson
 U.S. Bureau of Reclamation
 South-Central California Area Office
 1243 N Street
 Fresno, California 93721
 Email: remerson@usbr.gov

Comments on the Draft Environmental Assessment (DEA) for Groundwater Pump-ins into the Friant Kern Canal to certain participating Friant Division contractors and North Kern Water Storage District Enabled by the Bureau of Reclamation annual Warren Act Agreements/Contracts (CGB-EA-2021-033).

Dear Ms. Emerson:

Thank you for the opportunity to comment. We have reviewed the subject DEA and find that it is incomplete with regard to addressing environmental impacts in several areas, which we address in detail in comments below. Furthermore, the DEA lacks sufficient data to determine compliance with NEPA, provisions of State of California water quality laws under Porter Cologne and the federal Clean Water Act, the federal and State of California Endangered Species Acts (ESA and CESA), and the California Environmental Quality Act (CEQA). The Friant groundwater pump-ins (“FKC pump-ins” or “action”) is a substantial and complex project that clearly requires a comprehensive Environmental Impact Statement (EIS) to properly address potential impacts and alternatives to the proposed project. Further a programmatic impact statement is required due to the potentially significant individual actions that will likely result in cumulatively significant impacts to fish, wildlife and water quality.

Further, key documents related to this action are missing, including but not limited to:

1. the Warren Act Contracts/Agreements governing these groundwater pump-ins into the Friant Kern Canal,
2. the Agreement with the California Department of Water Resources (DWR) authorizing groundwater inputs from the Cross Valley Canal (as a part of this action) into the California Aqueduct,
3. A Quality Assurance Project Plan (QAPP) that describes water quality sampling and analysis requirements for non-project water.

Without these key documents, the public is left in the dark about what contractual terms and conditions are required for these groundwater discharges to the canals.

The National Environmental Policy Act (NEPA) compels an informed process. NEPA requires that federal decision makers be informed of the environmental consequences of their decisions and undertake an assessment of the environmental effects of their proposed actions prior to making decisions.¹ An informed decision document under NEPA should include all relevant data, including past monitoring data along with analysis of that data, to help inform the public and decision makers as to impacts and guide future implementation of the project. This data is also essential in determining individual and potentially significant cumulative impacts from all the proposed transfers and various canal pump-in projects.

The DEA is incomplete in several respects, which we will discuss. There are significant data gaps that hinder the public and decision makers' from making an informed decision regarding the potential environmental consequences of allowing these groundwater pump-ins into the Friant Kern Canal (FKC) and Cross Valley Canal and California Aqueduct. Also completely neglected are the impacts from discharging this groundwater and potentially substituting or exchanging it with water exported from the Delta Estuary or other exchanges that have the potential to impact the American River, Yuba River, Sacramento River and Shasta Dam operations.

There is substantial evidence that groundwater pumping including this project have caused and—if permitted again, will continue to cause—water pollution, land subsidence, increased water supply costs to others, and further damage to the FKC. The DEA fails to provide a complete assessment of the impacts of this project, fails to include effects of these prior pump-ins on subsidence damages to the FKC, and provides very little information and analysis of prior water quality data, from previous groundwater pump-ins associated with this project. The DEA, as presented, does not support a “fair argument” that this project does not have significant environmental impacts. A full Environmental Impact Statement (EIS) is required so that the environmental impacts, as well as costs and damage to infrastructure and downstream beneficial uses, can be adequately analyzed and described to the public and decision makers.

Further, we see no evidence of a CEQA analysis of this action. The Friant Water Users Authority, a state agency directly involved with these groundwater inputs into the FKC, should complete a CEQA analysis prior to the commencement of this project. Clearly extracting ground water and discharging it into canals will create a physical change and meets the definition of a Project under CEQA i.e., “*Project means an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and which is any of the following: a) An activity directly undertaken by any public agency;...*” California Environmental Quality Act, Cal. Pub. Res. **Code** §§ 21000-21189.3. Reclamation law requires CVP operations to follow state law provided it does not conflict with Congressional directives to the contrary. Congress has not directed Reclamation to operate

¹ https://ceq.doe.gov/docs/get-involved/Citizens_Guide_Dec07.pdf

the CVP without compliance with environmental rules and water quality laws of the State of California. Allowing the discharge of ground water contaminated with harmful pollutants is contrary to both federal and state law and the impacts especially of accumulating pollutants must be fully analyzed, permitted and disclosed prior to discharge.

Our organizations provide these comments on Reclamation’s DEA for a proposed two-year Warren Act Agreements² for the Friant Division contractors and North Kern Water Storage District. In accordance with NEPA, Reclamation, as the Federal lead agency, made the DEA available for a 15-day public comment period closing on June 11, 2021.³ Our comments are organized in two parts: (1) a summary of the project as described in the DEA as background for our critique, and (2) a critique of the project, monitoring requirements, and environmental analysis.

SUMMARY OF PROJECT AS DESCRIBED BY RECLAMATION IN THE DEA

Reclamation proposes to issue annual Warren Act agreements to the participating districts listed in Table 1 that would allow the cumulative annual introduction of up to 50,000 acre-feet of groundwater into the FKC over a two-year period. The maximum pump-in amounts listed in Table 1 may be adjusted among the participants as needed in a given year (i.e., could be more or less depending on need) but cannot exceed the cumulative total of 50,000 acre-feet. We note that the previous FKC pump-in program only pumped 11,799 AF over a 2-year period (2014-2015) detailed in Table 2 below. If the proposed project pumps the maximum cumulative total allowed (50,000 AF over the 2-year period) it would be over 4 times more than was pumped in 2014-2015. No cumulative impacts or groundwater impacts are provided.

Table 1. 2021-2022 Proposed FKC Pump-ins:

District	Maximum pump-in quantity (acre-foot)
Delano-Earlimart Irrigation District	12,000
Lindsay-Strathmore Irrigation District	3,000
North Kern Water Storage District	10,000
Orange Cove Irrigation District	5,000
Porterville Irrigation District	5,000
Saucelito Irrigation District	2,000
Southern San Joaquin Municipal Utility District	3,000
Terra Bella Irrigation District	1,500

² The Warren Act (Pub. L. No. 61-406) authorizes USBR to enter into contracts to impound, store, or convey non-CVP water in federal facilities, when excess capacity is available. Warren Act Contracts are issued by Reclamation to allow movement of non-federal water through federal facilities.

³ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=49768

Table 2. 2014-2015 FKC Pump-ins:

Contractor	2014 (acre-feet)	2015 (acre-feet)	Total (acre-feet)
Delano-Earlimart Irrigation District	2,059	2,588	4,647
Lindsay-Strathmore Irrigation District	1,078	1,317	2,395
North-Kern Water Storage District	0	0	0
Orange Cove Irrigation District	308	576	884
Saucelito Irrigation District	675	850	1,525
Southern San Joaquin Municipal Utility Districts	0	1,315	1,315
Tea Pot Dome Water District	0	0	0
Terra Bella Irrigation District	409	624	1,033
Total	4,529	7,270	11,799

Description of Types of water included in this Action (A, B and C).

Type “A” Non-Project Water

Water for which analytical testing demonstrates only compliance with California drinking water standards (Title 22)⁴ but fails to test and comply with water quality standards and objectives to protect migratory birds, fish and wildlife. Type A water must be tested every year for the full list of constituents listed in Table 2. No in-prism (within the Canal) monitoring is required to convey Type A water.

Type “B” Non-Project Water

This is water that generally complies with Title 22 standards, but may exceed the Maximum Contaminant Level (MCL) for certain inorganic constituents of concern to be determined by Reclamation and the Authority on a case-by-case basis. This water may be discharged into the Canal over short- intervals. Type B water shall be tested every year for the full list of constituents in Table 2, and more frequently for the identified constituents of concern. Flood Water and Ground Water are Type B non-project water.

Type B water may not be pumped into the FKC within a half-mile upstream of a delivery point to a CVP Municipal and Industrial contractor. The introduction of Type B water into the Friant-Kern and Madera Canals will require regular in-prism monitoring (in FKC) to confirm that the CVP water delivered to downstream customers is suitable in quality for their needs. The location, frequency, and parameters of in-prism monitoring (in FKC) will be determined by Reclamation and the Authority on a case-by-case basis.

Type “C” Non-Project Water

Type C Water is non-project water that originates in the same source as CVP water but that has not been appropriated by the United States. For example, non-project water from a tributary within the upper San Joaquin River watershed, such as the Soquel Diversion from Willow Creek above Bass Lake, is Type C water. Another example is State Water Project water pumped from the California Aqueduct and Cross Valley Canal into the lower Friant-Kern Canal. No water quality analyses are required to convey Type C water through the Friant-Kern or Madera Canals because it is physically the same as Project water.

⁴ Title 22. The Domestic Water Quality and Monitoring Regulations specified by the State of California Health and Safety Code (Sections 4010-4037), and Administrative Code (Sections 64401 et seq.), as amended. See: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/lawbook/dw_regulations_2019_04_16.pdf As noted in our comments below the 50 ppb selenium concentration allowed is not protective of fish, wildlife and migratory birds.

North Kern WSD pump-ins into the Cross Valley Canal and delivery via the California Aqueduct

North Kern Water Storage District's (North Kern WSD) groundwater would be introduced and conveyed through the FKC to the Cross Valley Canal for delivery to the following Kern County water districts via the California Aqueduct. All delivery schedules for North Kern WSD's groundwater would be coordinated with the Kern County Water Agency and the California Department of Water Resources (DWR) and approved by Reclamation prior to introduction into the FKC:

- Belridge Water Storage District
- Berrenda Mesa Water District
- Lost Hills Water District
- Wheeler Ridge-Maricopa Water Storage District

We note that the above recipient districts are upstream of the Cross Valley Canal discharge point into the California Aqueduct. The DEA does not disclose the mechanism by which this groundwater will be delivered to these districts. Will the Aqueduct allow reverse directional flow in this area to facilitate the delivery of this water? Or will the water be made available to these recipient districts by means of operational exchanges? This information needs to be disclosed and analyzed in the DEA.

Water Quality Commitments - FKC

Every four months, Reclamation will collect samples of water from the Friant-Kern Canal near Friant Dam and near Lake Woolomes. These samples will be analyzed for Title 22 and many other constituents. The purpose of these samples is to identify the baseline quality of water in the canal. No direct analysis within the Madera Canal will be conducted at this time.

Individual wells will be exempt from the nitrate and salt content requirements, provided that water quality measurements from the FKC satisfy the two conditions for nitrate concentration and salt content, measured by electrical conductivity (EC), as noted below:

- The concentration of nitrates (as $\text{NO}_3 = 10 \text{ mg/L as N}$) in the FKC may not exceed 20 mg/L, less than half of the maximum contaminant level (MCL for NO_3 is 45 mg/L) established by the State of California for nitrates.
- EC in the FKC may not exceed 900 micromhos per centimeter ($\mu\text{mhos/cm}$).

During the term of this action and while groundwater is being introduced into the FKC, water samples from the FKC will be collected each week by the Friant Water Authority and analyzed for nitrates and EC near the following municipal and industrial diversions:

- FKC Milepost 43.45 (City of Orange Cove diversion)
- FKC Milepost 85.55 (Lyndsay-Strathmore Irrigation District diversion)
- FKC Milepost 89.35 (Strathmore Public Utility District diversion)
- FKC Milepost 102.65 (Terra Bella Irrigation District diversion)
- FKC Milepost 151.80 (Arvin-Edison Water Storage District diversion, turnout near Terminus of the FKC at the Kern River).

Water Quality Sampling of FKC Non-Project Water

Each source of Type A and B non-project water must be tested once every year for the complete list of constituents of concern and bacterial organisms listed as described in Table 3 below.⁵

⁵ From page 7 of Appendix A to DEA, Reclamation's Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals, @ pdf pg 28 of the DEA:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=49770

Table 3. Water Quality Monitoring Requirements

Type of Water	Location	Frequency	Constituents Measured
Project Water	Friant	January, April, June, October	Title 22 and bacterial constituents (1) (2)
	Lake Woolomes	January, April, June, October	Title 22 and bacterial constituents (1) (2)
Type A Non-Project Water		Every year	Title 22 and bacterial constituents (1) (2)
Type B Non-Project Water		Every year	Title 22 and bacterial constituents (1) (2)
		Every month (5)	Constituents of concern (5)
		Every week (5)	EC, turbidity, etc. (3) (5)
Type C Non-Project Water		None required	
Project Water	Upstream of each Type B discharge (4)	Every week (5)	EC, turbidity, etc. (3) (5)
	Downstream of each Type B discharge (4)	Every week (5)	EC, turbidity, etc. (3) (5)

Revised: 08/16/2007 SCC-107

(1) California Department of Health Services, California Code of Regulations, Title 22, Division 4, Chapter 15, Domestic Water Quality and Monitoring

http://www.dhs.ca.gov/ps/ddwem/publications/Regulations/regulations_index.htm.

(2) Cryptosporidium, Giardia, total coliform bacteria

(3) Field measurements

(4) Location to be determined by the Contracting Officer

(5) To be determined by the Contracting Officer, if necessary

This water quality monitoring program is subject to change at any time by the Contracting Officer

SPECIFIC DEA COMMENTS AND RECOMMENDATIONS

I. Compliance with Clean Water Act & California Porter Cologne Act are Absent.

As the USEPA (EPA) noted in comments submitted on another groundwater pumping program into the California Aqueduct, the discharge of groundwater with potentially high salt, boron, chromium, arsenic, selenium, and other metals would be subject to the National Pollution Discharged Elimination System (NPDES) permitting requirements pursuant to the federal Clean Water Act. Further EPA noted, “Permits will need to be designed to ensure the discharges do not cause or contribute to exceedences of applicable State water quality standards or degradation of designated beneficial uses.”⁶

The Clean Water Act prohibits the discharge of "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. Such a permit would contain limits on what can be discharged, monitoring and reporting requirements, and other provisions to ensure that the discharge does not harm water quality or human health. The term point source is also defined very broadly in the Clean Water Act. It means any discernible, confined, and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure, or container.⁷ Yet, no compliance with the federal Clean Water Act has been provided for this project.

⁶ See: <http://calsport.org/news/wp-content/uploads/EPA-comments-Westlands-WD-EIR-NOP-3-4-10.pdf>

⁷ See: <https://www.epa.gov/npdes/npdes-permit-basics>

Further, we note that no Waste Discharge Requirements (WDRs) have been issued for this project. Waste Discharge Requirements established pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13263) permit discharges that “could affect the quality of waters of the state” – both surface and groundwater. These permits shall take into consideration beneficial uses to be protected, water quality objectives required for that purpose, other waste discharges, and the need to prevent nuisance. Some WDRs can also serve as a CWA NPDES permit (Wat. Code, § 13377; Chapter 5.5, Wat. Code, § 13370 et seq.).⁸

The DEA notes @ pg 1 that Type B non-project water can have constituents that may exceed the Title 22 California drinking water standards. The DEA @pdf pg 26 notes that Reclamation will provide a Quality Assurance Project Plan (QAPP) that will describe sampling and analysis of Type B non-project water. Yet the QAPP was not provided with this DEA. Failing to publicly provide this document effectively precludes public comment and analysis.

Groundwater discharge into the FKC can impact municipal beneficial uses of this water downstream. The law requires this type of discharge project to be permitted. And yet there is no Waste Discharge Requirements (WDR) nor a CWA NPDES permit. Without these necessary permits there is no assurance that beneficial uses will be protected. Further failure to provide these permits precludes public participation and fails to provide decision makers with the necessary data and information necessary to determine adequate water quality and beneficial use protection measures. Further it is not clear how the discharge of this groundwater containing contaminants will ensure that water supplies are not degraded as required under both federal and state law. Finally there is little or no monitoring sufficient to determine impacts and virtually no enforcement or remedy for failure to meet even the minimal requirements cited in the monitoring for the project.

II. Proposed Water Quality Monitoring is Lax.

Annual monitoring of groundwater (types A and B) for Title 22 constituents is inadequate. No water quality data or analysis has been provided to justify only annual monitoring of water quality. Further, the DEA identifies annual monitoring of “constituents of concern” for type B water, without identifying what these constituents are. The DEA should be withdrawn and replaced with an EIS that includes the QAPP for public comment review and more robust groundwater water quality monitoring requirements. Enforcement is necessary to ensure compliance and is absent from the project.

III. Limited FKC Water Quality Data and no Groundwater Water Quality Data from Previous FKC Pump-ins is Provided in DEA, Thus Precluding Cumulative Impact Analysis.

Limited water quality data is provided in the DEA for Nitrate (as NO₃) and EC in the FKC from July thru December 2014 only. Data on groundwater quality from participating wells from previous FKC pump-ins is not provided in the DEA. The DEA fails to include data from previous FKC groundwater pump-ins on water quality from each participating well, quantity of groundwater pumped by each well, depth to groundwater of each well prior to pumping, or contaminant mass balance in the FKC. Data on the previous performance of the FKC pump-ins is essential information missing from the DEA. These data are also important to inform decision makers and the public about the cumulative impacts of this action. Further, with respect to groundwater inputs into the California Aqueduct, it is important to estimate mass balance contaminant loading from these discharges to ensure that discharges do not harm downstream beneficial uses.

⁸ See: https://www.waterboards.ca.gov/board_reference/docs/wq_law.pdf

As emphasized for other issues as well, the DEA should be withdrawn and replaced with an EIS that includes all this critical information and related analysis for public review and comment.

IV. Groundwater that is pumped into the California Aqueduct from the Cross Valley Canal Likely Impacts Beneficial Uses Associated with the California Aqueduct.

As proposed in the DEA, groundwater from North Kern WSD would be introduced and conveyed through the FKC to the Cross Valley Canal for delivery to four Kern County water districts (Belridge WSD, Berranda Mesa WD, Lost Hills WD, and Wheeler Ridge Maricopa WSD) via the California Aqueduct (DEA @ pg 4). As we noted earlier in this letter, the DEA does not describe or analyze how this water will be delivered to these recipient districts in Kern County as they are upstream of the input from the Cross Valley Canal. Will the flow of the Aqueduct be reversed to allow delivery of this groundwater, or will this water be operationally exchanged with surface water? Either of these scenarios could affect water quality in the Aqueduct and beneficial uses associated with Aqueduct water.

The groundwater discharge from this North Kern WSD in the Cross Valley Canal into the Aqueduct could affect quality of water delivered to Kern NWR. The CVPIA refuge water supply for Kern National Wildlife Refuge (NWR) comes from the California Aqueduct and is diverted near Check 29. Kern NWR provides habitat for rare species including the federally listed Buena Vista Lake Ornate Shrew (Endangered). Numerous water actions such as groundwater pump-ins and exchanges into the California Aqueduct have the potential to cumulatively degrade the quality of refuge water delivered to Kern NWR. Past data on the percent of flow in the Aqueduct (POA) comprised of groundwater pump-ins in the fall of 2014 and early 2015 indicate that the groundwater pump-ins have at times contributed 100% of the flow in the Aqueduct at Check 21 as depicted in the Figures 3-1 and 3-2 from DWR 2015⁹ and Figure 3-1 from DWR 2016¹⁰ reports. Some of these time periods overlap with refuge water deliveries to Kern NWR.

Further, groundwater inputs from the Cross Valley Canal could be conveyed south through the California Aqueduct and stored in four reservoirs (Pyramid Lake, Castaic Lake, Silverwood Lake, and Lake Perris). The aqueduct and these four reservoirs are regulated under four Regional Water Boards jurisdictions. Designated fish and wildlife beneficial uses of the Aqueduct and downstream reservoirs are listed in Table 1.

Table 1. Fish and Wildlife Beneficial Uses Associated with CA Aqueduct south of Pump-in Project

Waterbody Name	WARM	COLD	SPWN	WILD	RARE
California Aqueduct ¹¹				E	
Castaic Lake ¹²	E	I	E	E	E
Pyramid Lake ⁵	E	E		E	E
Silverwood Lake ¹³	E		E	E	

⁹ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>

¹⁰ See: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

¹¹ See: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

¹² See Beneficial Use Designations of Inland Surface Waters, Los Angeles Regional Water Board: https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/2020/Chapter_2/Chapter_2_Table_2-1/Chapter_2_-_Table_2-1.pdf

¹³ See: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/ch2_bu.pdf

Lake Perris ¹⁴	E	E		E	E
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E: Existing beneficial use.

I: Intermittent beneficial use.

WARM: Warm Freshwater Habitat - Uses of water that support warm water ecosystems including but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

COLD: Cold Freshwater Habitat - Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

SPWN: Spawning, Reproduction, and/or Early Development - Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

WILD: Wildlife Habitat - Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

RARE: Endangered Species - Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

The FKC pump-ins should be protective of downstream beneficial uses of the water from the California Aqueduct and these impacts need to be disclosed and addressed in a full EIS. The DEA is deficient and fails to disclose immediate significant impacts to these beneficial uses and long term cumulative impacts. No data is provided in the DEA on groundwater quality from North Kern WSD. This lack of data does not support the adoption of an EA/FONSI for environmental impacts of this action. Further, the cumulative impacts of these groundwater inputs along with other groundwater pump-in projects that affect water quality of the California Aqueduct needs to be analyzed.

V. Water Quality Standards for Selenium in the DEA are not Protective of Downstream Fish and Wildlife Beneficial Uses.

On page 8 of Appendix A to the DEA (Reclamation’s Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals) Reclamation listed Water Quality Standards, Title 22 in Table 2. Included with those standards is a water quality standard for selenium listed as 50 µg/L (0.05 mg/L). The Title 22 selenium objective of 50 µg /L MCL for selenium is not protective of fish and wildlife resources that use water from the Aqueduct, which require levels less than 2 µg /L, specifically 1.5 µg /L, as we discuss in more detail below.

In addition, on page 2 of Appendix A of the DEA, Reclamation states that for Type B Non-Project Water: *“Water that generally complies with Title 22, but may exceed the Maximum Contaminant Level (MCL) for certain inorganic constituents of concern to be determined by Reclamation and the Authority on a case-by-case basis. This water may be discharged into the Canal over short- intervals. Type B water shall be tested every year for the full list of constituents in Table 2, and more frequently for the identified constituents of concern.”* Title 22 standards would have a significant impact on endangered species and bio accumulation of selenium in the food chain impacts reproduction, survival along with resulting deformities. In addition, there is no regulatory basis for the relaxation of Title 22 standards for type B

¹⁴ See:

https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2019/New/Chapter_3_June_2019.pdf

water which would further impact endangered species, migratory birds, the Pacific Flyway and other fish and wildlife that rely upon waters from the California Aqueduct.

Without evidence Reclamation concludes that the FKC pump-ins would have no effect on proposed or listed species or critical habitat under the federal ESA of 1973, as amended (16 U.S.C. §1531 et seq.), and there would be no take of birds protected under the Migratory Bird Treaty Act (16 U.S.C. §703 et seq.) or eagles under the Bald and Golden Eagle Protection Act (16 U.S. Code § 668). No biological data or monitoring is provided in the DEA to support such a conclusion. No consultation was completed with CDFW or USFWS.

On July 13, 2016, the Environmental Protection Agency (EPA) released a Final Updated Clean Water Act (CWA) section 304(a) recommended national chronic aquatic life criterion for the pollutant selenium in fresh water.¹⁵ The final criterion supersedes EPA's 1999 CWA section 304(a) recommended national acute and chronic aquatic life criteria for selenium. The 2016 criterion reflects the latest scientific information, which indicates that selenium toxicity to aquatic life is primarily based on organisms consuming selenium-contaminated food rather than direct exposure to selenium dissolved in water. The federal register notice identified revised chronic selenium criteria in water for lentic waters (e.g., meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps) and lotic waters (e.g., rivers and streams). EPA's revised chronic selenium criterion for lentic waters of a monthly mean of 1.5 µg /L is the criterion that should be applied to water in the California Aqueduct to protect fish and wildlife beneficial uses. Reclamation provides no data or studies to warrant the proposed arbitrary relaxation of these regulatory standards.

These complex issues related to impacts on fish and wildlife beneficial uses require a full analysis of the proposed project and potential project alternatives that could better minimize environmental risks. This should be done as part of a full EIS. Consultation with CDFW and USFWS is essential.

Warren Act Contracts/Agreements and the Agreement with DWR allowing water to be conveyed in the Aqueduct are not Included in the DEA.

The proposed Warren Act Contracts/Agreements are not included with the DEA and have not been made available for public review. Thus, an informed decision and analysis of this action is precluded. In order to accurately assess the impacts and cumulative impacts of this FKC pump-ins, a copy of the Contracts/Agreements and all Exhibits for the time period being considered (2021-2022) should be disclosed and included in the environmental analysis for this Project.

Further, adding to the incomplete project description and definition of the project, the Agreement with DWR (DWR Agreement) for introduction and conveyance of local groundwater in the California Aqueduct is also absent. Without these documents, the public is prevented from seeing key information regarding the contractual requirements of this action. Omitting these key documents keeps the public in the dark regarding the project definition, baseline, and potential contractual remedies available to downstream beneficial uses that could be harmed by the degradation of water quality in the California Aqueduct.

VI. Subsidence Impacts to the FKC are not Disclosed & Monitoring Requirements are Insufficient.

Land subsidence is a major and growing consequence of groundwater pumping in the project area and

¹⁵ See: <https://www.federalregister.gov/documents/2016/07/13/2016-16585/recommended-aquatic-life-ambient-water-quality-criterion-for-selenium-in-freshwater>

threatens the FKC and other infrastructure. Increases in subsidence, impacts, and costs to the infrastructure, and long-term cumulative impacts are significant. Operational impacts of subsidence to the FKC include reduction in conveyance capacity, increase in power cost, decrease in available freeboard (the difference in elevation between the crest of the canal and the water level as fixed by design requirements). These effects are significant and costly to repair. Reclamation estimated that implementing the preferred alternative for the Friant-Kern Canal Middle Reach Capacity Correction Project that would build a parallel canal to the impacted reach of the FKC would have a total capital cost of \$430,000,000.¹⁶

As denoted in the DEA @ pg 11-12: *“Land subsidence has caused portions of the FKC to sink significantly in recent years, which has decreased the capacity of the canal to carry and deliver water. Hydraulic modeling completed as part of the Friant-Kern Canal Capacity Restoration Feasibility Report authorized pursuant to Section 10201(a)(1) of the San Joaquin River Restoration Settlement Act confirmed the reduction in FKC capacity in several segments (Reclamation 2020a). A portion of the Action area falls within an approximately 33-mile section of the FKC located within Tulare and Kern Counties (milepost 88 to milepost 121.5), that has experienced more than 50 percent capacity loss due to regional land subsidence and other factors. The subsidence-induced capacity loss has resulted in downstream water delivery impacts to six Friant Division long-term contractors: Arvin-Edison Water Storage District, Delano-Earlimart Irrigation District, Kern-Tulare Water District, Sausalito Irrigation District, Shafter-Wasco Irrigation District, and Southern San Joaquin Municipal Utility District, three of which are participants under this Proposed Action...To address this issue, Reclamation and the Friant Water Authority have proposed to restore this section by raising portions of the embankments in the existing FKC over approximately 13 miles and constructing an approximately 20-mile realigned canal segment east of the existing FKC (Reclamation 2020b).”*

On page 5 of the DEA, Reclamation includes the following environmental commitment regarding subsidence, *“Districts shall comply with applicable Groundwater Sustainability Plans pursuant to the Sustainable Groundwater Management Act.”* Yet, no details of what commitments are in those Groundwater Sustainability Plans is provided in the DEA.

Reclamation concludes on page 12 of the DEA: *“The groundwater to be pumped under the Proposed Action would come from wells at varying depths, from a wide range of locations along the FKC. Although the withdrawal of up to 50,000 acre-feet per year over a two-year period would contribute to regional overdraft and subsidence, this would occur with or without the Proposed Action.”*

The proposed FKC pump-ins would authorize up to 50,000 AF to be pumped in 2021 and 2022. If this full pumping amount is realized, that would be an over 4-fold increase in groundwater pumping compared with the previous program in 2014-2015. The DEA assumes that regional overdraft and subsidence will be the same with or without the project, yet this finding is not supported by any data or analysis. Further, the DEA points to commitments in groundwater sustainability plans without providing any detailed information. The DEA provides no clear plan for mitigating future excessive subsidence. The impacts of this action are complex, broad, and far reaching, and need to be considered in a full EIS analysis. A full EIS should evaluate all areas that would be affected by increased subsidence and provide a plan to offset losses of wetland and riparian vegetation communities caused by changes in hydrology associated with subsidence caused by the FKC pump-ins.

¹⁶ See pg 4-30 of Friant-Kern Canal Middle Reach Capacity Correction Project Feasibility Report: <https://usbr.gov/mp/docs/fkc-feasibility-report.pdf>.

VII. Cumulative Impacts.

Cumulative impacts from these pump-ins into the FKC, conveyance to the California Aqueduct, and potential exchanges or reverse flow of the Aqueduct are not disclosed or analyzed. We adopt by reference our comments from previous exchanges and transfers and previous scoping comments.¹⁷ Numerous water actions such as groundwater pump-ins and exchanges into the California Aqueduct have the potential to cumulatively degrade the quality in the Aqueduct and affect beneficial uses associated with Aqueduct water supplies.¹⁸

In addition to the continued extraction of water from already over-drafted groundwater basins, the impacts from discharging this groundwater to the FKC and California Aqueduct is not adequately addressed. These impacts are merely brushed aside. No data from previous pump-ins is provided to support Reclamation's conclusions of no impact in the DEA. No alternatives are considered. Finally, there is insufficient analysis of the cumulative impact of discharging these contaminants into drinking water, wildlife refuge supplies, or downstream fish and wildlife beneficial uses.

VIII. Conclusion.

The DEA does not adequately assess the potentially significant environmental impacts from the FKC pump-ins. In addition, there are reasonably available alternatives that have not been considered and should be analyzed to reduce the potentially significant environmental impacts. Absent from the document is any assessment of the cumulative impacts, including third party impacts and impacts to fish, wildlife, and water quality. Required permits and compliance with the Clean Water Act to allow discharge of contaminants into the waters of the State and Nation have not been provided; nor have necessary consultations with federal and state wildlife agencies concerning potential endangered and threatened species impacts. The Warren Act Contracts/Agreements and associated Contract Exhibits and

¹⁷ See Coalition comments on Westlands pump-in project, 9.30.2020: https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-9-30-2020_WWD-SLC-Pump-in-2020-IS_ND_-Cal-Aqueduct-Corrected.pdf
See also comments provided http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=14341

“Resnicks’ Westside Mutual Water District member lands in Westlands Water District to the AEWS service area and Westside Exchange Program are not disclosed nor analyzed. Nor are the impacts to Madera County from the potential groundwater transfers likely contemplated under the proposed action. The existing Exchange Program involves delivery of Arvin’s supplies to Westside member lands as exchange water, based on a 1 for 1 or “bucket for bucket” basis, up to 50,000 acre-feet (AF).”

See 30,000 acre-feet of groundwater proposed to be transferred to Westlands et. al. from the Mendota Pool
<http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=49107>

See also North Valley Regional Recycled Water Program-- <http://www.nvrrecycledwater.org/description.asp> *The NVRWP could produce and deliver up to 32,900 acre-feet per year of tertiary-treated recycled water to the drought-impacted west side. This water can be used to irrigate food crops, public and privately-owned landscaping, and for industrial uses. This basin transfer would alter San Joaquin River Flows and flows to refuges, and the South Delta Bay Estuary. The project would deliver up to 59,000 acre-feet per year (AFY) of recycled water produced by the cities of Modesto and Turlock via the Delta-Mendota Canal (DMC), a feature of the Central Valley Project owned by Reclamation. Instead of discharging fresh treated water into the San Joaquin River, recycled water would be conveyed from Modesto and Turlock through pipelines from their wastewater treatment facilities, crossing the San Joaquin River, ending at the DMC.*

¹⁸ See: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Water-Quality/Documents/2018-Turn-In-Report.pdf>
<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>
<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

Agreement with DWR governing the discharge into the Aqueduct from 2021-2022 is absent and therefore could not be reviewed. Thus, the public is provided an incomplete project, incomplete project description and no mitigation and compliance measures upon which the public and decision makers can rely to make an informed opinion regarding the environmental impacts.

Prior to commencing with the proposed project, which has in the past and likely will continue to harm downstream uses, a complete EIS is required that includes, among other things, a QAPP that ensures waters of the State and Nation are not degraded, compilation and analysis of prior groundwater water quality data, flow rates and quantities pumped from participating wells from previous pump-ins, the Warren Act Contracts/Agreements and Exhibits, the Agreement with DWR allowing discharge into the Aqueduct, documentation of Clean Water Act permit compliance, and full analysis of alternatives and cumulative impacts. We object to the adoption of a FONSI for this project. The project definition is not complete, mitigation measures are absent and data or evidence is not provided to make such a determination and finding.

Thank you for the opportunity to comment. Please add our names to Reclamation's electronic notification lists for environmental documents regarding water supplies or contracts or conveyance.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League
jminton@pcl.org



Mike Conroy
Executive Director
Pacific Coast Federation of Fishermen's Asso.
mike@ifrfish.org



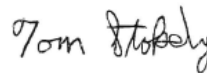
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Acting Calif. Director
Sierra Club California
brandon.dawson@sierraclub.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](#)
caleenwintu@gmail.com



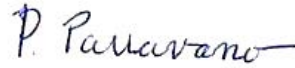
Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



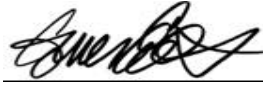
Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



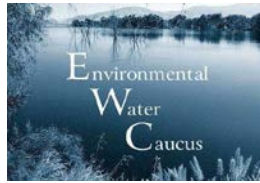
Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



CA Save Our Streams Council



January 11, 2021

Ms. Rain Emerson
South Central California Area Office
U.S. Bureau of Reclamation
1243 N Street
Fresno, CA 93721
remerson@usbr.gov

Via Email and Regular Mail

Re: Comments on Draft EA/FONSI for the Central Valley Project Interim Renewal Contracts for Panoche Water District and San Luis Water District, 2021-2023, CGB-EA-2021-007

Dear Ms. Emerson,

On December 10, 2020, the U.S. Bureau of Reclamation (Reclamation) made available the draft Environmental Assessment (DEA) on the 2-year interim renewal of Central Valley Project (CVP) contracts (contracts) for Panoche and San Luis Water Districts (WDs) for a 30-day public comment period.¹ As denoted on Reclamation's website, written comments on these contracts must be received by close of business on January 11, 2021. The two contracts that are the subject of the DEA provide water to Panoche WD (94,000 AFY) and San Luis WD (125,080 AFY).

¹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=47664

As we will describe below, the DEA is deficient, and the Bureau of Reclamation (“Reclamation”) must prepare an Environmental Impact Statement (“EIS”), as required by the National Environmental Policy Act (“NEPA”). Further, we note that Reclamation has inexplicably failed to provide a draft Finding of No Significant Impact (FONSI) during this public comment period. Yet, Reclamation did include a draft FONSI with the DEA for the previous Interim Contract Renewal for these contracts in 2019.² Further, the Water Needs Assessments (WNAs) that were referenced as Appendix B in the DEA were not included (WNAs for the San Luis Unit cities were included in Appendix B, but not for Panoche and San Luis WDs). We therefore request that Reclamation at a minimum re-release the DEA (with the correct WNAs) and the draft FONSI for Panoche and San Luis WDs interim contracts for an additional 30-day public review period.

For more than 20 years, Reclamation’s Mid-Pacific Region has circumvented federal law by serial issuance of “*Interim Renewal*” water service contracts, each lasting approximately two years. The undersigned groups have previously called attention to the serious legal deficiencies of this pattern and practice. Legal challenge to Westlands serial renewal of interim water service contracts resulted in a recent 9th Circuit Court ruling,³ whereby Reclamation’s interim contract renewal and circumvention of the NEPA process was determined an abuse of discretion. The court ordered a *rejection* of Reclamation’s premise that the interim contracts merely continued the status quo. Unfortunately, Reclamation repeats these same mistakes under the proposed contract renewals. [PCFFA, 655 Fed. Appx. at 598-599.]

Despite the 2016, 9th Circuit Court ruling (PCFFA), Reclamation continues to abuse its discretion in issuing interim water service contracts. Issuance of the newly proposed two-year interim contracts to Panoche and San Luis Water Districts would violate Congressional direction and federal law. Much of the agricultural land serviced by these contracts is contaminated with selenium and other pollutants that are carried into ground and surface waters and pollute the San Joaquin River and Delta Estuary when the lands are irrigated with these water deliveries. There is no legal requirement that these interim water service contracts be renewed, yet Reclamation seems determined to do whatever it takes, legal or not, to renew these contracts.

Proceeding to renew these water supply contracts, in addition to not complying with NEPA, violates the Administrative Procedures Act, Central Valley Project Improvement Act [PL 102-575], the Reclamation Reform Act of 1982 [PL 97-293], the Coordinated Operations Act of 1986 [PL 99-546], and other federal statutes. Reclamation would be committing these additional illegal actions if it issues the proposed interim water service contracts.

The DEA is inadequate in several respects including the following:

- 1) The DEA fails to consider the irrigability of lands within Panoche and San Luis WDs a legal requirement of the Coordinated Operations Act Sec. 305. § 4(c),
- 2) The DEA fails to study a reasonable range of alternatives, including an alternative that reduces the full contract quantity,

² See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=36682

³ Ninth Circuit’s Amended Memorandum in Pacific Coast Federation of Fishermen’s Associations v. Bureau of Reclamation (“PCFFA”), 655 Fed. Appx. 595 (9th Cir. 2016).

- 3) The DEA's no action alternative is fatally flawed,
- 4) The DEA improperly excludes from analysis all of the source waters that the Project will harm, including the Trinity, American, San Joaquin and Sacramento rivers, the Delta, and their watersheds,
- 5) The DEA's analysis of impacts of these water contract renewals, including impacts to biological resources, impacts related to global warming, and cumulative impacts (which are completely omitted from consideration in the DEA) are inadequate,
- 6) The DEA improperly relies upon outside documents addressing different issues to excuse its lack of analysis.

Because the Project will significantly affect the quality of the human environment, and this is the only NEPA analysis Reclamation has completed relevant to water deliveries to these districts, an EIS must be prepared. We note that Reclamation failed to complete any NEPA or ESA review of the conversion of these contracts to repayment contracts as authorized under the WIIN Act.

Conclusions and Recommendations

We urge Reclamation to rescind the current DEA and prepare an EIS for these interim contracts. The NEPA process should be restarted with proper public transparency that follows established legal requirements including a full EIS review as required by the CVPIA and NEPA. Furthermore, the NEPA analysis should include completed, endangered species consultation(s), an accurate irrigable land map of the agricultural lands within Panoche and San Luis Water Districts, and the correct water needs assessments for each district.

Our detailed comments on these contracts follow. Our organizations adopt by reference the previously provided comments on interim renewal contracts for Panoche and San Luis WDs, including comments submitted on December 13, 2010, and comments filed with Reclamation on behalf of PCFFA et. al. on February 6, 2019, by Steve Volker. We also refer Reclamation to our October 6, 2020, comments on the draft WIIN Act Repayment Contracts for Panoche, Pacheco, and San Luis Water Districts. We incorporate these comments by reference.

Thank you for considering these comments. Please make sure the undersigned are included in any future actions with regard to CVP contract renewals and/or conversion of CVP contracts pursuant to Section 4011 of the WIIN Act. Please find our detailed comments attached.

Thank you for the opportunity to comment.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://www.planningandconservationleague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://www.pacificcoastfederationoffishermen.org)
mike@ifrfish.org



John Buse
Senior Counsel, Legal Director
Center for Biological Diversity
jbuse@biologicaldiversity.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



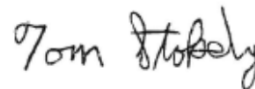
Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



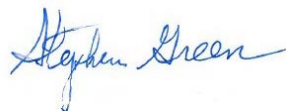
Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.com)
connere@gmail.com



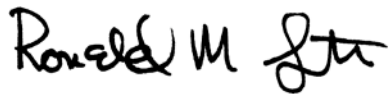
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Director
Save California Salmon
tgstoked@gmail.com



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



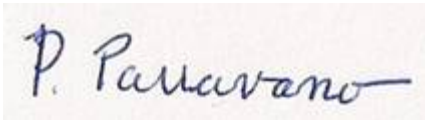
Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
President
Crab Boat Owners Association
papaduck8@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net

DETAILED COMMENTS ON THE DEA FOR PANOCHÉ AND SAN LUIS WATER DISTRICTS' INTERIM CONTRACTS

I. The Secretary is Required to Contract for the Delivery of Project Irrigation Water Only to Lands with Characteristics that Allow Delivery—these interim contracts Violate that Mandate.

As stated above water is being provided to the service areas of these two districts even though no updated irrigable lands map have been provided. Public Law 99-546, 100 Stat. 3050. (Coordinated Operations Act) Sec. 305. § 4(c) of the Act requires, among other things, that the Secretary must show that lands receiving project water are capable of *"successful irrigability of those lands and their susceptibility to sustained production of agricultural crops by means of irrigation has been demonstrated in practice. Such proposal shall also include an investigation of soil characteristics which might result in toxic or hazardous irrigation return flows."* No such documentation and evidence has been provided in support of these CVP interim water contracts. The DEA @ pg 38 states that 38,000 acres in Panoche WD and 3,882 acres in San Luis WD proposed for irrigation under these interim contracts are "drainage impacted." These drainage-impacted lands generate "toxic or hazardous irrigation return flows" to ground or surface waters. Indeed, current practices result in some of these toxic flows being discharged without proper Clean Water Act permits or consideration of hazardous conditions for fish and wildlife.^{4,5}

The proposed interim contracts will deliver water to lands that are unsuitable for irrigation. Delivery of water to these lands could obligate the federal government to furnish something

⁴ <http://calsport.org/news/wp-content/uploads/Conant-Burman-Ltr-Re-Extension-of-Cmt-Re-SLD-Discharges-UseAgreement-12-10-19.pdf>

⁵ http://calsport.org/news/wp-content/uploads/PCL-et-al_Comments-on-DEA-for-GBP-Stormwater-Plan_12-23_2019-.pdf

that has been unattainable for decades—drainage service. The drainage service obligation does not exist, however, if water service to these lands is cut off because of the impracticability of irrigation. This alternative—cessation of irrigation water from unsuitable lands—is mandated by law and regulation.⁶ The toxic drainage, groundwater pollution, and surface water pollution is created in large part by the Bureau’s [of Reclamation] deliveries of CVP water to these drainage-impaired lands. Reducing water service instead of expanding it is the obvious solution. Controlling or eliminating the supply of drainage water by eliminating deliveries to these identified toxic soils will control the demand for drainage and the enormous costs estimated at \$2.7 billion.⁷ The unauthorized financial obligation inferred by issuing the proposed permanent water contract must be addressed.⁸

II. A Full EIS analysis under NEPA is Required.

As we noted in our October 6, 2020 comments, given the numerous potential environmental effects associated with these San Luis Unit water deliveries, a full EIS and ESA analysis must be completed for CVP water deliveries to these districts. The CVPIA PEIS and Biological Opinion provided a framework whereby future CVP-related actions, including interim and long-term CVP water contract renewals, could be reviewed for site-specific impacts under NEPA and ESA.

The environmental review completed for Panoche and San Luis WDs interim contracts is inadequate, as our organizations have documented in our February 6, 2019 comments on the DEA for the previous interim renewal contracts for these districts.⁹ We incorporate those comments by reference. These sequential two-year contracts have failed to address reduction in exports, irrigability of these lands, drainage impacts, and conversion to municipal and industrial uses.

⁶ Continuing to provide project water to these toxic soils would require approval from Congress to increase the authorized appropriation cap under the San Luis Act. Also see Reclamation Directives and Standards PEC P12 for required continuing investigations into land classification and suitability for irrigation for the delivery of project water.

⁷ The estimated cost to implement the San Luis Drainage Feature Re-evaluation Record of Decision (SLDFR) was \$2.7 billion in 2008: <https://www.usbr.gov/mp/mpr-news/docs/factsheets/san-luis-drainage.pdf>

⁸ The SLDFR 2008 Feasibility Report sent to Congress explained that “Federal interest is established either by legislation or through an evaluation of a proposed action relative to the agency’s mission” and that, to be federally implementable, an action “must be feasible as defined by the Economic and Environmental Principles and Guidelines (Principles and Guidelines). The Principles and Guidelines require Federal actions contribute to the national economic development (NED).” The 2008 Feasibility Report continued: The San Luis Act of 1960 as amended establishes the Reclamation’s Federal interest in the proposed action. However, the requirement for a net positive contribution to the Nation’s economy cannot be met by either of the two action alternatives. The 2008 Feasibility Report concluded the action alternative selected by the Bureau was not appropriate for implementation according to the government’s own accepted standards.

⁹ See Appendix F in 2019 FEA for Panoche and San Luis WDs Interim Contracts: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=37785

Because the renewal of these interim renewal contracts will significantly affect the quality of the human environment, an EIS must be prepared. An EIS must comprehensively assesses the far-ranging and complex direct and secondary effects of irrigation and illuminate the total environmental impact of contract renewal and the future conversion of these contracts to a permanent contracts under the WIIN Act. Responsible decision making requires guidance from this EIS and adherence to established legal requirements.

In comments submitted in 1999 by the USEPA to the Bureau of Reclamation on Long Term Contract Renewals for the CVP, EPA recommended that an EIS should be the level of review for contract renewals: *“an EIS should be assumed the appropriate level of analysis for contract renewals, especially considering the many regional and localized concerns which were not covered in the CVPIA PEIS; e.g. water quantity, water quality, or specific terms and conditions for contract renewals.”*¹⁰ Further, in comments on CVP Long Term Contracts in 2000 the USEPA argued that, *“long term water service contracts are not and should not be permanent entitlements, but rather that they should be subject to review at the end of each contract period to reevaluate water supply and environmental conditions in a rapidly changing state.”*¹¹ Locking in these paper water supplies in perpetuity artificially inflates Pacheco, Panoche, and San Luis WDs’ allocations during times of shortage and results in shortfalls to other contractors and the environment.

The following impacts from renewal of CVP interim water contracts for Panoche and San Luis WDs’ are significant and should be addressed in a full EIS:

1. Effects to the San Francisco Bay-Sacramento and San Joaquin River Delta Estuary.

There have been repeated violations of the Clean Water Act standards¹² and Endangered Species Act requirements under the Reasonable and Prudent Alternatives. CVP operations and the exports of water pursuant to these WDs’ contracts have consistently violated the Coordinated Operation Act of 1986, which requires adherence to Delta Water Quality Standards contained in D-1485 and subsequent water quality standards.

The operations of the Federal CVP and State Water Project (Water Projects) have caused devastating environmental impacts and have contributed to severe declines in California’s native fish species, several of which are now listed as endangered or threatened species under the Endangered Species Act. Specifically, Water Projects operations have been major factors in the decline of the endangered Sacramento River winter-run Chinook salmon (“winter-run Chinook salmon”), threatened Central Valley spring-run Chinook salmon (“spring-run Chinook salmon”), threatened Central Valley steelhead, threatened Green Sturgeon and threatened Delta Smelt, and in the listing of these and other species under the Endangered Species Act. Further,

¹⁰ See: <https://archive.epa.gov/region9/nepa/web/pdf/cvprenew.pdf>

¹¹ See: <https://archive.epa.gov/region9/nepa/web/pdf/cvprenewals.pdf>

¹² Of particular note, the SWRCB, referencing WR Order 90-05, stated in WR 92-02 at page 9: *The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery.* SWRCB warned against USBR decisions to maximize water deliveries in the initial years of a drought and failing to maintain sufficient carryover storage to protect fisheries and public trust resources.

species not currently listed, such as longfin smelt and Sacramento splittail, are also being adversely affected by Water Project operations.

2. Effects to Indian Trust Assets in the Trinity River must be assessed and disclosed.

The Yurok and Hoopa Tribe's fishing and associated water rights in the Trinity River are Indian Trust Assets. Protection of the Indian Trust Assets for the Hoopa, Yurok and Winnemem Wintu people require sufficient water to remain within the Tribe's watershed so that their fishery resources will thrive, not merely survive.¹³ As the Hoopa Tribe commented as far back as 2010, the CVP water diversions to San Luis Unit contractors including Pacheco, Panoche, and San Luis WDs, significantly impact their Indian Trust Assets:

*"...It is irrelevant to the environmental review that the Tribe's reservation is not in the vicinity of the Proposed Action Area. The water to which the Tribe has a right and whose use is essential to its fishery resources is being delivered and will continue to be delivered pursuant to the proposed federal action from the vicinity of the reservation to the contractors' area by CVP facilities that divert water from the Tribe's watershed."*¹⁴

3. Effects to Listed Species: the required Endangered Species Consultation has not been completed or made available to the public.

For any federal action that may affect a threatened or endangered species or its habitat, the agency contemplating the action, otherwise known as "the action agency" (here, the Bureau of Reclamation), must consult with the appropriate "consulting agency" (here, the FWS and NMFS), for the purpose of ensuring that the federal action is not likely to: (1) jeopardize "the continued existence of" an endangered or threatened species; and (2) that the federal action will not result in the "destruction or adverse modification" of the designated critical habitat of the listed species. 16 U.S.C. § 1536(a)(2).¹⁵ For these San Luis Unit contract conversions, Reclamation is required to request both FWS and NMFS to complete a formal Section 7 consultation under the ESA.

Terrestrial federally listed species that could be affected by these San Luis Unit water deliveries and contract conversions include:

Mammals: San Joaquin kit fox, Fresno kangaroo rat, Giant kangaroo rat;
Reptiles: Blunt-nosed leopard lizard;
Plants: San Joaquin woolly-threads.

¹³ *Federal court: Tribal water rights outrank farmers' rights* Associated Press 11/25/2019 See <https://www.cherokeephoenix.org/Article/Index/113786>

¹⁴ See: January 29, 2010 Letter to Rain Healer, USBR from Joseph Membrino Re: Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts. pg 3.

¹⁵ See: <https://www.fws.gov/endangered/laws-policies/section-7.html>

Threats to these species include loss of habitat to cultivation, conversion of land to other uses, use of rodenticides, herbicides and pesticides, any of which could decimate small, isolated populations.

Supporting documentation for this USEPA Docket for Selenium in California includes 2 reports by USFWS: Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries (includes a list of species considered most at risk for selenium exposure in CA)¹⁶ and Species at Risk from Selenium Exposure in the San Francisco Estuary.¹⁷ The species identified as most at risk from selenium exposure from agricultural drainage contamination in the San Joaquin Valley and San Francisco Estuary include:

Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
Reptiles: Giant Garter Snake;
Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

4. Effects of San Luis Unit Drainage Caused by Imported Irrigation Water from the CVP are Significant and Complex and Must be Addressed in a Comprehensive EIS.

Federal and State law prohibit degradation of the waters of the State and Nation. The proposed contract conversions would allow the continued delivery of CVP water to lands known to create pollution when applied to irrigate these soils without data or substantive environmental analysis of the effects of drainage contamination from Panoche or San Luis WDs or Reclamation. This drainage pollution can deform fish and wildlife, impair reproduction, and reduce survival. These adverse impacts affect trust resources including migratory birds, anadromous fish, and federally and state listed species. Continued delivery of water to these soils, as contemplated by this contract renewal, will degrade the waters of the State and Nation. The USEPA, in their comments on San Luis Unit Long Term Contract Renewals (@ pg 4 of Attachment A), concluded that, "*the Drainage solutions and features relied upon to implement these solutions should not be separated from the implementation of long-term water contracts.*"¹⁸ Yet that is exactly what Reclamation has done in for these interim contract renewals and WIIN Act contract conversions.¹⁹

The USEPA in their comment letter on the Draft EIS and Supplemental Information for Renewal of Long-Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006) recommended that the FEIS for San Luis Unit Long Term Contracts should include information on the relationships between irrigation in the San Luis Unit and groundwater movement downslope, in terms of flow and water quality. EPA further noted that Reclamation should provide information on the San Luis Unit's role in groundwater accretions

¹⁶ See: <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0144&contentType=pdf>

¹⁷ See: <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0265&contentType=pdf>

¹⁸ Ibid.

¹⁹ <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=71983>

and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as “*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*”²⁰

5. Drainage Contamination in Grasslands Wetland Channels must be disclosed.

Panoche, and San Luis WDs participate in the Grassland Bypass Project (GBP) which manages agricultural drainage from the 97,000 acres in the Grassland Drainage Area. The undersigned organizations have long-standing interests in the GBP because contaminants in agricultural drainage discharges have profound effects to the environment, including effects to downstream waterways, aquatic life, and migratory birds. The Grasslands Wetland Channels are listed as impaired for selenium on the State’s 303(d) list²¹ and elevated selenium in those channels could be harming aquatic-dependent fish and wildlife resources including federally listed species such as the threatened giant garter snake.

We hereby include our previous comments on the 2009 GBP EIR/EIS²² and Basin Plan Amendment by reference.²³ We also include our comments submitted to Reclamation December 23, 2019 on the Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area (Draft EA-19- 029) by reference.²⁴

6. The San Francisco Bay/Delta continues to be impacted by selenium from agricultural drainage.

The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta, including Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta, are listed as

²⁰ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

²¹ See:

https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/01657.shtml#34338

²² See comments on the GBP EIS/R from CWIN and CSPA starting on pdf pg 3:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4417

²³ See: Comments of the Pacific Coast Federation of Fishermen’s Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker. June 22, 2015. Available at:

https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015_may/

²⁴ See: Coalition comments on the Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area (Draft EA-19- 029)—A Comprehensive EIS is Required and Compliance with the Clean Water Act starting @ pdf pg 200: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).²⁵ Sources of selenium contamination include agricultural drainage from the San Joaquin Valley and effluent discharges from oil refineries (Linares et al 2015; Presser and Luoma 2010). At risk species include federally-listed as threatened or endangered, green sturgeon, Chinook salmon, steelhead trout, delta smelt, Sacramento splittail and the California Ridgway's rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters.

Our organizations submitted comments to USEPA on the proposed selenium water quality and tissue criteria for the Bay Delta supporting more protective water quality criteria and hereby incorporate those comments by reference.²⁶ The selenium discharges being considered by the Regional Board from the GBP for the next 25 years will affect the Bay-Delta ecosystem and could affect compliance with EPA's proposed water quality criteria for San Francisco Bay and Delta. The 5.0 µg /L Basin Plan selenium objective for Mud Slough and the San Joaquin River is not protective of downstream beneficial uses, will result in non-compliance with proposed water quality criteria and will cause deleterious effects to fish and wildlife in the Bay-Delta. Agricultural drainage from Panoche and San Luis WDs and other drainage-impaired lands in the Grasslands Drainage Area contribute to this discharge and therefore must be analyzed in a full EIS.

New information has been published in 2020 that identifies adverse effects from selenium to Sacramento splittail. Recent publications by the USGS and NMFS have documented elevated levels of selenium in the benthic clam food chain used by the Sacramento splittail and the federally listed green sturgeon in the San Francisco Bay Delta. In the spring of 2011, young-of-year splittail were found to have a high incidence (>80%) of spinal deformities characteristic of selenium toxicity at the site of a water diversion station in the San Joaquin Valley of the Delta (U.S. Department of the Interior, Bureau of Reclamation Tracy Fish Collection Facility) (Johnson et al 2020). This study identified various sources of selenium contamination and points to agricultural drainage as a significant source:

*"These data suggest that individuals acquired Se toxicity while feeding in the freshwaters of the San Joaquin River but already started with significantly higher Se burdens from females maturing in the estuary (Figure 3, Table 1 and Supporting Information)."*²⁷

²⁵See: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

²⁶ Coalition comments of environmental, fishing and environmental justice organizations on EPA's Water Quality Standards for the Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta. October 28, 2016. Available at <https://www.regulations.gov/document?D=EPA-HQ-OW-20150392-0246>

²⁷ See: <https://dx.doi.org/10.1021/acs.est.9b06419>



A second publication (Stewart et al 2020) compared splittail tissue concentrations with those proposed by EPA in 2016 for the Bay Delta and found that, “Despite the consistently low muscle Se concentrations across all regions and years and no exceedances, the frequency of exceedance in liver and ovary were high for Pacheco, ranging from 60 to 80% (range for both tissues and years), followed by Suisun in 2011 (33%) and the Confluence in 2010 (17%).” These findings are significant as they document harm in a fish foraging in a benthic clam food web in the Delta, which is also utilized by the federally listed green sturgeon.

7. Drainage Treatment is not cost effective and has not been proven to be reliable and meet operational criteria.

The 2006 EIS for SLDFR and the 2009 EIR/EIS for the GBP included treatment as a significant component of the plan to manage drainage and reduce brine volumes to be discharged or disposed of. Reclamation has promoted and funded drainage treatment solutions for decades with repeated operational failures and unreliable results.²⁸ Both the SLDFR EIS and the GBP EIS/R included a biotreatment plant to reduce the selenium load being discharged, and to ultimately achieve zero discharge of agricultural drainage to the San Luis Drain and San Joaquin River.²⁹

In 2012, construction began of the SLDFR Demonstration Treatment Plant (Demo-Plant) in Panoche Drainage District. The purpose of the Demo-Plant was to demonstrate and operate

²⁸ See USBR SLDFR Feasibility Report 2008, Appendices D and E. See: http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppE-Se-Biotreatment-Performance_2008.pdf http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppD-RO-TreatmentPerformance_2008.pdf

²⁹ See SLDFR FEIS Appendix B page 18: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

water treatment processes to collect cost and performance data for the design of a full-scale water treatment facility to be constructed in Westlands. The Demo-Plant was completed in 2014 in Panoche Drainage District but did not operate consistently due to operational failures and faulty design. The treatment plant has yet to become operational.³⁰

The Department of Interior's Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant.³¹ The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational performance criteria. In addition, Reclamation was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, Reclamation spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals. Warned of fraud, the Inspector General found that "work at the "pilot" Demo-Plant included: "invalid single audits, conflicts of interest with key personnel, a general absence of project oversight, and questionable use of a cooperative agreement as the legal instrument." The Inspector General also raised federal fraudulent funding issues, stating: "*We also question how and why the project grew from a pilot-scale \$15 million demonstration and research and development plant to a full-size \$37 million plant. Further, we have been told that the costs to operate and maintain the plant could outweigh the benefits of the treated water produced.*"³²

All action alternatives in the SLDFR FEIS included bio-treatment and reverse osmosis treatment as a large part of the schematic to manage drainage for the San Luis Unit. Since the Demo-Plant has yet to work reliably, the viability and costs of the drainage plan put forth in the SLDFR ROD is questionable, particularly at full-scale. Without treatment, how will drainage volumes and selenium loads be managed? These issues related to contract deliveries to Panoche and San Luis WDs must be addressed and analyzed in a full EIS.

8. Long Term Viability of Drainage Management Actions

The SLDFR FEIS included a suite of management actions, including drainage reuse (to reduce the volume of drainage that would need to be treated), treatment, and disposal. Pilot studies conducted for SLDFR failed to meet specified objectives, putting doubt into effective implementation of any of these approaches at full-scale.

Reuse of polluted drainage in reuse areas does not eliminate the loading of wastes. It simply stockpiles contaminants on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into saline and toxic wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to permanent fallowing of more and more land, leaving hazardous conditions.

³⁰ Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.

³¹ See <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luisdemonstrationtreatment-plant>

³² See https://www.doioig.gov/sites/doioig.gov/files/ManagementAdvisory_ProposedModification_112717.pdf

9. Cessation of deliveries to these toxic soils is the most cost effective and proven strategy to manage drainage.

Our organizations have previously submitted comments to the Regional Water Board about the success of land retirement in relation to the GBP's drainage volume load reductions.³³ The USBR's 2004 Broadview Water Contract Assignment Draft Environmental Assessment cites Summer's Engineering as predicting a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year from the cessation of irrigation on 9,200 acres of agricultural land in Broadview Water District as per Table 4-1 below (USBR 2004). This amounts to a per acre reduction of 0.28 AF of drainage, 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of boron.

**TABLE 4-1
DRAINAGE AND WATER QUALITY EFFECTS OF PROPOSED ACTION ON THE
SAN JOAQUIN RIVER**

	Existing Conditions	Under Proposed Action Conditions	Estimated Reduction Attributable to Proposed Action
BWD Drainage to San Joaquin River (afy)	3,700	1,100	2,600
BWD Estimated Salt Production (tons/yr)	24,300	7,300	17,000
BWD Estimated Selenium Production (lbs/yr)	2,140	640	1,500
BWD Estimated Boron Production (lbs/yr)	74,000	22,000	52,000

Source: Summers Engineering, 2003

Land retirement likely accounted for most of the reductions in selenium, and the majority of reductions in drainage volume, boron, and salt claimed by the Grasslands Bypass Project in the 2009 EIR/EIS.

The USEPA, in a letter regarding the Bay Delta Conservation Plan,³⁴ strongly recommended the USBR's Land Retirement Program be revived to save water and prevent further selenium contamination and impacts to endangered species (page 13):

Recommendations: *To mitigate for the project's impacts to selenium levels in the estuary as a result of the BDCP operations, consider reviving and funding the Bureau of Reclamation's Land Retirement Program¹⁷ to remove from cultivation and irrigation large areas of selenium laden lands on the West side of the San Joaquin Valley. This would save irrigation water, reduce discharges of selenium into the San Joaquin River basin, and advance attainment of selenium reduction targets¹⁸ set by EPA and the Central Valley Regional Water Quality Control Board. Evaluate the extent to which restoration of these "retired" lands to the native plant community could also contribute to the recovery of threatened and endangered plants and animals listed by FWS. Consider analyzing the cost/benefit of implementing treatment technologies vs. land retirement. Although cost/benefit analyses are not required under NEPA, such an analysis may be useful to decision makers and the public in this case."*

³³ See: Coalition letter to CVRWQCB on Selenium Basin Plan Amendment, April 26, 2010, p 15-16; http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr and Coalition letter to Karl Longley on Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements: <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-toLongley-re-gbpland-retirement.pdf>

³⁴ See: <http://calsport.org/news/wp-content/uploads/bay-delta-conservation-plan-deis.pdf>

Further, Reclamation’s SLDFR Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit. Three land alternatives were evaluated in the SLDFR EIS, 306,000 acres, 194,000 acres and 100,000 acres respectively. The Final EIS found that the only environmentally and economically preferred alternative was to retire 306,000 acres (In-Valley/Drainage Impaired Area Land Retirement).³⁵ It’s clear from the NED findings in Table N-10 below that additional land retirement would provide increased net economic benefits.

**Table N-10
Benefit/Cost Summary
Changes Relative to the No Action Alternative (\$/year in 2050)**

Subarea	In-Valley Disposal	Out-of-Valley Disposal	In-Valley/ Groundwater Quality Land Retirement	In-Valley/ Water Needs Land Retirement	In-Valley/ Drainage-Impaired Area Land Retirement
Total NED Benefit	\$37,962,000	\$38,430,000	\$31,164,000	\$20,629,000	\$9,931,000
Total NED Cost	51,225,000	51,370,000	46,767,000	30,778,000	6,288,000
Net NED Benefit	-\$13,263,000	-\$12,940,000	-\$15,603,000	-\$10,149,000	\$3,643,000

Notes:

Values represent net NED benefits relative to No Action.

Values rounded to nearest \$1,000. Totals may not add due to rounding.

Moreover, the US Fish and Wildlife Service (FWS), in their Fish and Wildlife Coordination Act Report (FWCAR) for SLDFR, recommended that all of the northerly area within the San Luis Unit (including all drainage-impaired lands within Pacheco, Panoche and San Luis WDs) be retired as well,³⁶ but Reclamation did not consider that alternative. The FWS concluded on page 67 of the FWCAR, *“To avoid and minimize risks and effects to fish and wildlife resources in the San Joaquin Valley and Pacific Flyway, the Service recommends land retirement on all drainage impaired lands in the SLU. This approach would maximize the elimination of drainage at its source, and therefore avoidance of adverse fish and wildlife effects.”*

10. A Drainage Plan is required by law.

Federal courts and reclamation law require a drainage plan for the San Luis Unit. There is no plan. The drainage management laid out in the schematics of the preferred alternatives in the SLDFR FEIS and ROD have failed during pilot studies, and treatment has not proven viable or cost effective.³⁷ Moving forward with interim renewal contracts and contract conversions for Panoche and San Luis WDs that authorize full contract quantities in perpetuity without acknowledging drainage problems and technological and economic limitations is negligent and in violation of the law. This ‘head in the sand’ approach

³⁵ SLDFR Final EIS, Appendix N, Table N-10, page N-17, accessed at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2240

³⁶ SLDFR Final EIS, Appendix M, USFWS FWCAR accessed at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236

³⁷ These important scientific reports were removed from USBR's website but can be found here: http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppE-Se-BiotreatmentPerformance_2008.pdf Also see http://calsport.org/news/wp-content/uploads/USBR_SLDFR-FeasibilityRpt_AppD-RO-Treatmt-Performance_2008.pdf

continues the delivery of CVP water to drainage-impaired lands in the San Luis Unit and creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River and the Bay-Delta estuary, especially in wetter years.

11. The EA's No-Action Alternative Fails to Comply with PCFFA

The DEA defines the no action alternative on page 8, *“Under the No Action alternative, Reclamation would continue to deliver up to full CVP water contract amounts to other south-of-Delta CVP contractors consistent with CVP operations as analyzed in the PEIS, accounting for hydrologic conditions and regulatory and environmental requirements... In general CVP pumping and operations would not change under the no-action alternative because in that case Reclamation “would continue to deliver up to full CVP water contract amounts to other south-of-Delta contractors consistent with CVP operations described in the PEIS, and Delta operations will continue to be subject to the LTO...”*

The DEA further speculates on page 8 that “it is possible that in wetter years” the 94,000 acre-feet available to Panoche and 125,800 acre-feet available to San Luis *“would be re-apportioned either by (1) re-allocating to other south-of-Delta CVP contractors including wildlife refuges, (2) retained in upstream CVP storage, (3) released for use by other water rights diverters, and/or (4) passed through the Delta undiverted by Reclamation.”* But Reclamation disclaims any need to address how it would re-apportion the water as part of its discussion of the no-action alternative, even though that re-allocation is an essential consideration when determining the impacts of approving or not approving the contracts. Indeed, in these wetter years, declining to provide the south-of-Delta CVP contractors with excess water would reduce the amount of time the Delta pumps would be operated, yielding substantial environmental benefits including reduced fish entrainment, increased in-stream flows, reduced energy consumption, and improved water quality. Reclamation’s affirmative decision to forego this analysis renders its no-action alternative incomplete.

The EA’s analysis is predicated on the false assumption that the no-action alternative will not change CVP operations and not reduce their environmental impacts. The entire point of a no-action alternative analysis is to compare what will happen if the project is implemented to what will happen if it is not. Reclamation’s “meaningless” analysis improperly “assumes the existence of the very plan being proposed,” and thus violates NEPA.³⁸

The DEA’s no-action alternative analysis also violates PCFFA and NEPA because it is self-contradictory and prevents the public and Reclamation from meaningfully assessing the environmental impacts of Reclamation’s decision to either approve or reject the interim contracts. The entire no-action alternative analysis is skewed to support Reclamation’s predetermined outcome of approving the Project. The DEA fails to meaningfully consider how Reclamation’s decision to reject or approve the interim contracts would affect the environment. It therefore contravenes both PCFFA and NEPA.

³⁸ See: PCFFA, 655 Fed.Appx. at 598.

12. NEPA Analysis of Panoche and San Luis WDs' interim renewal contracts should include alternatives that reduce water contract quantities.

An EA must consider a reasonable range of alternatives because this NEPA requirement applies "whenever [proposed federal agency] actions 'involve[] unresolved conflicts concerning alternative uses of available resources,'" regardless whether an EIS is required or prepared.³⁹ Contrary to this requirement, the DEA on these interim contracts fails to consider a reasonable range of alternatives. Indeed, no alternatives aside from the no action alternative and the status quo renewal of these interim contracts were considered. A proper range of alternatives would have considered interim contract renewals at water amounts less than the current allocation along with non-renewal of the contracts. Such alternatives would reduce diversions from the Delta and provide more water for imperiled fish and wildlife. Reclamation had a duty to show the environmental and land use impacts of such reductions, as necessary to provide Reclamation, Congress and the public a proper understanding of the contract renewals' impacts. The DEA's failure to provide a reasonable range of alternatives violates NEPA.

There is nothing presented in the record that precludes the Secretary of Interior from considering an alternative that decommissions the drainage-impaired lands from these contracts. There is no legal obligation to operate a project once it was built if experience reveals to the Secretary that the project is not "practicable" under reclamation law without drainage (which of course both Reclamation and Congress knew to be the case beforehand) and is harmful to public and environmental health. At the time the San Luis Unit (SLU) was authorized in 1960, vast portions of the Unit were understood by Congress, the Bureau of Reclamation and the State of California not to be "practicable" for irrigation without drainage. *See* Reclamation Act of 1902 § 4 (43 USC 419) "*Upon the determination by the Secretary of the Interior that any irrigation project is practicable, he may cause to be let contracts for the construction of the same...*" The statutory premise and requirement of practicable irrigability remains under Reclamation law. Based on Reclamation's own studies: (1) Over 45,000 acres under the proposed Pacheco, Panoche and San Luis WDs contract are not practicable of irrigation due to drainage problems;⁴⁰ and (2) it is not a beneficial use to apply water to these lands that are not practicable of irrigation.

The contract quantities for these interim contract renewals are justified by outdated, inaccurate data, and bias that renders the DEA insufficient in addressing shortcomings identified by the 9th Circuit Court.⁴¹ Additionally, we note that no current WNAs for Panoche or San Luis WDs were included with the current DEA (the WNAs for the San Luis Unit cities are included in Appendix B, not for Panoche and San Luis WDs). We also note that a non-irrigation covenant for 178.3 acres within San Luis WD was recorded with the County of Merced for the Vega Solar Project in 2011,⁴² yet these acres are still included within the CVP contract service area boundary for San

³⁹ See: *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228 (9th Cir. 1988), quoting 42U.S.C. § 4332(2)(E).

⁴⁰ As described on page 38 of the DEA for Panoche and San Luis WD CVP interim renewal contracts: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=47665

⁴¹ *Ibid.* See Appendix A and B of the FEA for Panoche and San Luis WDs interim contract renewals, CVP Water Needs Assessments (WNA) Purpose and Methodology, and Contractor WNA, respectively.

⁴² See: http://web2.co.merced.ca.us/pdfs/commissionarchive/2013/11-20/final_eir_vega_solar.pdf

Luis WD (Exhibit A map to the San Luis WD contract⁴³). Further, the 9th Circuit Court ruled in their July 25, 2016 Amended Memorandum that “*Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion, and the agency did not adequately explain why it eliminated this alternative from detailed study... On remand, the district court shall direct Reclamation consider such an alternative in any future EA for an interim contract renewal.*”⁴⁴

Drainage was known to be an issue and it was required to be provided under the San Luis Act of 1960 (PL 86-488). The project proceeded without it. So, the catastrophe of San Luis Unit's irrigation causing pollution and degradation of water supplies was both predictable and predicted. The contract conversion does not require Reclamation to merely roll over the existing interim contracts without considering the irrigability requirements under Reclamation law and by definition the cessation of exported water to these non-irrigable lands.

Any consideration of a "no-action" alternative should not set up the false choice of drainage vs. no drainage. This is a false choice. The alternative which needs to be considered is the cessation of water exports under the contract to these lands that are causing the pollution. Such a false choice--drainage vs. no drainage-- is a deliberate obfuscation by the Secretary to avoid considering the alternative of discontinuing water deliveries to these unsuitable lands. The “No-Action” in the SLDFR alternative created by Reclamation set up a false choice between no drainage and drainage. The no-action alternative is feasible and legal under the 9th Circuit court decision if the Secretary changed operations and discontinued deliveries to drainage-impaired lands.

Finally, under Reclamation law, feasibility is required of project operations. Typically, project feasibility is determined by an economic analysis, the goal of which is a 1:1 benefit-cost ratio. If one includes the obligation for drainage management, for which no solution except land retirement has been effective, it seems that irrigation of drainage-impaired lands in these San Luis Unit districts is not *economically* feasible from a national perspective, even if it is *financially* beneficial to irrigators in the Unit. The ongoing environmental damage caused by its operation is a cost that needs to be fully integrated into any justification for continued deliveries.

There is a need for a full and fair review in the NEPA analysis that would determine what lands within Panoche and San Luis WDs service areas are not practicably irrigable and then that portion of the project should be *decommissioned*. Review should be made of the authority of the Secretary to make the non-practicability determination and thus, stop water deliveries. How can there be an obligation to provide—and liability for not providing—drainage when the government has decided, using another cornerstone of reclamation law, that irrigation of San Luis Unit is not a “beneficial” use of water. *See* section 8 of the 1902 Act “beneficial use shall be the basis, measure, and limit of the right.”

In addition, the cumulative impacts of other water export projects, such as a tunnel project providing even greater exports, needs to be evaluated against (1) the full cost, including

⁴³ See: <https://www.usbr.gov/mp/wiin-act/docs/san-luis-water-district-exhibits-508-compliant.pdf>

⁴⁴ See: <https://cdn.ca9.uscourts.gov/datastore/memoranda/2016/07/25/14-15514.pdf>

drainage and environmental remediation costs of irrigating the San Luis Unit; and (2) who is responsible for those costs.

The benefit/cost ratio of the SLU is no longer favorable, if ever it could have been. The SLU irrigation development has fundamental flaws in its soil contaminants, and drainage that are not economical to remediate. Irrigation of all lands within the SLU is not feasible. The SLU is not a practicable irrigation project.

Section 4 of the 1902 act states: "Upon the determination by the Secretary of the Interior that any irrigation project is *practicable*, he may cause to be let contracts for the construction of the same . . ." (emphasis added). We know that subsequent to 1902, by the time of the SLU authorization in 1960, reclamation law had changed to require congressional authorization of projects. But the basic criterion of practicability remained intact.

When one looks PL 86-488, one can see how problematic the project development was, with drainage being the biggest problem. Tapping distant water supplies (e.g. Trinity River) along with expensive pumping plants and the Delta-Mendota Canal/California Aqueduct Intertie added to the problem. Too many subsidies are needed to address problems that it turns out cannot be solved. Moreover, there has been an enormous environmental price to pay because the SLU has not worked and was not feasible in the first instance to construct. Thus, one is drawn to the unavoidable conclusion that using CVP water on these SLU lands under these conditions is not practicable under federal law or "beneficial" under state law.

The USEPA in their comments on the Draft EIS and Supplemental Information for Renewal of Long Term Contracts for SLU Contractors (CEQ# 050411 and 060056, dated April 17, 2006, @ pg 2 of Attachment A) recommended that the SLU FEIS should consider mitigation measures, such as "*...contract provisions, or changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*" EPA further cited 40 CFR 1502.14 (b) and CEQ's NEPA 40 Most Asked Questions, which emphasize the need to evaluate all reasonable alternatives, even if they conflict with local or federal law (2b).⁴⁵

Curtailling deliveries of CVP water to drainage-impaired lands could have significant benefits to the environment, including: reducing diversions from the Trinity River and pumping in the Delta, reduction of drainage production and selenium contamination of the environment, freeing up water to meet CVPIA fish and wildlife obligations including water for fisheries restoration and improvement as established in CVPIA Sections 3406 b(2) and b(3) and for refuge water management needs as established in 3406(d).⁴⁶

We conclude that the State Water Board must re-open the water right and Reclamation must cease deliveries of water to these toxic lands. It remains unclear whether the State Board has conformed its *place of use* designation for CVP water exports to facts on the ground. A contract requirement should include: (1) A prohibition of any water deliveries to drainage-impaired lands, (2) the CVPIA restoration fund payment obligation must remain intact, and (3) any proprietary interest in the water as a result of a change in the contract whereby Panoche or San Luis WDs can use or sell the

⁴⁵ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁴⁶ See: <https://www.usbr.gov/mp/cvpia/docs/public-law-102-575.pdf>

water as the market warrants, must be subject to CVPIA limitations for other project purposes such as fishery restoration, preservation and propagation. Similarly, fish and wildlife refuge needs also must be considered prior to such change in use or sale.

13. Cumulative Effects Analysis is Required in an EIS.

As denoted by NEPA Regulations [40 C.F.R. §1508.8], the action agency must “analyze the full range of direct, indirect, and cumulative effects of the preferred alternative...” Section 1508.7 of NEPA defines cumulative impact as, “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions...Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”⁴⁷ For these interim contracts and all of the San Luis Unit WIIN Act contract conversions, Reclamation should do complete an EIS that includes the effects of other past, present, and reasonably foreseeable future actions that could result in cumulative impacts on the biological resources of the study area.

The DEA includes no analysis of cumulative impacts. On page 40 of the DEA Reclamation states, “The CVPIA PEIS included full contract deliveries in the assumptions regarding future use. By including full deliveries, the impact assessments were able to adequately address the hydrologic, operational, and system-wide cumulative conditions expected under future conditions.” This claim completely ignores the deteriorating condition of the Delta, wherein species are rapidly moving ever-closer to extinction. Reclamation is obliged to analyze how the environmental impacts of current operations are magnified by these deteriorating conditions. As the Delta’s water quality continues to decline, and its fish and wildlife are pushed closer to extirpation, the impacts of a given quantity of diversions are multiplied. The DEA completely fails to address these impacts and thus violates NEPA.

The DEA references the Programmatic EIS for CVPIA which identified restoration programs necessary to remediate adverse impacts of these contract renewals. Yet, some important ecosystem restoration provisions of CVPIA, such as acquisition of full Level 4 refuge water supplies, have lacked funding for adequate implementation. Purchase of environmental water under the CVPIA b(3) program has also fallen substantially short of targeted needs due to inadequate funding mechanisms. This unmet need may increase in the future as market prices for water continue to rise with demand. Further, past and present efforts to meet water quality standards in the San Joaquin Basin have been significantly hampered by the lack of adequate fresh water supplies. The USEPA recommended, in their comments on the DEIS and Supplemental Information for San Luis Unit Long Term Contracts (@ pg 6 of Attachment A) that, “The cumulative impacts analysis in the FEIS should be based on the past and present trends of supplies available for redirection to meet restoration and refuge needs in the area, including Trinity Restoration needs. Where information is available, the analysis should reflect the actual implementation status of CVPIA restoration actions.”⁴⁸

Examples of actions that should be reviewed in an EIS Cumulative Effects Analysis include:

- CVP water assignments

⁴⁷ See: https://ceq.doe.gov/docs/get-involved/Citizens_Guide_Dec07.pdf

⁴⁸ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

- Groundwater pump-ins into the Delta Mendota and San Luis Canals
- Water transfers and exchanges
- Groundwater banking projects
- Cuts to the CVPIA Restoration Funding

As our organizations have documented in prior comment letters, San Luis Unit contractors, have been involved with a number of CVP water assignments, groundwater pump-ins, transfers and exchanges. These actions have adverse local effects as many involve substitution of higher quality surface water supplies with lower quality groundwater or commingling of poor-quality groundwater with surface water supplies. These projects can cumulatively effect trust resources.

We also note that during a San Luis WD Board Meeting on August 25, 2020 it was discussed that sources of non-CVP water for the WD are not subject to the rescheduling cap imposed on CVP water. In this way, WDs can maximize carryover storage while limiting their exposure to Reclamation’s rescheduling cap. This results in greater exports from the Delta Estuary that need to be disclosed.

These San Luis Unit WDs continue to pump groundwater causing subsidence impacts to canals and permanent impacts to groundwater quality and levels. Without detailed analysis the public and decision makers are left in the dark regarding the impacts of these massive pumping programs and compliance with Sustainable Groundwater Management Act (SGMA). These impacts are further compounded by additional pumping in the present, and reasonably foreseeable future groundwater pumping, exchanges and transfers that involve these WDs including:

- Ten-Year Exchange Agreements and/or Warren Act Contract for Conveyance of Groundwater in the Delta-Mendota Canal - Contract Years 2013 through 2023,⁴⁹
- 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area,⁵⁰
- Mendota Pool Group (MPG) 20-Year Exchange Program⁵¹
- Firebaugh Canal Water District 5-Year Transfer Program, 2019-2023⁵²
- Delta-Mendota Canal Groundwater Pump-In Program Revised Design Constraints⁵³

⁴⁹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=11470

⁵⁰ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41544

⁵¹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=36282

⁵² See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=36203

⁵³See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=32781

- San Joaquin River Exchange Contractors Water Authority, 25-Year Groundwater Pumping and Water Transfer Project⁵⁴
- Long Term Water Transfer Program⁵⁵
- Water transfers from the San Joaquin Exchange Contractors⁵⁶
- Los Banos Creek Detention Reservoir Re-Regulation⁵⁷
- Permanent Partial Assignment of Portion of San Luis Water District CVP Contract to Santa Nella County Water District⁵⁸
- San Luis Water District Water Transfer and Related Exchanges⁵⁹
- Meyers Groundwater Banking Exchange Agreement⁶⁰
- B.F. Sisk Dam Raise and Reservoir Expansion Project⁶¹
- Del Puerto Canyon Reservoir Project⁶²
- Water Exchange Agreement with San Luis and Grassland Water Districts for Refuge Level 4 Water Supplies⁶³
- Water Transfer Program for the San Joaquin River Exchange Contractors Water Authority, 2014-2038 EIS/EIR⁶⁴
- Kaljian Drainwater Reuse Project⁶⁵
- Althea Avenue Bridge Replacement⁷⁰
- Delta Mendota Canal Subsidence and Conveyance Capacity Study⁷⁰

⁵⁴ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=2771

⁵⁵ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=18361

⁵⁶ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=9086

⁵⁷ See: <https://ceqanet.opr.ca.gov/2020050047/2>

⁵⁸ See: <https://ceqanet.opr.ca.gov/2018038578>

⁵⁹ See: <https://ceqanet.opr.ca.gov/2012028167>

⁶⁰ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=15021

⁶¹ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=46464

⁶² See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=43344

⁶³ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=32822 and https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=26827

⁶⁴ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=9086

⁶⁵ See Appendix D in: https://sldmwa.org/IRWMP/WSJ%20IRWMP%20Appendices_ADA-OK.pdf

III. The EA's reliance on Outside Documents is Improper

The EA relies upon outside documents to excuse its lack of analysis (e.g., DEA @ pg 26, CVPIA PEIS; @ pg 13 (Grassland Bypass Project Biological (GBP) Opinion, SLDFR Biological Opinion, and SLDFR Demonstration Treatment Facility ESA consultation; and @ pg 24 CVP/SWP long term operation ESA consultations). However, these documents do not remedy the EA's deficiencies, for two reasons.

First, none of these documents analyzed the site-specific impacts of contract renewal. The DEA @ pg 2 admits that the CVPIA PEIS "*did not analyze site specific impacts of contract renewal.*" Further, FWS made clear in its Biological Opinion about the CVPIA PEIS @ pg 2-50 that "*Subsequent tiered consultations, addressing future actions or programs carried out by Reclamation (e.g. contract renewal), shall consider what incremental effect, if any, such action or program causes in addition to the effects included in the existing environmental baseline...*"

Moreover, the PEIS never considered an alternative of reducing contract quantities, so it never considered or disclosed the environmental benefits of reducing the amount of water delivered to Panoche and San Luis Water Districts. FWS CVPIA BiOp @ pg 2-32, "*The PEIS assumed that contracts would be renewed for the same quantity of water as the existing contracts.*" And none of the other ESA consultations referenced in the DEA analyzed site-specific impacts of contract renewal (e.g., GBP BiOp, SLDFR consultations, or LTO EIS and consultations).

IV. Endangered Species Consultations completed on SLDFR and Panoche and San Luis WDs contracts are outdated or contain invalid assumptions.

1. Consultations on Drainage

Consultations by the USFWS on San Luis Drainage (SLDFR) and Grasslands Bypass Project (GBP) included as part of the project a cessation of discharge to the San Joaquin River by 2010 in SLDFR⁶⁶ and 2019 in GBP.⁶⁷ In December 2019 Reclamation proposed to extend the Use Agreement for the San Luis Drain (allowing GBP discharges to the San Joaquin River) for an additional 10 years.⁶⁸

The SLDFR 2006 biological opinion (BO) and Fish and Wildlife Coordination Act Report (FWCA) were predicated on a drainage treatment performance objective of <10 µg/L selenium in treatment effluents, primarily as selenate. SLDFR FEIS studies of the proposed drainage

⁶⁶ See appendix M of SLDFR FEIS for Biological Opinion and Fish and Wildlife Coordination Act Report available at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236, https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2237, https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2238, https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2239

⁶⁷ The 2009 GBP FWS Biological Opinion is available at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4826

⁶⁸ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41546

management scheme reported that treatment (RO and selenium biotreatment) had not been performing to performance objectives that the Service used for the basis of the FWCA Report and BO. The SLDFR pilot evaporation pond data in the SLDFR FEIS demonstrated double the bioconcentration that was predicted by the bioconcentration model (see page 18, Appendix B). The highest reported invertebrate selenium concentration from the SLDFR pilot evaporation ponds was 225.7 µg/L dry weight from a sample of aquatic nektonic invertebrates (primarily water boatmen) collected from pond 1 (see Appendix B, Attachment B-2, Table 10, SLDFR FEIS).⁶⁹ By comparison, concentrations of selenium in water boatman collected from Kesterson Reservoir in the mid-1980's were in the range of 5.9-130 µg/L (see Moore et al., 1990 page 4-43). Most selenium concentrations for invertebrates from the SLDFR pilot evaporation ponds were well above concentrations associated with adverse biological effects to wildlife (i.e., >7 µg/L dry weight in invertebrates based on dietary effects on reproduction in chickens, quail and ducks, see Table 6-4, Recommended Ecological Risk Guidelines Based Upon Selenium Concentrations, on page 6-27 of the FEIS/R Grassland Bypass Project, 2010–2019.⁷⁰

The critical issue with respect to environmental risk is associated with bioaccumulation potential of waterborne selenium through the food-web and into higher trophic level consumers. A two-fold increase in bioconcentration factors may have a pronounced impact on realized risks to wildlife populations because toxicity is not a linear phenomenon (i.e., the dose-response curve is sigmoidal). In the case of selenium, a trace element with a very narrow safety margin (the range between nutritionally beneficial and toxic concentrations), the dose-response curve is quite steep (see, for example, SLDFR FEIS Appendix M, USFWS Adult Avian Mortality Protocol).⁷¹ Therefore, the ESA consultation and Coordination Act Report were based on invalid performance objectives and are invalid. Even Interior in their latest status report on the drainage litigation (@ pg 4) admits a need to re-scope [SLDFR] project needs: *“Reclamation, in collaboration with Westlands, San Luis WD, Panoche Water District, and Pacheco Water District, is collecting and analyzing data to verify that the original assumptions and conceptual plans presented in the 2008 Feasibility Study are still accurate.”*⁷²

2. ESA Consultations on Panoche, and San Luis WDs Interim Contracts are Insufficient & Outdated.

The EA on the 2019 CVP Interim Contract Renewals for Panoche and San Luis WDs,⁷³ includes an Environmental Protection Measure for biological resources @ page 11, Table 2: *“No CVP water would be applied to native lands or land untilled for three consecutive years or more without additional environmental analysis and approval.”* Yet, there is no data presented validating this measure. Without actual data or analysis to verify compliance this environmental commitment is of

⁶⁹ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

⁷⁰ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4412

⁷¹ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2237

⁷² Oct 1, 2019 Fed Defendants Status Report, Case 1:88-cv-00634-LJO-SKO

⁷³ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=37785

little value. Further, there is no mechanism identified in the Draft EA to address habitat conversions that may have occurred without additional “environmental analysis and approval.” The consequences of non-compliance need to be defined and implementable.

3. Status of Consolidated Place of Use Mitigation should be Disclosed.

In November 1999, the SWRCB issued a final EIR that updated Reclamation’s 16 CVP water rights permits. Included in this EIR were changes to the state authorized place of use for these permits (CPOU). The EIR authorized the addition of “encroachment lands” to the CPOU (defined as lands within the boundaries of CVP water contractor service areas outside of the POU that received CVP water historically). The EIR did not authorize the addition of “expansion lands” to the CPOU (defined as lands within the boundaries of CVP water contractor service areas but outside of the POU that have never received CVP water) until adequate site-specific environmental documentation is completed (CPOU EIR @ pg ES-2).⁷⁴

The CPOU EIR concluded that historic delivery of CVP water to encroachment lands has resulted in significant adverse effects to vegetation and wildlife. The EIR and SWRCB Decision 1641 (D-1641) identified that of the 85,620 acres of encroachment lands that currently receive CVP water, the development and land use conversion of 45,390 acres was facilitated by delivery of CVP water supplies for agricultural purposes. As part of the D-1641 Reclamation was required to provide compensation for lost habitat due to encroachment. Specifically, Reclamation was required to delineate existing habitats of the affected special status species and in consultation with CDFW and USFWS to develop a mitigation plan satisfactory to the SWRCB. This decision required that the mitigation plan be developed and completed within ten years of the date of D-1641 (D-1641 was signed in March 2000, @ pg 165). This decision also requires a mitigation monitoring and reporting program to ensure continued protection and enhancement of special status species.⁷⁵

San Luis WD was identified in the CPOU EIR to have 10,668 acres of agriculture-induced encroachment lands. The SWRCB identified the following habitat types that would need to be mitigated for from San Luis WD encroachment: 789 acres of alkali scrub, 2,032 acres of Valley-foothill riparian/fresh emergent wetland, and 7,847 acres of annual grassland (CPOU EIR @ pg 2-65, Table 2-28). No information was provided on the status of mitigation for CPOU in the DEA for Panoche and San Luis WDs CVP interim contract renewals.

⁷⁴ Available at this link:

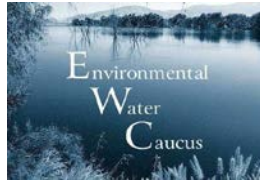
https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/eirs/eir1999_ccpou/docs/ccpoufeir.pdf

⁷⁵ D-1641 @ pg 140, available at this link:

https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf

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CA Save Our Streams Council



December 14, 2019

Mr. Colin Davis
U.S. Bureau of Reclamation
South-Central California Area Office
1243 N Street Fresno CA, 93721

Re: Interim Renewal Contract for Central Valley Project Water Contracts for Westlands Water District (Draft EA-19-043¹)--An abuse of discretion and failure to comply with federal law.

Dear Mr. Davis:

For more than 20 years, Reclamation's Mid-Pacific Region has circumvented federal law by serial issuance of "Interim Renewal" water service contracts, each lasting approximately two years. The undersigned groups have previously called attention to the serious legal deficiencies of this pattern and practice. Legal challenge to this serial renewal of water service contracts resulted in a recent 9th Circuit

¹ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41303, November 2019 Draft EA for WWD interim water service contract & the last Westlands' draft interim contracts posted on the USBR.gov site is for 2016: https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2016-int-cts/index.html

Court ruling,² whereby Reclamation's interim contract renewal and circumvention of the NEPA process was determined an abuse of discretion. The court ordered a *rejection* of Reclamation's premise that the interim contracts merely continued the status quo. Unfortunately, Reclamation repeats these same mistakes under the proposed contract renewals. [*PCFFA*, 655 Fed. Appx. at 598-599.] *PCFFA et. al* on December 22, 2017³ again attempted to gain Reclamation compliance with federal law, including analysis of significant public health and environmental impacts from more than 20 years of serial renewals.⁴

Despite the 2016, 9th Circuit Court ruling, Reclamation continues to abuse its discretion in issuing interim water service contracts for Westlands Water District (Westlands) without proper environmental review. Issuance of the newly proposed two-year interim contracts to Westlands and other San Luis Unit federal contractors would violate Congressional direction and federal law. Much of the agricultural land irrigated by Westlands and other San Luis Unit federal contractors is contaminated with selenium and other pollutants that are carried into ground and surface waters and pollute the San Joaquin river and Delta Estuary when the lands are irrigated with these federal water deliveries. There is no legal requirement that this interim water service contract be renewed, yet Reclamation seems determined to do whatever it takes, legal or not, to renew these interim contracts. There is no legal requirement to deliver water to these toxic soils. In fact the Congress direct that drainage is a precondition to water delivery by Reclamation. Thus, water should not be delivered to these lands.⁵ And due to the pollution caused and deformities in fish and wildlife, water should not be delivered to these lands that are not practicable of irrigation.

Proceeding to renew these interim water supply contracts without addressing needed pollution controls and failure to address the pollution cause by the water deliveries, in addition to not complying with NEPA, violates the Administrative Procedures Act, Central Valley Project Improvement Act [PL 102-575], the Reclamation Reform Act of 1982 [PL 97-293], the Coordinated Operations Act of 1986 [PL 99-546], and other federal statutes. Further the export of water to an enlarged unauthorized service area

² Ninth Circuit's Amended Memorandum in *Pacific Coast Federation of Fishermen's Associations v. Bureau of Reclamation* ("PCFFA"), 655 Fed. Appx. 595 (9th Cir. 2016):
<https://cdn.ca9.uscourts.gov/datastore/memoranda/2016/07/25/14-15514.pdf>

³ [Case 1:16-cv-00307-LJO-MJS Document 64 Filed 09/28/17: & Case 1:16-cv-00307-LJO-MJS Document 71 Filed 12/22/17-- North Coast Rivers Alliance, California Sportfishing Protection Association, Pacific Coast Federation of Fishermen's Associations, et. al.](#)

⁴ These shortcomings in the proposed Interim Contract Renewal project (Project) for Westlands Water District were filed with the court: (1) approving the Project may affect public health and safety, (2) the Project's water diversions from the Delta may affect the unique environment of the Delta – the largest estuary on the West Coast of North America; (3) the Project's impacts are highly controversial and uncertain; (4) defendants' serial approval of short-term interim contracts "establish[es] a precedent for future actions with significant effects"; (5) the Project may have potentially significant cumulative impacts; and (6) the Project may have a significant impact on endangered species. FAC ¶ 58; 40 C.F.R § 1508.27(b); *see also* 40 C.F.R. § 1508.7 (defining cumulative impacts).

⁵ The San Luis Act directs Reclamation to provide drainage if they deliver water. There is, however, no mandate to deliver water to these lands. A decision by BOR not to irrigate based on experience following construction and operation and the pollution caused is not precluded by the San Luis Unit Act or the courts' interpretation. It is common sense and is consistent with the fundamental principle of Reclamation law that land needs to be practicable of irrigation.

contrary to the San Luis Act PL 86-488 has significant water quality and water supply impacts that effect other water rights, contracts, water quality regulations and endanger fish and wildlife.

Our detailed comments are organized according to six primary topics related to legal requirements and inadequate of assessment of the environmental impacts of the proposed interim water service contract:

- I. Reclamation Does Not Have the Legal Authority to Contract for the Proposed Interim Water Service Because it Exceeds Acreage Limits Authorized by Congress.
- II. Issuing the Proposed Interim Water Service Contract would Violate Reclamation Law.
- III. The Conclusions of the Draft EA for the Interim Contract Renewal Conflict with both Facts and Law and an EIS is Required.
- IV. The Effects of Drainage from Westlands Caused by Irrigation Enabled by the Interim Contract Renewal are Significant and Must be Addressed in a Comprehensive EIS.
- V. Land Use Effects of the Interim Water Service Contract have not been Adequately Addressed in the Draft EA.
- VI. Cumulative Impacts have not been Adequately Addressed in Draft EA.
- VII. Pending Long-Term Permanent Water Contracts Impacts Are Not Disclosed.

I. Reclamation Does Not Have the Legal Authority to Contract for the Proposed Interim Water Service Because it Exceeds Acreage Limitations Authorized by Congress.

The authorization for the San Luis Unit, Central Valley Project⁶ limits the gross service area to 500,000 acres of land and refers to the feasibility report⁷, which includes a map⁸ that clearly describes the location, size, and elevation of that service area. Subtracting out acreage for San Luis Water District and Panoche Water District, leaves roughly 400,000 acres of eligible land within Westlands, according to the federal authorization and confirmed in the Special Task Force Report on the San Luis Unit [PL 94-46]. After subtracting the roughly 100,000 acres that has already been retired with taxpayer dollars and largely put to other industrial uses, that leaves approximately 300,000 acres eligible for CVP water

⁶ In 1960, Congress passed the San Luis Act, Pub. Law No. 86-488, 74 Stat. 156 (1960). Section 1(a) of the San Luis Act authorized Reclamation to “*construct, operate, and maintain the San Luis unit as an integral part of the Central Valley Project,*” in accordance with the 1956 Feasibility Study for the purpose of irrigating only 500,000 acres in the entire San Luis Unit in three counties—Merced, Fresno, and Kings. Emphasis added. We note PL 86-488 has not been amended.

⁷ U.S. Dept Of The Interior, Feasibility Report (approved by President Roosevelt, December 2, 1935), *reprinted in* House Committee On Interior & Insular Affairs, Central Valley Project Documents-Part One: Authorizing Documents, H.R. Doc. No. 416, 84th Cong., 2d Sess. 563 (1956). The Feasibility Report, released in Sacramento in May 1955 and reported to Congress December 17, 1956.

⁸ *Ibid.* See the 1956 Feasibility Report page 36.

exports.⁹ Yet, the proposed interim water service contract renewal proposes to irrigate over 600,000 acres of land within Westlands. Under the contract, that acreage would be allocated between 2.2 and 1.7 ac/ft of water per acre. The inclusion of the additional acres to be irrigated represents 400,000 AF of additional unauthorized allocation of water to lands not authorized by Congress to receive federal CVP water under the San Luis Act. Without Congressional authorization, this contract arbitrarily takes water from other CVP contractors, communities, and the environment.

Public Law 86-488, authorizing the San Luis Unit, does not contain any provision authorizing an enlargement of the San Luis Unit Service area. The law is based on a feasibility study that was released in May 1955 and reported to Congress on December 17, 1956. It states that the service area is 496,000 acres and it establishes a long-term crop pattern for 440,000 acres.¹⁰ The proposed interim water service contract also contradicts the December 30, 1961 Federal-State Agreement for the construction and operation of the joint-use facilities of the San Luis Unit.¹¹

In simple terms, the proposed interim contract would enlarge of the service area beyond the limit authorized by Congress. In addition to it being an unauthorized enlargement of the CVP contract service area, and thus an unauthorized increase in water allocation, the environmental and water quality impacts are not addressed in the NEPA documents or in the absent ESA documents.

The inflated acreage and water deliveries are shown by the map provided in the Draft EA for the Interim Contract. This interim water service contract map documents an expansion of acreage beyond what is Congressionally authorized.¹² No statutory authority is provided for this arbitrary action. Further, the enlargement of the San Luis Unit service area and distribution canals exceed the construction and operations costs of the distribution and drainage facilities. The increase in water exports causes increased impacts from the areas of export including the Trinity and Sacramento Rivers and the Sacramento-San Joaquin Delta Estuary and Bay. Further the pollution created by irrigating these lands and constructing distribution systems has not been analyzed nor disclosed.

⁹ Special Task Force Report on San Luis Unit 1978 available online [see pages 18 and 20 for the finding of 500,000 gross acres authorized for all three districts finding an unauthorized expansion of more than 100,000 acres or 30%.] <http://babel.hathitrust.org/cgi/pt?id=umn.31951002836772c;view=1up;seq=35>. Also see Lloyd Carter's law review <https://digitalcommons.law.ggu.edu/gguelj/vol3/iss1/3/>. And Friends of the Trinity water rights testimony before the State Water Resources Control Board. https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/FOTR/for_94.pdf

¹⁰ Ibid. See the 1956 Feasibility Report pg 91.

¹¹ See pg 4 of the Federal State Contract which reads: "The 'Federal San Luis Unit service area' shall mean the area of approximately 500,000 acres in Merced, Fresno, and Kings Counties as described in the report of the Department of Interior entitled, 'San Luis Unit Central Valley Project', dated December 17, 1956.. ...This agreement established that the federal service under this contract.

¹² See Plate 1--Map of the Service Area & Plate 5 Map of Land Classification found in the 1956 Feasibility Report can be found online: <http://cdm15911.contentdm.oclc.org/cdm/ref/collection/p15911coll10/id/2106>

II. Issuing the Proposed Interim Water Service Contracts Would Violate Reclamation Law

A. Congressional Intent is Clear --Water Service Contracts are to guard against land monopoly and excess profits.

1. One of the 1902 Reclamation Act's purposes was to promote living on the land, and the distribution of the Act's benefits was limited accordingly in the original statute.¹³ Later statutory amendments were added to prevent speculative profits from the sale of "excess" lands and allocated water rights.¹⁴ The Omnibus Adjustment Act of 1926 expressly restricted the sale price for such excess land to a dryland valuation (e.g., as though the project were not planned or built) and also regulates later sales of formerly excess land. The Reclamation Reform Act of 1982 largely reconfirms this policy by requiring that, henceforth, project water be delivered to excess land only at full cost and limited the size to 960 acres.
2. Despite these federal protections against excessive profits and speculation, Westlands has proceeded to sell or lease tens of thousands of acres for solar farms, while still claiming 2.2 acre feet per acre of water for these lands under the existing 2 year interim water service contract.¹⁵ Reportedly, Westlands has received tens of millions of dollars for these municipal and industrial leases, while still receiving subsidized water for these lands courtesy of the American taxpayer.¹⁶ The EA mentions solar farms and suggests a water need, but provides no information, data, or contract approvals sanctioning this land use change. The EA does not show how the federal government has complied with Reclamation law—and specifically the 1960 San Luis Act—while allowing these lands to be inappropriately included in the acreage for determining water supply allocation.

¹³ The Act limited land acquisition. No one could acquire land without living on it for five years. Congress sought to limit speculation or monopoly, because, in addition to the five years' residence, no homesteader can take more than 160 acres, and in many cases, he can take no more than 40 to 80 acres. These provisions have since changed to 960 acres and residency requirements were not enforced. See <https://digitalcommons.law.ggu.edu/guelj/vol3/iss1/3/>

¹⁴ The Reclamation Extension Act of 1914 required the owners of large, private holdings adjacent to projects to dispose of "excess" land before project construction. The Omnibus Adjustment Act of 1926 expressly restricted the sale price for such excess land to a dryland level (e.g., as though the project were not planned or built) and also regulated later sales of formerly excess land. See also the Reclamation Act of 1902 32 Stat 388 43 USC.

¹⁵ See this 2016 overview of transmission lines, towers and land conversion maps for Westlands WD: http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI02/TN210903_20160330T140735_Daniel_Kim_Comments_WSP_comments_to_RETI_20_plenary_group_meeti.pdf & <http://web.energyvacuity.com/REProject.aspx?id=16887>
Westlands Solar Park is a public-private effort to master plan renewable development and infrastructure for large scale solar projects in California's central valley. The Westlands Solar Park study area includes approximately 24,000 acres ...within the Westlands Water District, located in western Fresno and Kings Counties..... Initial development planning estimates that phased projects totaling upwards of 2.4 GWs of solar power could be developed before 2025. Early Phase 1 projects are expected to begin operation as early as 2013-2015." See also Conditional Use Permit (UCUP) Application Nos. 3451 through 3458 for the Tranquillity Solar Generating Facility Project, Westlands Water District 3,732 acres, 39 parcels: October 9, 2014: Tranquillity LLC, RE Tranquillity 2 LLC, Tranquillity 3 LLC, RE Tranquillity 4 LLC, Tranquillity 5 LLC, RE Tranquillity 6 LLC, Tranquillity 7 LLC, RE Tranquillity 8 LLC

¹⁶ See <http://articles.latimes.com/2002/dec/20/local/me-settlement20> LA Times Mark Arax *Four Families to Split Big Share of Farm Deal.*

B. Municipal Water Service contracts must be approved by Reclamation, interest must be charged on capital and construction costs, and they must adhere to specified repayment provisions--the proposed Westlands interim contract renewal does not meet these requirements:

1. No approvals or analysis of water shifted to municipal and industrial uses by Westlands are provided, nor is this water identified separately in the Reclamation water needs assessment. The Reclamation Project Act requires that every contract for water delivery include provisions for repayment of specified costs of construction, operation, and maintenance.¹⁷ Any conveyance of project water to an M&I customer must be approved by Reclamation. Westlands disclosed¹⁸ such was not the case in that a portion of the Broadview Water District water that was shifted to M&I. This change in use required changes to repayment provisions and contract modifications that could not be located in any of the proposed Reclamation interim water supply service contracts for Westlands.
2. No such contract or changes in capital obligation repayments (e.g. interest or other changes) were identified in either the contract or environmental assessment.
3. Westlands also disclosed that less expensive CVP water, previously destined for the Lemoore Naval Air Station, would be shifted to Westlands' agricultural users and more expensive water would be purchased for the Navy. Thus, charging the taxpayer for this expensive water.¹⁹ And yet, in 2015 Westlands sought additional supplies for the Lemoore NAS after shifting those supplies to other users, thereby claiming municipal priority and augmenting Westlands' water allocation during drought shortages. Westlands charged the Navy a land-based rate for the water and required the Navy to repay Westlands debt and a surcharge per every acre foot. No records or data were provided in the Draft EA regarding this "enhanced" municipal and industrial supply nor were the environmental impacts of these shifts from agricultural use to industrial use analyzed.

¹⁷ Under the Reclamation Project Act: No water may be delivered for irrigation of lands in connection with any new project, new division of a project, or supplemental works on a project until an organization, satisfactory in form and powers to the Secretary, has entered into a repayment contract with the United States, in form satisfactory to the Secretary ...43 U.S.C. § 485h(d) (1982).

¹⁸ See WWD 2008 Bond Debt Statement: 30,065,000 Westlands Water District adjustable Rate Refunding Revenue Certificates of Participation, Series 2008a _ Westlands Water District Notes To Financial Statements Years Ended FEBRUARY 28, 2007 AND 2006 @ page 31: "*In February and March 2005, the District acquired approximately 8,750 acres of land within the Broadview Water District, which is substantially all of Broadview's irrigable acreage. In conjunction with the acquisition, the District initiated the process to annex all of Broadview's lands and will seek a permanent assignment of Broadview's Central Valley Project Water Contract totaling 27,000 acre-feet to the District from the Bureau of Reclamation. Of this water supply, the District plans to annually make available 6,000 acre-feet of entitlement to the Naval Air Station – Lemoore pursuant to the Supplemental Water Allocation Agreement between the District and NASL.*"

Ibid. Westlands charges Lemoore NAS both a thirty-year surcharge to recover Westlands' debt with interest [more than \$30 million] in addition to a land base charge per acre. Despite federal rules and regulations, it is not clear whether Westlands is reaping the sole benefits of these "extra" charges, mortgage debt, interest and operation charges or whether Reclamation has a separate contract and charge for this M& I assignment collecting additional revenue per Reclamation rules and regulations. The impacts including irrigating selenium laden lands and Lemoore's resulting discharges into wastewater ponds was not analyzed in the Reclamation EA on interim contracts. See page 101 of 2008 A Financial Statements. For discussion of Lemoore NAS wastewater pond impacts and elevated selenium discharges see Moore et al 1990.

Further, the Water Needs Assessment provided in Appendix C of the Draft EA assumes that residential water demand would drop down to zero in 2051, reflecting “the Westlands Drainage Settlement” without any further explanation as to why the municipal water demands would change under the Settlement.²⁰

III. The Conclusions of the Draft EA for the Interim Contract Renewal Conflict with both Facts and Law and an EIS is Required.

Federal law and regulation 'require at least thirty (30) calendar days before making the decision on whether, and if so how, to proceed with a proposed action, the Responsible Official must make the EA and preliminary FONSI available for review and comment to the interested federal agencies, state and local governments, federally-recognized Indian tribes and the affected public. The Responsible Official must respond to any substantive comments received and finalize the EA and FONSI before making a decision on the proposed action.'²¹ Failure to provide these essential documents for public review prevents comment and does not comply with the disclosure and transparency required by the National Environmental Policy Act. We note that no draft FONSI was included for review during the public comment period for these interim contracts.²²

We include by reference the comments filed with Reclamation on behalf of PCFFA et. al. on January 5, 2018, by Steve Volker. Additionally, the Draft EA brushes aside, without facts or data, the Westlands' interim water supply contract impacts to the following:

A. The San Francisco Bay-Sacramento and San Joaquin River Delta Estuary.

There have been repeated violations of the Clean Water Act standards²³ and Endangered Species Act requirements under the Reasonable and Prudent Alternatives. CVP operations and the exports of water pursuant to this interim contract have consistently violated the Coordinated Operation Act of 1986 requiring adherence to Delta Water Quality Standards contained in D-1485 and subsequent water quality standards.

B. Endangered Species.

The Draft EA relies on narratives to discount effects to listed species. No data is provided to support the effects conclusions in the Draft EA. No consultation with either USFWS or the National Marine Fisheries Service (NMFS) was provided for public review. Without consultation and data determining impacts to endangered species from the propose contract sanctioned exports to an enlarged service area outside of Congressional authorization cannot be determined.

²⁰ https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41301

²¹ 40 CFR § 6.203 - Public participation.

²² Reclamation's website only provides notice of availability of a Draft EA for public comment on 11.14.2019: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41301

²³ Of particular note, the SWRCB, referencing WR Order 90-05, stated in WR 92-02 at page 9: *The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery.* SWRCB warned against USBR decisions to maximize water deliveries in the initial years of a drought and failing to maintain sufficient carryover storage to protect fisheries and public trust resources.

1. For terrestrial species, the Draft EA relies on an environmental protection measure (@ pg 11, Section 2.2.1) that would be implemented to ensure that, “*No CVP water would be applied to native lands or land untilled for three consecutive years or more without additional environmental analysis and approval.*” Yet no mechanism is established to track the compliance with this measure, and no land use data is provided to confirm that compliance with this measure is actually taking place. More details are provided in Land Use Effects section below.
2. For aquatic species in the Grasslands (downstream from the polluted runoff from Westlands' lands), such as the giant garter snake, the Draft EA (Table 4 @ pg 22) relies on a narrative which concludes that, “*Extensive land retirement along the northern boundary and drainage management under the Grasslands Bypass Project have prevented contamination of Grasslands wetlands water supply channels.*” Yet, no data is provided that confirm that contamination of Grasslands wetland water supply channels has been prevented. More details are provided in Drainage Effects section below.
3. For aquatic species in the San Joaquin River and San Francisco Bay-Delta, the Draft EA (Table 4 @ 19-20) concludes that, “*Effects of pumping in the San Joaquin-Sacramento Delta are a result of CVP operations and have been/are being addressed separately under CVP/SWP Coordinating Operations consultation.*” The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta including Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta are listed as impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).²⁴ Sources of selenium contamination include agricultural drainage from the Central Valley and effluent discharges from oil refineries (Linares et al 2015; Presser and Luoma 2010). Effects of drainage contamination in the San Joaquin River and Bay Delta have not been addressed in the CVP/SWP Operations Consultation. More details are provided in Drainage Effects Section IV below.

C. Indian Trust Assets.

The Yurok and Hoopa Tribe’s fishing and associated water rights in the Trinity River are Indian Trust Assets. Without data or analysis, Reclamation claims there will be no physical changes to existing facilities, no new facilities, and that continued delivery of CVP water to the contractors listed under the interim renewal contract will not affect any Indian Trust Assets. As the Hoopa Tribe commented as far back as 2010, the CVP water diversions to Westlands and other west side San Luis Unit, significantly impact their Indian Trust Assets:

*“...It is irrelevant to the environmental review that the Tribe’s reservation is not in the vicinity of the Proposed Action Area. The water to which the Tribe has a right and whose use is essential to its fishery resources is being delivered and will continue to be delivered pursuant to the proposed federal action from the vicinity of the reservation to the contractors’ area by CVP facilities that divert water from the Tribe’s watershed.”*²⁵

²⁴ https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

²⁵ See January 29, 2010 Letter to Rain Healer, USBR from Joseph Membrino Re: Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts. pg 3.

Protection of the Indian Trust Assets for the Hoopa, Yurok and Winnemem Wintu people require sufficient water remain within the Tribe's watershed so that their fishery resources will thrive not merely survive.²⁶

D. Water transfers, exchanges, and non-project water diverted from various watersheds, rivers, and the S.F. Bay-Delta Estuary.

These diversions and downstream impacts are major. In 2019 alone, Westlands CVP allocation was 70% of their full contract quantity, more than 835,000 AF was diverted to Westlands.²⁷ Impacts from these diversions were not analyzed in the EA. The majority of the water diverted came at the expense of flows, water quality, and temperatures in the Trinity River, Sacramento River, American River, the Yuba River, and the Delta Estuary. The impacts to imperiled fisheries facing extinction have been severe, but the EA does not analyze these impacts or include new information.²⁸

E. Retaining the full historic water quantities under the proposed contract without analyzing reduction of maximum contract quantities fails to disclose impacts.

²⁶ *Federal court: Tribal water rights outrank farmers' rights* Associated Press 11/25/2019 See <https://www.cherokeephoenix.org/Article/Index/113786>

²⁷ Full contract quantity from page 3 of DEA multiplied by 2019 allocation from <https://www.usbr.gov/mp/cvp-water/docs/cvp-water-allocations-quantities-table.pdf>

²⁸ See pages 7 & 8 of the EA. Both the Coordinated Operation Act and Central Valley Project Improvement Act place limitations on the operations of the Central Valley Project to ensure water quality standards are met and fish and wildlife resources are protected and restored to specified levels. On 3 June 2015, The California Sportfishing Protection Alliance (CSPA), California Water Impact Network (C-WIN), AquAlliance and Restore the Delta (RTD), collectively "Petitioners," filed a complaint for declaratory and injunctive relief, under the Administrative Procedures Act, and a Petition for Writ of Mandate, under California Code of Civil Procedure, in federal District Court for the Eastern District of California. Natural production of Sacramento winter-run and spring-run Chinook salmon have decline by 98.2 and 99.3%, respectively, and are only at 5.5 and 1.2 percent of doubling levels mandated by the Central Valley Project Improvement Act, California Water Code and California Fish & Game Code. Toxic algal blooms like *Microcystis* pose a serious risk to drinking water quality and human health in the Delta; these are the type that [shut down](#) the water supply for the city of Toledo, Ohio in 2014, and that have caused the death of at least [three dogs](#) that jumped into northern California's waterways this year. The State predicts that toxic algal blooms will get worse in a climate-changed future if we don't take action now to address the problem.

'USBR is presently violating water quality standards protecting fish & wildlife and agricultural beneficial uses. USBR has failed to comply with the SWRCB 2010 Cease & Desist Order. CSPA additionally alleges that, USBR failed to comply with their responsibilities and obligations under the ESA, Public Trust Doctrine and Article X of the California Constitution. Violations of salinity standards at Three-mile Slough and Jersey Point have occurred in 2015 and are continuing. USBR and DWR are now in violation of WR Order 2010-0002 and the southern Delta salinity objectives at Old River Near Tracy, Old River near Middle River and San Joaquin River at Brandt Bridge. Further, the Vernalis salinity objective was violated on 5 days in July 2015. Significant because a key to Delta smelt abundance, X2, is determined by the concentration of salinity and not by flow.'

https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/tucp/2015/cspa_jennings072215.pdf *The U.S. Supreme Court observed that a lowering of quantity or flow could destroy all of the beneficial uses of a river, and specifically that "... there is recognition in the Clean Water Act itself that reduced stream flow, i.e., diminishment of water quantity, can constitute water pollution."* *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, (1994), 511 U.S. 700, 17.

The Draft EA proposes to renew full contract quantities as established in Table 1 below for a period of 2 years. These contract quantities are justified by outdated, inaccurate data, and bias that renders the Water Needs Assessment (WNA) insufficient in addressing shortcomings identified by the 9th Circuit Court²⁹. Further, the 9th Circuit Court ruled in their July 25, 2016 Amended Memorandum that “*Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion, and the agency did not adequately explain why it eliminated this alternative from detailed study... On remand, the district court shall direct Reclamation consider such an alternative in any future EA for an interim contract renewal.*”³⁰

Table 1 Contractors, Existing Contract Amounts, and Expiration Dates

Contractor	Existing Contract Number	Contract Quantity (acre-feet per year)	Expiration of Existing Interim Renewal Contract
Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District Distribution District # 1 (3-way assignment from Mercy Springs Water District)*	14-06-200-3365A-IR16-B	6,260	2/29/2020
Westlands Water District	14-06-200-495A-IR6	1,150,000	2/29/2020
Westlands Water District Distribution District #1 (full assignment from Broadview Water District)	14-06-200-8092-IR16	27,000	2/29/2020
Westlands Water District Distribution District #1 (full assignment from Centinella Water District)	7-07-20-W0055-IR16-B	2,500	2/29/2020
Westlands Water District Distribution District #2 (partial assignment from Mercy Springs Water District)	14-06-200-3365A-IR16-C	4,198	2/29/2020
Westlands Water District Distribution District #1 (full assignment from Widren Water District)	14-06-200-8018-IR16-B	2,990	2/29/2020

*Note: Pajaro Valley no longer has an interest in the 3-way contract assignment and will no longer be a potential recipient of CVP water pursuant to the May 1999 agreement and subsequent contract assignment.

The claim above that 'Pajaro Valley no longer has a claim to CVP water' is not supported by data nor a Board resolution from the Pajaro Valley Water Management Agency. This change in use is also not analyzed in the EA.

The PCFFA case held that Reclamation's previous assessment relied on "stale water needs data." Reclamation in this interim contract once again acts unreasonably and fails to use current data:

- 1) Without data or analysis, the WNA assumes that the acreage needing to be retired from irrigation in Westlands (under the Drainage Settlement) would be 100,000 acres. Yet, the preferred alternative in the 2006 San Luis Drainage Feature Re-evaluation (SLDFR) Final EIS @ pg 2-94 (In-Valley/Water Needs Land Retirement Alternative) included approximately 298,000 acres and 10,000 acres in Broadview Water District that would need to be retired from irrigated agriculture.³¹ Even the 2007 Westlands Interim Contract³², which all the subsequent Interim Contracts refer to and by reference implement, cites the land

²⁹ See Appendix B and C of the Draft EA, Central Valley Project (CVP) Water Needs Assessments (WNA) Purpose and Methodology, and Westlands WD WNA.

³⁰ See: <https://cdn.ca9.uscourts.gov/datastore/memoranda/2016/07/25/14-15514.pdf>

³¹ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2227

³² https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2007_int_cts/2007_interim_westlands_dft.pdf

retirement acreage from the SLDFR Record of Decision of 194,000 acres, not the 100,000 acres assumed in the WNA. No water quality data, depth to shallow groundwater assessment, or monitoring of salt and selenium is provided to support this arbitrary reduction in land retirement in Westlands. The Draft EA and WNA mentions the Federal Settlement Agreement³³, but this is of marginal relevance because the Agreement has not been approved by Congress, much less complied with NEPA, the Endangered Species Act, the Federal Clean Water Act, nor State of California law as required under Section 8 of the Reclamation Reform Act of 1982.³⁴ The latest Federal Defendants Status Report on litigation relevant to San Luis Unit drainage (Case 1:88-cv-00634-LJO-SKO) dated October 1, 2019 provided an update on the Westlands Settlement: “A bill introduced in the House during the 115th Congress failed to secure a floor vote, and no action was taken in the Senate regarding the Westlands Settlement. ECF 1034 at 3. At this time, no bill has been introduced in the 116th Congress to authorize the Westlands Settlement. The Westlands Settlement, as amended, has by its own terms now become voidable because the necessary authorizing legislation was never enacted.”

- 2) The WNA announces, without data or analysis, that productive acreage in Westlands is 560,700 acres from 2011 to 2050 and in 2051 shrinks to 460,700 acres. As mentioned earlier for the entire San Luis Unit, Congress specifically authorized only 500,000 acres across all San Luis Unit districts and three counties. Even Westlands’ recent documents do not inflate eligible CVP acreage as much as Reclamation has in this EA. Westlands’ 2017 Engineer Study³⁵ relying on data from 1988 to 2016, identifies only 453,466 acres that are eligible for CVP water @ pg 5-2. The figures used in the Draft EA and the WNA appear arbitrary, inflated, and biased in order to justify avoiding the accurate WNA ordered by the court and designed to inflate water deliveries.
- 3) The WNA does not explain why crop water requirements are supposedly hundreds of thousands of acre-feet greater in 2050 and 2051 than in 2011 (DEA Appendix C, column 15), and these differences are not proportional to the relative number of acres that supposedly will be irrigated in these years (DEA Appendix C column 21).
- 4) The WNA does not explain why residential population and municipal water demand decreases to zero from a total demand of 3,408 AFY in 2011 to zero AFY in 2051 (DEA Appendix C, column 30).
- 5) The USEPA in their comments on the Draft EIS and Supplemental Information for Renewal of Long Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006, @ pg 2 of Attachment A) recommended that the SLU FEIS should consider mitigation measures, such as “...contract provisions, or changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.” EPA further cited 40 CFR 1502.14 (b) and CEQ’s NEPA 40 Most Asked Questions, which emphasize the need to evaluate all reasonable alternatives, even if they conflict with local or federal law (2b).³⁶
- 6) Reclamation chose to not include any alternatives in the Draft EA that curtailed full contract deliveries to Westlands as part of these Interim Contract Renewals. This decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water

³³ See USBR Drainage Settlement September 15, 2015 with Westlands Water District, April 2017 San Luis Agreement and proposed Northerly District Agreements <https://www.usbr.gov/mp/wds.html>.

³⁴ See Friends of the River letter to Justice, June 24, 2015, Drainage Settlement Fails to Comply with NEPA and Endangered Species Act--George Wright FOR Counsel to Stephen M. Macfarlene et. al. adopted here by reference.

³⁵ http://wwd.ca.gov/wp-content/uploads/2017/07/WWD_Engineers_Rpt_revised-7-21-17.compressed.pdf

³⁶ <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

quantities is an abuse of discretion, and the agency did not adequately explain why it eliminated this alternative from detailed study. Curtailing deliveries of CVP water to drainage impaired lands could have significant benefits to the environment, including: reducing diversions from the Trinity River and pumping in the Delta, reduction of drainage production and selenium contamination of the environment, freeing up water to meet CVPIA fish and wildlife obligations including water for fisheries restoration and improvement as established in CVPIA Sections 3406 b(2) and b(3) and for refuge water management needs as established in 3406(d).³⁷

F. The effects of reallocation of CVP Water from contract assignments to Westlands and retired lands within Westlands relies on flawed NEPA Analyses.

- 1) Between 1999 and 2006, Reclamation approved five water assignments of CVP contract supply from neighboring districts to Westlands. All of these water assignments have relied on flawed NEPA documents that did not consider: curtailing deliveries of these assignments; effects of delivering this additional water to drainage impaired lands within Westlands; and, beneficial use of some of the assigned water for fish wildlife purposes despite the mandates identified in the CVPIA.:
 - a. 6,260 AF/year, 3-Way Assignment Mercy Springs WD to Pajaro Valley WMA, Santa Clara Valley WD and Westlands Water District Distribution District #1. However, the EA now claims, without environmental analysis that Pajaro Valley WMA will not longer take their CVP supply,
 - b. 4,198 AF/year, Partial assignment of from Mercy Springs to Westlands Distribution District #2,
 - c. 27,000 AF/year from Broadview WD to Westlands,
 - d. 2,990 AF per year from Widren WD to Westlands,
 - e. 2,500 AF per year from Centinella WD to Westlands
- 2) There is no description of the status of retired lands in Westlands in the Draft EA. The SLDFR Final EIS contains the following description of retired lands in Westland @ pg 2-5:

2.2.1.2 Lands Not in Agricultural Production

Land Retirement

Land retirement is defined as the removal of lands from irrigated agricultural production by purchase or lease for other purposes or land uses. Under No Action, Reclamation assumes 109,106 acres would be retired based on the following:

1. CVPIA Land Retirement – Up to 7,000 acres of lands are included to be retired within the study area under the existing CVPIA land retirement program (2,091 acres retired to date).
2. Westlands Settlement Agreement (*Sagoupe v. Westlands Water District*) – A settlement agreement among various classes of water users within Westlands calls for temporary retirement of land. An estimated 65,000 acres of land would be retired under this settlement agreement. Because the agreement would allow these lands to come back into production if and when Reclamation provides drainage service, Reclamation assumed these lands would be retired under the No Action Alternative.³
3. Britz Settlement (*Sumner Peck Ranch, Inc., et al. v. Bureau of Reclamation, et al.*) – An additional 3,006 acres in Westlands are being retired permanently under a settlement agreement dated September 3, 2002, between the United States, Westlands, and the Britz group of plaintiffs in the Sumner Peck lawsuit.
4. An additional 34,100 acres from the Sumner Peck Ranch et al. settlement of December 2002 would be retired.

In summary, 44,106 acres of permanently retired lands would be increased by 65,000 acres if drainage service is not provided to Westlands, for a total of 109,106 acres.

³⁷ <https://www.usbr.gov/mp/cvpia/docs/public-law-102-575.pdf>

There is no disclosure of any NEPA analysis completed on the reallocation of water from retired lands to upslope lands within Westlands. The USEPA in their comments on the San Luis Unit Long Term Contracts EIS (@ pg 3 of Attachment A) noted concern that “*redistribution of supplies from lands which are no longer in production to land currently dependent on groundwater could lead to expansion of drainage-impaired lands (p. 84, “Land Retirement Final Report”, Feb. 1999). Water redistributed upslope can create conditions of shallow groundwater in downslope areas, leading to more widespread drainage problems.*”³⁸

IV. The Effects of Drainage from Westlands Caused by Irrigation Enabled by the Interim Contract Renewal are Significant and Complex and Must be Addressed in a Comprehensive EIS.

Federal and State law prohibits degradation of the waters of the State and Nation. Without data or substantive analysis of the effects of drainage contamination from Westlands, these interim contracts would allow the continued delivery of CVP water to lands known to create pollution when applied to irrigate these soils. This drainage pollution can deform fish and wildlife and impair reproduction and affect survivorship. These adverse impacts affect trust resources including migratory birds, anadromous fish, and federally and state listed species. Continued delivery of water to these soils, as contemplated by this contract renewal, will degrade the waters of the State and Nation. The USEPA in their comments on San Luis Unit Long Term Contract Renewals (@ pg 4 of Attachment A) concluded that, “*the Drainage solutions and features relied upon to implement these solutions should not be separated from the implementation of long-term water contracts.*”³⁹ Yet that is exactly what Reclamation has done in this EA. And appears poised to do it again in the conversion of this contract to a permanent contract.⁴⁰ No NEPA compliance documents have been released nor has environmental analysis been conducted for this conversion to a permanent contract.

A. No data on land retirement and groundwater conditions in Westlands is provided to support conclusions.

The Draft EA @ pg 28 argues that land retirement has reduced volume of drainage being produced: “*the transition of Westlands lands to efficient irrigation systems, in concert with land retirement and fallowing, has significantly reduced the volume of drain water being produced. As a result, the giant garter snake is extremely unlikely to be adversely affected by the Proposed Action.*” Yet, aside from the narrative, no data on the actual acreage and locations of retired lands in Westlands is provided in the Draft EA. Further, no data on shallow groundwater quality and depths in Westlands are provided to support the conclusions in the Draft EA.

A comprehensive reconnaissance of drainage problem in Westlands has not been conducted since 1980’s. A major planning effort to devise a drainage plan for the San Luis Unit was completed in 2006, with the San Luis Drainage Feature Re-evaluation (SLDFR) Final EIS. Yet the much of the data in the SLDFR

³⁸ <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

³⁹ *Ibid.*

⁴⁰ <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68443> USBR October 25, 2019 *Reclamation releases draft repayment contract for Central Valley Project contractor. And Reclamation extends the public comment period for the released draft repayment contract for Central Valley Project contractors* <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68567>

FEIS for Westlands, which was used to define the drainage problem and help with modelling analyses, was derived from 1980's data of groundwater conditions in Westlands (CH2MHill 1985).⁴¹

The Draft EA includes a narrative description of groundwater movement in Westlands based on modeling done by Williamson et al 1989 describing a groundwater flow system that has a much larger vertical gradient than horizontal gradient. However, lateral and vertical movement of subsurface drainage are not the only effects of subsurface agricultural drainage from Westlands to downslope lands. Steve Deverel, a groundwater hydrologist with Hydrofocus Inc., provided written testimony to the State Water Resource Control Board for the 1998 Bay-Delta Water Rights Hearing describing the effect of the hydraulic pressure of shallow drainage problem upslope of the Firebaugh Canal WD and Central California Irrigation District (primarily in Westlands) causing increases in pressure down gradient and contributing to drainage flows within those districts (Deverel 1998). Relevant excerpts are provided below:

"I have also been asked if I could quantify the load of salinity and selenium that enters along this boundary by downslope migration compared to the drainage load leaving Firebaugh Canal Water District as an example. Downslope migration does not explain all of the load but a part of it is from this shallow downslope flow, in the range of 20 to 40%..."

"...Elevations of groundwater in saturated areas in upslope areas are higher than elevation [sic] in lower areas. Although a particular particle of Water will take many years to migrate, in saturated soils pressure is very quickly transmitted to areas of lesser pressure. That is what is happening here. Pressure transmitted from high areas to low areas as an example will cause poor quality Water to show up in surface drain and be counted as load. A particle of poor quality Water may have originated from farming the downslope areas or migrated in the shallow geological features from farming the downslope areas or migrated in the shallow geological features from upslope, but the pressure causes it to rise into the tile drainage and surface drain and flow out."

"Pumping decreased substantially during the 1950's and 1960's as surface water was delivered and groundwater water levels rose. This rise in the groundwater levels continues to occur and has caused increases in pressures in downslope areas which have contributed to drainage flows."

Numerous Reclamation documents have noted downgradient groundwater flows that could impact areas downslope of Westlands. For example, the SLDFR FEIS developed a regional groundwater flow model for the SLDFR project area (which included agricultural lands in the San Luis Unit, Delta Mendota Canal Unit, and San Joaquin Exchange Contractors service areas) developed by Hydrofocus Inc. The SLDFR FEIS noted on page 6-26 that, *"Using the groundwater-flow model results, horizontal groundwater velocities were estimated at about 500 feet/year in the upper 50 feet of the saturated zone for the 1-foot/year seepage rate. Therefore, in 44 years groundwater with high salinity and constituent concentrations could travel about 20,000 feet downgradient from the evaporation basins. Results suggested significant water level increases could affect crop root zone salinity within 3,500 feet of the evaporation basins..."*⁴²

The San Luis Unit Long Term Contract Draft Supplemental EIS dated 2006 (Appendix B, @ pg 11) found that, *"The Westlands Subarea has no drainage discharge to the receiving waters of the State,*

⁴¹ Westlands North, South and Central drainwater quality was estimated in the SLDFR FEIS by geostatistical analysis using TDS concentrations and 1980's groundwater data (SLDFR FEIS Appendix C, page C-39) https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

⁴² Available at this link https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

therefore it is not directly affected by the current salinity and boron TMDL which limits discharge into the San Joaquin River. However, these actions have an indirect impact on the hydrology of the Basin owing to regional groundwater flow from Westlands into the Grasslands subarea...⁴³ Further, the Draft EA for a CVP Water Assignment from Broadview Water District (USBR 2004) noted on page 4-2 that, "...the Proposed Action would reduce the quantity of drainage water currently being discharged from the BWD [Broadview WD] to the San Joaquin River by approximately 2,600 acre-feet or 70 percent of water per year (Summers Engineering, 2003). More specifically, by following the BWD lands and not applying CVP water for irrigation, the estimated reduction in drain water discharge from existing conditions (approximately 3,700 acre feet per year [afy]), will be reduced by approximately 1,100 afy. Most of these resulting flows are likely attributable to sub-surface flows originating from up-gradient locations to the south and west..." and on page 4-12 that, "Although irrigated agriculture would be discontinued within the BWD, under-land flow of groundwater from up-gradient locations would still contribute to drain water within BWD drainage canals." In other words, the Broadview DEA estimated that about a third of the subsurface drainage below Broadview WD originated outside and upslope of district boundaries via lateral flow from agricultural lands in the south and west (i.e., Westlands).

The SWRCB in their revised Water Rights Decision 1641, dated March 15, 2000 (@ pg 83) identified lands within the San Luis Unit that contribute to drainage-water contamination to the San Joaquin River, "...the SWRCB finds that the actions of the CVP are the principal cause of the salinity concentrations exceeding the objectives at Vernalis. The salinity problem at Vernalis is the result of saline discharges to the river, principally from irrigated agriculture, combined with low flows in the river due to upstream development. The source of much of the saline discharge to the San Joaquin River is from lands on the west side of the San Joaquin Valley which are irrigated with water provided from the Delta by the CVP, primarily through the Delta-Mendota Canal and the San Luis Unit."⁴⁴

Oppenheimer and Grober (2004) in a draft staff report for the Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Salt and Boron Discharges into the Lower San Joaquin River, noted the following with respect to Westlands' effects on San Joaquin River water quality: "*The Grassland Subarea contains some of most [sic] salt-affected lands in the LSJR watershed. This subarea is also the largest contributor of salt to the LSJR (approximately 37% of the LSJR 's mean annual salt load). Previous studies indicate that shallow groundwater in the LSJR watershed is of the poorest quality (highest salinity) in the Grassland Subarea (SJVDP, 1990). The Grassland Subarea drains approximately 1,370 square miles on the west side of the LSJR in portions of Merced, Stanislaus, and Fresno Counties. This subarea includes the Mud Slough, Salt Slough, and Los Banos Creek watersheds. The eastern boundary of this subarea is generally formed by the LSJR between the Merced River confluence and the Mendota Dam. The Grassland Subarea extends across the LSJR, into the east side of the San Joaquin Valley, to include the lands within the Columbia Canal Company [and including the Northern Portion of Westlands Water District].*"

The USEPA in their comment letter on the Draft EIS and Supplemental Information for Renewal of Long Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006, @ pg 5 and 6 of Attachment A) found that, "*Subsurface drainage flow comes in part from the Westlands Water District and other water districts upgradient of the northerly [San Luis Unit] districts with high*

⁴³ Available at this link: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2143

⁴⁴ Available at this link: https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_199dec29.pdf

selenium/Total Dissolved Solids (TDS) concentrations ([USBR SLDFR] Plan Formulation Report Addendum, July 2004).” EPA recommended that the FEIS for San Luis Unit Long Term Contracts should include information on the relationships between irrigation in the San Luis Unit (including Westlands) and groundwater movement downslope, in terms of flow and water quality. EPA further noted that Reclamation should provide information on the San Luis Unit’s role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as “changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.”

B. The Westlands Contract includes an obligation to implement Drainage Studies and Solutions--These are absent.

The Draft EA references the 1963 Water Supply Contract with Westlands (Contract No. 1406-200-495A) with Reclamation for CVP supply from the San Luis Canal, Coalinga Canal, and Mendota Pool. This contract includes the following requirement @ pg 24:

DRAINAGE STUDIES AND SOLUTIONS [lines 10 to 18 see page 24] To aid in determining the source and solution of future potential drainage problems the District shall, in a manner satisfactory to the Contracting Officer, initiate and maintain a program of ground-water observation in order to delineate shallow water table areas and shall furnish annually to the Contracting Officer, during the period of this contract and any renewal thereof, records and analyses of such observations as they relate to potential drainage problems. The District shall construct such drainage works as are necessary to protect the irrigability of lands within the District. (emphasis added)

No such data was provided in the Draft EA or Appendices. Nor is this provision included in the 2016 Interim contract for Westlands (the last Interim Contract for Westlands posted on USBR’s website).⁴⁵

C. Environmental Impacts from Groundwater pump-ins in the California Aqueduct need to be disclosed.

There is no mention or analysis of the impacts from polluted groundwater from Westlands being pumped into the California Aqueduct as part of a Warren Act Contract approved by USBR in 2015 despite records showing elevated levels of selenium, arsenic, and boron in this groundwater.⁴⁶ The California Department of Water Resources conducts monthly monitoring of the California Aqueduct and has times documented elevated levels of concern for selenium at Check 21 near Kettleman City, station number KA017226, especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct. Some of these monthly water quality samples have exceeded the US EPA’s November 2018 proposed selenium objectives for protection of aquatic fish and wildlife. These proposed objectives include a lentic water quality objective of 1.5 µg/L (lentic meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps), which would be the applicable selenium objective for Kern National Wildlife Refuge and other wetlands that are fed by

⁴⁵ https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2016-int-cts/index.html

⁴⁶ https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=21021

water from the Aqueduct.⁴⁷ The 50 µg/L drinking water selenium objective that is currently applicable to water in the California Aqueduct is not protective of fish and wildlife resources that use water from the Aqueduct. Kern National Wildlife Refuge receives their refuge water supplies from the California Aqueduct. Endangered species, such as the Buena Vista Lake Shrew, are likely to be impacted from cumulative levels of selenium in this source water contaminated by Westlands' groundwater discharges. The once-a-month water quality sampling is insufficient to capture selenium spikes that accumulate downstream, or to assess the bioaccumulation in the food chain.⁴⁸

D. Drainage Contamination in Grasslands Wetland Channels.

The Draft EA notes @ pg 22 in the effects table for federally-listed species, under giant garter snake, that extensive land retirement along the northern boundary and drainage management under the Grassland Bypass Project (GBP) have “*prevented contamination of Grasslands wetlands water supply channels.*” Yet, those very channels in the Grasslands are listed as impaired for selenium on the State’s 303(d) list⁴⁹, and elevated selenium in those channels could be resulting in harm to aquatic-dependent fish and wildlife resources. Further, aside from the narrative in the Draft EA, there are no maps documenting retired lands in Westlands, no data confirming that contaminated groundwater is not migrating downslope and out of Westlands, and no data on flow or water quality in the Grassland wetland channels.

The undersigned organizations have long-standing interests in the GBP because contaminants in agricultural drainage discharges have profound effects to the environment, including effects to downstream waterways, aquatic life, and migratory birds. Further Westlands' Broadview District lands and upgradient irrigated lands contribute to this drainage discharge. We hereby include our previous comments on the GBP EIR/EIS and Basin Plan Amendment by reference.⁵⁰

⁴⁷ Federal Selenium Criteria for Aquatic Life and Aquatic Dependent Wildlife Applicable to California Docket RIN, 2040-AF79 EPA-HQ-OW-2018-0056 FRL-9989-46-OW. These selenium criteria established lentic and lotic water values, and bird egg and fish tissue values. See: <https://www.regulations.gov/document?D=EPA-HQ-OW-2018-0056-0001>.

⁴⁸ Selenium & Arsenic concentrations in the California Aqueduct, downstream of where groundwater has been pumped into the canal, have increased markedly in 2015 and in the case of Arsenic are approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L. See http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

⁴⁹ https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/01657.shtml#34338

⁵⁰ These comments are as follows: Coalition comments of environmental, fishing, and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. Available at <http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-CaSelenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf>; Comments of the Pacific Coast Federation of Fishermen’s Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker. June 22, 2015. Available at https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf; Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR. September 8, 2014. Available at <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-toLongley-re-gbp-land-retirement.pdf>; Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project. June 30, 2014. Available at <http://calsport.org/news/wp-content/uploads/Finalcoalition-comments-on-Draft-GBP-WDR-6.30.14.pdf>.

E. The San Francisco Bay/Delta continues to be impacted by selenium from agricultural drainage.

The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta including Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta are listed as impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).⁵¹ Sources of selenium contamination include agricultural drainage from the Central Valley and effluent discharges from oil refineries (Linares et al 2015; Presser and Luoma 2010). At risk species include federally listed as threatened or endangered, green sturgeon, Chinook salmon, steelhead trout, delta smelt, splittail and the California Ridgway's rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters. The USEPA noted on page 46036 of the Federal Register Notice 81(136) that, "[t]he analyses to develop the fish tissue and the avian egg tissue benchmarks used in the modeling, and the modeling results used to derive the proposed water column criteria, indicate the health of these species would be negatively impacted from exposure to selenium water column concentrations above 0.2 µg /L, which would be allowed to occur under the existing NTR selenium criterion of 5.0 µg /L. Accordingly, EPA finds that it is necessary to propose revised and more protective criteria for selenium in order to help ensure the continued protection of these vulnerable species and associated designated uses."

Our organizations submitted comments to USEPA on the proposed selenium water quality and tissue criteria for the Bay Delta supporting more protective water quality criteria and hereby incorporate those comments by reference.⁵² The selenium discharges being considered by the Regional Board from the GBP for the next 25 years will affect the Bay-Delta ecosystem and could affect compliance with EPA's proposed water quality criteria for San Francisco Bay and Delta. The 5.0 µg /L Basin Plan selenium objective for Mud Slough and the San Joaquin River is not protective of downstream beneficial uses, will result in non-compliance with proposed water quality criteria and will cause deleterious effects to fish and wildlife in the Bay-Delta. Westlands' Broadview District and upgradient irrigated lands contribute to this discharge and yet no monitoring, data or analysis of these impacts is provided.

⁵¹ https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

⁵² Coalition comments of environmental, fishing and environmental justice organizations on EPA's Water Quality Standards for the Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta. October 28, 2016. Available at <https://www.regulations.gov/document?D=EPA-HQ-OW-20150392-0246>

Table 2. Proposed Selenium Water Quality Criteria for the San Francisco Bay and Delta

Media Type	Tissue		Water Column ¹		
			Dissolved		Particulate
Criteria	Fish Whole Body or Muscle	Clam	Chronic	Intermittent Exposure ²	Chronic
Magnitude	8.5 µg/g dw whole body or 11.3 µg/g dw muscle	15 µg/g dw	0.2 µg/L	$WQC_{int} = \frac{0.2 \mu\text{g/L} - C_{bkgnd}(1 - f_{int})}{f_{int}}$	1 µg/g dw
Duration	Instantaneous measurement	Instantaneous measurement	30 days	Number of days/month with an elevated concentration	30 days
Frequency	Not to be exceeded	Not to be exceeded	Not more than once in three years	Not more than once in three years	Not more than once in three years

¹ Dissolved and particulate water column values are based on total selenium (includes all oxidation states, i.e., selenite, selenate, organic selenium and any other forms) in water.

² Where C_{bkgnd} is the average background selenium concentration in µg/L, and f_{int} is the fraction of any 30-day period during which elevated selenium concentrations occur, with f_{int} assigned a value ≥ 0.033 (corresponding to one day).

F. Drainage Treatment is not cost effective and has not been proven to be reliable and meet operational criteria.

The 2006 EIS for SLDFR and the 2009 EIR/EIS for the GBP included treatment as a significant component of the plan to manage drainage and reduce brine volumes to be discharged or disposed of. Reclamation has promoted and funded drainage treatment solutions for decades with repeated operational failures and unreliable results. Both the SLDFR EIS and the GBP EIS/R included a bio-treatment plant to reduce the selenium load being discharged, and to ultimately achieve zero discharge of agricultural drainage to the San Luis Drain and San Joaquin River.

In 2012, construction began of the SLDFR Demonstration Treatment Plant (Demo-Plant) in Panoche Drainage District. The purpose of the Demo-Plant was to demonstrate and operate water treatment processes to collect cost and performance data for the design of a full-scale water treatment facility to be constructed in Westlands. The Demo-Plant was completed in 2014 but did not operate consistently due to operational failures and faulty design. The treatment plant has yet to become operational.⁵³

The Department of Interior's Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant.⁵⁴ The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational performance criteria. In addition, the USBR was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, USBR spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals. Warned of fraud, the Inspector General found that "work at the "pilot" Demo-Plant included: "invalid single audits, conflicts of interest with key personnel, a general absence of project oversight, and questionable use of a cooperative agreement as the legal instrument." The Inspector General also raised federal fraudulent funding issues, stating: "*We also question how and why*

⁵³ Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.

⁵⁴ See <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luis-demonstration-treatment-plant>

*the project grew from a pilot-scale \$15 million demonstration and research and development plant to a full-size \$37 million plant. Further, we have been told that the costs to operate and maintain the plant could outweigh the benefits of the treated water produced.”*⁵⁵

All action alternatives in the SLDFR FEIS included bio-treatment and reverse osmosis treatment as a large part of the schematic to manage drainage for the San Luis Unit, primarily from Westlands. Since the Demo-Plant has yet to work reliably, the viability and costs of the drainage plan put forth in the SLDFR ROD is questionable, particularly at full-scale. Without treatment, how will drainage volumes and selenium loads be managed?

G. Long Term Viability of Drainage Management Actions.

The SLDFR FEIS included a suite of management actions including drainage reuse (to reduce the volume of drainage that would need to be treated), treatment and disposal. Pilot studies conducted for SLDFR failed to meet specified objectives, putting doubt into effective implementation at full-scale.

Reuse of polluted drainage in reuse areas does not eliminate the loading of wastes. It simply stockpiles wastes on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into salted up wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to permanent fallowing of more and more land.

H. Land Retirement is the most cost effective and proven strategy to manage drainage.

Our organizations have previously submitted comments to the Regional Water Board about the success of land retirement in relation to the GBP’s drainage volume load reductions.⁵⁶ The USBR’s 2004 Broadview Water Contract Assignment Draft Environmental Assessment cites Summer’s Engineering as predicting a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year from the cessation of irrigation on 9,200 acres of agricultural land in Broadview Water District as per Table 4-1 below (USBR 2004). This amounts to a per acre reduction of 0.28 AF of drainage, 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of boron.

**TABLE 4-1
DRAINAGE AND WATER QUALITY EFFECTS OF PROPOSED ACTION ON THE
SAN JOAQUIN RIVER**

	Existing Conditions	Under Proposed Action Conditions	Estimated Reduction Attributable to Proposed Action
BWD Drainage to San Joaquin River (afy)	3,700	1,100	2,600
BWD Estimated Salt Production (tons/yr)	24,300	7,300	17,000
BWD Estimated Selenium Production (lbs/yr)	2,140	640	1,500
BWD Estimated Boron Production (lbs/yr)	74,000	22,000	52,000

Source: Summers Engineering, 2003

⁵⁵ See https://www.doioig.gov/sites/doioig.gov/files/ManagementAdvisory_ProposedModification_112717.pdf

⁵⁶ See Coalition letter to CVRWQCB on Selenium Basin Plan Amendment, April 26, 2010, p 15-16; http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr and Coalition letter to Karl Longley on Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements: <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbp-land-retirement.pdf>

Land retirement likely accounted for most of the reductions in selenium, and the majority of reductions in drainage volume, boron and salt claimed by the Grasslands Bypass Project in the 2009 EIR/EIS.

The USEPA, in a letter regarding the Bay Delta Conservation Plan,⁵⁷ strongly recommended the USBR’s Land Retirement Program be revived to save water and prevent further selenium contamination and impacts to endangered species (page 13):

Recommendations: *To mitigate for the project’s impacts to selenium levels in the estuary as a result of the BDCP operations, consider reviving and funding the Bureau of Reclamation’s Land Retirement Program¹⁷ to remove from cultivation and irrigation large areas of selenium laden lands on the West side of the San Joaquin Valley. This would save irrigation water, reduce discharges of selenium into the San Joaquin River basin, and advance attainment of selenium reduction targets¹⁸ set by EPA and the Central Valley Regional Water Quality Control Board. Evaluate the extent to which restoration of these “retired” lands to the native plant community could also contribute to the recovery of threatened and endangered plants and animals listed by FWS. Consider analyzing the cost/benefit of implementing treatment technologies vs. land retirement. Although cost/benefit analyses are not required under NEPA, such an analysis may be useful to decision makers and the public in this case.”*

Further, the USBR’s San Luis Drainage Feature Re-Evaluation (SLDFRE) Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit. Three land alternatives were evaluated in the SLDFRE EIS, 306,000 acres, 194,000 acres and 100,000 acres respectively. The Final EIS found that the only environmentally and economically preferred alternative was to retire 306,000 acres (In-Valley/Drainage Impaired Area Land Retirement).⁵⁸ It’s clear from the NED findings in Table N-10 below that additional land retirement would provide increased net economic benefits.

**Table N-10
Benefit/Cost Summary
Changes Relative to the No Action Alternative (\$/year in 2050)**

Subarea	In-Valley Disposal	Out-of-Valley Disposal	In-Valley/ Groundwater Quality Land Retirement	In-Valley/ Water Needs Land Retirement	In-Valley/ Drainage-Impaired Area Land Retirement
Total NED Benefit	\$37,962,000	\$38,430,000	\$31,164,000	\$20,629,000	\$9,931,000
Total NED Cost	51,225,000	51,370,000	46,767,000	30,778,000	6,288,000
Net NED Benefit	-\$13,263,000	-\$12,940,000	-\$15,603,000	-\$10,149,000	\$3,643,000

Notes:
Values represent net NED benefits relative to No Action.
Values rounded to nearest \$1,000. Totals may not add due to rounding.

Moreover, the US Fish and Wildlife Service, in their Fish and Wildlife Coordination Act Report (FWCAR) for SLDFRE, recommended that all of the northerly area within the San Luis Unit

⁵⁷ <http://calsport.org/news/wp-content/uploads/bay-delta-conservation-plan-deis.pdf>

⁵⁸ SLDFRE Final EIS, Appendix N, Table N-10, page N-17, accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2240

(GBP Drainage Area) be retired as well,⁵⁹ but USBR did not consider that alternative. The Service concluded on page 67 of the FWCAR, *“To avoid and minimize risks and effects to fish and wildlife resources in the San Joaquin Valley and Pacific Flyway, the Service recommends land retirement on all drainage impaired lands in the SLU. This approach would maximize the elimination of drainage at its source, and therefore avoidance of adverse fish and wildlife effects.”*

The Draft EA arbitrarily reduces the acreage of permanent land retirement from what was recommended in the Final EIS for SLDFR. This ‘head in the sand’ approach continues delivering CVP water to drainage-impaired lands in Westlands and creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River and the Bay-Delta estuary, especially in wetter years.

I. A Drainage Plan is required by law.

Federal courts and reclamation law require a drainage plan. There is no plan. There is an unauthorized settlement agreement, as mentioned in the Draft EA, whereby Reclamation suggests implementation would occur in 2051. Westlands would be required to contain all drainage within their district. As pointed out, this promise is one of a long line of promises broken by Westlands, designed to get a contract for water without an effective drainage plan.⁶⁰

The drainage management laid out in the schematics of the preferred alternatives in the SLDFR FEIS and ROD have failed during pilot studies, and as yet, treatment has not proven viable or cost effective. Moving forward with contracts that authorize full quantities without acknowledging drainage problems and technological and economic limitations is negligent and in violation of the law.

J. An Alternative including Secretarial cessation of water deliveries to Westlands' must be considered.

There is nothing presented in the record that precludes the Secretary of Interior from considering an alternative that decommissions this specific contract. There is no legal obligation to operate a project once it was built if experience reveals to the Secretary that the project is not “practicable” under reclamation law without drainage (which of course both Reclamation and Congress knew to be the case beforehand) and is harmful to public and environmental health. At the time the San Luis Unit was authorized in 1960, vast portions of the unit were understood by Congress, the Bureau of Reclamation and the State of California not to be “practicable” of irrigation without drainage. *See* Reclamation Act of 1902 section 4 (43 USC 419) *“Upon the determination by the Secretary of the Interior that any irrigation project is practicable, he may cause to be let contracts for the construction of the same”* The statutory premise of practicable irrigability requirement remains under Reclamation law.

Drainage was known to be an issue and it was required to be provided under the San Luis Act of 1960 (PL 86-488). The project proceeded without it. So the catastrophe of Westlands' irrigation cause pollution and degradation of water supplies was both predictable and predicted. The contract does not require Reclamation to merely roll over the existing interim contract without considering the irrigability requirements under Reclamation law and by definition the cessation of exported water to these non-irrigable lands. Further, any consideration of a "no-action" alternative should not set up the false choice

⁵⁹ SLDFRE Final EIS, Appendix M, USFWS FWCAR accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236

⁶⁰ Taxpayers in 2002, paid roughly [\\$140 million dollars](#) in a previous settlements to “solve” the drainage problem where four families reportedly reaped most of the financial gains and Westlands got the land and the water. Also see http://www.lloydgcarter.com/content/120329554_how-westlands-was-won-a-two-part-series-part-one

of drainage vs no drainage. This is a false choice. The alternative which needs to be considered is the cessation of water exports under the contract to these lands that are causing the pollution. Such a false choice--drainage vs. no drainage-- is a deliberate obfuscation by the Secretary to avoid considering the alternative of discontinuing water deliveries to these badlands. The “No-Action” in the SLFRE alternative created by Reclamation set up a false choice between no drainage and drainage. The no action alternative is feasible and legal under the 9th Circuit court decision if the Secretary changed operations and discontinued deliveries to drainage impaired lands.

Further under Reclamation law, feasibility is required of project operations. Typically project feasibility is determined by an economic analysis, the goal of which is a 1:1 benefit-cost ratio. If one includes the obligation for drainage where no solution has been effect, it seems that irrigation of Westlands is not *economically* feasible from a national perspective, even if it is *financially* beneficial to Westlands’ irrigators. (The ongoing environmental damage caused by its operation is a cost that needs to be fully integrated into any justification for continued deliveries. There is a need for a full and fair review in the NEPA analysis that would determine what lands within Westlands’ service area are not practicably irrigable and that portion of the project should be *decommissioned*. Review should be made of the authority of the Secretary to make the non-practicability determination and thus, stop water deliveries. How can there be an obligation to provide—and liability for not providing—drainage when the government has decided, using another cornerstone of reclamation law, that irrigation of Westlands is not a “beneficial” use of water. *See* section 8 of the 1902 Act “beneficial use shall be the basis, measure, and limit of the right.”

Under the current San Luis Unit situation, solving the vexing drainage pollution problem turns on whether CVP is delivering water to Westlands. If yes, then drainage is required of the Reclamation to be repaid by the contractors. If not, that is, if the Secretary declares it is not beneficial or practicable to apply water to San Luis Unit lands, then the drainage obligation as a federal responsibility disappears. This environmental pollution, the potential for clean up and treatment along with the costs must be weighed against the alternative of not delivering the water for irrigation.

In addition the cumulative impacts of other water export projects such as a tunnel project providing even great exports needs to be evaluated against (1) the full cost, including drainage and environmental remediation costs of irrigating the San Luis Unit; and (2) who is responsible for those costs.

The benefit/cost ratio of the SLU is no longer demonstrable, if ever it could have been. The SLU irrigation development has a fundamental flaw in its soils, drainage, are location re water source that it is not economical to remediate. The SLU is not feasible. The SLU is not a practicable irrigation project.

Section 4 of the 1902 act states: “Upon the determination by the Secretary of the Interior that any irrigation project is *practicable*, he may cause to be let contracts for the construction of the same . . .” (emphasis added). We know that subsequent to 1902, by the time of the SLU authorization in 1960, reclamation law had changed to require congressional authorization of projects. But the basic criterion of practicability remained intact.

When one looks PL 86-488, one can see how problematic the project development was, with drainage being the biggest problem. Tapping distant water supplies (e.g. Trinity River) along with expensive pumping plants and the Delta-Mendota Canal/California Aqueduct Intertie added to the problem. Too many subsidies are needed to address problems that it turns out cannot be solved. Moreover there has been an enormous environmental price to pay because the SLU has not worked and has not been feasible in the first instance to construct. Thus, one is drawn to the unavoidable conclusion that using CVP water on these SLU lands under these conditions is not practicable under federal law or “beneficial” under state law.

Further, any conversion from the existing 9(e) contract to a 9(d) contract must include a contract to resolve this vexing contamination problem caused by such water quantity exports. Clearly because such conversion contracts are proposed the proposed new interim contracts must document the practicability of the irrigation of Westlands' lands. We conclude (1) Over 200,000 acres under the proposed interim contract due to drainage is no longer practicable of irrigation; and (2) it is not a beneficial use to apply water to these lands that are not practicable of irrigation. We conclude accordingly and that the State Water Board must re-open the water right and Reclamation must cease deliveries of water to these toxic lands. It remains unclear whether the State Board has conformed its *place of use* designation for CVP water exports to facts on the ground. Further a contract requirement should include (1) A prohibition of any irrigation of drainage impaired lands (2) the restoration fund payment obligation must remain intact (3) any proprietary interest in the water as a result of a change in the contract whereby Westlands can use or sell the water as the market warrants, must be subject to CVPIA limitations for other project purposes such as fishery restoration, preservation and propagation.

V. Land Use Effects of the Interim Water Service Contract have not been Adequately Addressed in the Draft EA

A. Environmental Protection Measure in Draft EA is unverified.

The Draft EA @ pg 11 includes an environmental protection measure for biological resources, “No CVP water would be applied to native lands or land untilled for three consecutive years or more without additional environmental analysis and approval.” No land use data analysis is provided to ensure compliance with this measure. The Draft EA also does not identify a mechanism that Reclamation would use to confirm compliance with this measure. Lastly, the Draft EA fails to identify what the consequences of non-compliance would be.

The USFWS completed a Programmatic biological opinion on the Central Valley Project Improvement Act in 2000 (CVPIA BO). The CVPIA BO reviewed and provided ESA coverage for the CVPIA Programmatic EIS (PEIS). The purposes of the CVPIA included:

- Protection, restoration and enhancement of fish, wildlife, and associated habitats in the Central Valley and Trinity River basins of California;
- Addressing impacts of the CVP on fish, wildlife and associated habitat;
- Improving operational flexibility of the CVP;
- Increasing water-related benefits through expanded use of voluntary water transfers and water conservation;
- Contributing to efforts to protect the San Francisco Bay/Delta Estuary;
- To achieve a reasonable balance among competing demands for use of CVP water, including requirements of fish and wildlife, agricultural, municipal and industrial and power contractors.

The CVPIA PEIS and BO provided a framework whereby future CVP-related actions, including interim and long-term CVP water contract renewals, could be reviewed for site-specific impacts under NEPA and ESA. Included in the BO was a commitment to develop and implement a Comprehensive Mapping Program (aka CVPHMP) (as described on pages 2-62 and 2-63 of the Final CVPIA BO): *“Reclamation and the Service will use the best scientific and commercial information available, in conjunction with data from aerial photograph analysis to monitor trends in the environmental baseline for listed species. It is the ultimate goal of Interior to assure that listed species are being recovered. For any species affected by the CVP that are continuing to decline, the Service and Reclamation will immediately assess critical needs for the species and determine whether it is appropriate to expand the Conservation*

Program or implement other conservation measures. Any native habitat converted to agricultural or municipal/industrial use within the water service area without prior biological surveys, as required by Reclamation prior to the delivery of Reclamation water, will be evaluated to determine what mitigation measures will be required.” The purpose of the CVPHMP was to identify remaining natural habitats and cropping patterns within the State-permitted CVP Place of Use (POU) and identify any changes within those habitats that have occurred from 1993 to 1999, and then every 5 years thereafter. Identification of natural habitats remaining in CVP contract service areas and monitoring of those habitats every 5 years is essential to confirming that listed species baselines are stable.

As part of the ESA consultation on the 2014 CVP Interim Contract Renewals for Westlands, the USFWS requested confirmation that districts that receive this CVP water will not use the water to convert native lands to other uses. This information was identified as necessary for validating Reclamation’s conclusion that CVP interim contract deliveries do not result in land use changes that would adversely affect Federally-listed species or critical habitat.⁶¹ Yet, the current Draft EA for Westlands interim contract renewals includes no mention of the CVPHMP commitments, or any data from it. Without actual data to verify the environmental commitment @ pg 11, “No CVP water would be applied to native lands or land untilled for three consecutive years or more” is of little value. Further, there is no mechanism identified in the Draft EA to address land conversions that may have occurred without additional “environmental analysis and approval.” The consequences of non-compliance need to be defined and implementable.

B. Status of Consolidated Place of Use Mitigation should be disclosed.

In November 1999, the SWRCB issued a final EIR that updated Reclamation’s 16 CVP water rights permits. Included in this EIR were changes to the state authorized place of use for these permits (CPOU). The EIR authorized the addition of “encroachment lands” to the CPOU (defined as lands within the boundaries of CVP water contractor service areas outside of the POU that received CVP water historically). The EIR did not authorize the addition of “expansion lands” to the CPOU (defined as lands within the boundaries of CVP water contractor service areas but outside of the POU that have never received CVP water) until adequate site-specific environmental documentation is completed (CPOU EIR @ pg ES-2).⁶² Westlands was identified in the EIR to have 30,718 acres of encroachment lands and 9,664 acres of expansion lands.

The CPOU EIR concluded that historic delivery of CVP water to encroachment lands has resulted in significant adverse effects to vegetation and wildlife. The EIR and D-1641 identified that of the 85,620 acres of encroachment lands that currently receive CVP water, the development and land use conversion of 45,390 acres was facilitated by delivery of CVP water supplies for agricultural purposes. As part of the SWRCB Decision 1641 Reclamation was required to provide compensation for lost habitat due to encroachment. Specifically, Reclamation was required to delineate existing habitats of the affected special status species and in consultation with DFG and USFWS to develop a mitigation plan satisfactory to the SWRCB. This decision requires that the mitigation plan be developed and completed within ten years of the date of D-1641 (D-1641 was signed in March 2000, @ pg 165). This decision also requires a mitigation monitoring and reporting program to ensure continued protection and enhancement of special

⁶¹ Available at this link: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=15981

⁶² Available at this link: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/eirs/eir1999_ccpou/docs/ccpoufeir.pdf

status species.”⁶³ The SWRCB identified the following habitat types that would need to be mitigated for from Westlands encroachment: 22,343 acres of alkali scrub/ 1,611 acres of Valley-foothill riparian/fresh emergent wetland, and 6,653 acres of annual grassland (CPOU EIR @ pg 2-70, Table 2-32). No information was provided in the Draft EA on the status of mitigation for CPOU.

C. Direct Effects of Farming practices.

The Draft EA notes @ pgs 27-28 that farming practices, including application of rodent control anticoagulant baits, will continue to occur into the future. As such, Reclamation concludes that the effects of ongoing farm practices are “outside the control or authority of Reclamation.” Reclamation concludes that “[T]hese effects have occurred previously and are likely to continue to occur in the future as they are the effect of farming practices and not an effect of the Proposed Action.” We disagree. Delivery of CVP water to Westlands has had a profound effect on how many acres of land are in production in the district. Without the delivery of CVP water, the acreage in agricultural production in Westlands would likely be significantly reduced. Similarly, without Federal water deliveries, contamination of ground and surface water would likely decline.

VI. Cumulative Impacts have not been Adequately Addressed in Draft EA.

Reclamation diminishes the effects of the proposed renewal of interim contracts, when added to other past, present, and reasonably foreseeable future actions, by concluding this action represents a continuation of existing conditions which are unlikely to result in cumulative impacts on the biological resources of the study area. As Reclamation concludes, these interim contract renewals provide for the delivery of the same contractual amount of water to the same lands for existing purposes without the need for facility modification or construction. However, these conclusions of finding minimal cumulative impacts to biological resources are dependent on the timely implementation of future agricultural drainage service, habitat restoration, land acquisition and retirement, water conservation, and CVPIA programs including implementation of Fish and Wildlife Habitat Restoration Programs under Sections 3406 b(2), b(3) and 3406 d(1) and d(2).

The Draft EA references the Programmatic EIS for CVPIA which identified these restoration programs necessary to remediate adverse impacts of these contract renewals. Yet, some important ecosystem restoration provisions of CVPIA, such as acquisition of full Level 4 refuge water supplies, have lacked funding for adequate implementation. Purchase of environmental water under the CVPIA b(3) program has also fallen substantially short of targeted needs due to inadequate funding mechanisms. This unmet need may increase in the future as market prices for water continue to rise with demand. Further, past and present efforts to meet water quality standards in the San Joaquin Basin have been significantly hampered by the lack of adequate fresh water supplies. The USEPA recommended, in their comments on the DEIS and Supplemental Information for San Luis Unit Long Term Contracts (@ pg 6 of Attachment A) that, “The cumulative impacts analysis in the FEIS should be based on the past and present trends of supplies available for redirection to meet restoration and refuge needs in the area, including Trinity Restoration needs. Where information is available, the analysis should reflect the actual implementation status of CVPIA restoration actions.”⁶⁴

⁶³ D-1641 @ pg 140, available at this link: https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf

⁶⁴ <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

In October 2019, Reclamation released a draft EA on new water assignments from Mercy Springs and Fresno Slough WDs (both Delta-Mendota Unit CVP contractors) to Angiola Water District.⁶⁵ Angiola WD is a non-CVP contractor in the Tulare Basin that is outside of the CVP Place of Use as established by the SWRCB⁶⁶. Allocating federal water outside of the State permitted Place of Use, and without consideration of CVPIA fish and wildlife restoration programs is a violation of the law.

VII. Pending Long-Term Contracts

The Draft EA @ pg 6 notes that “*long-term contracts have generally been negotiated but cannot be finalized until site-specific environmental review is completed.*” Yet, Reclamation released a Westlands draft repayment contract on October 25, 2019⁶⁷ (as authorized by Section 4011 of the Water Infrastructure Improvements for the Nation Act (aka WIIN Act) Public Law 114-322) that effectively would authorize a renewed contract to Westlands in perpetuity.⁶⁸ The WIIN Act allows for the conversion of Westlands current CVP water service contract(s) (that were authorized by CVPIA to be renewed for up to 40 years) to a 9(d) repayment contract. No NEPA or ESA documents were provided to the public for review. Further there is no mention of any requirements to complete NEPA or ESA review of these contract conversions on USBR’s website for the WIIN Act contract conversions.⁶⁹ The only document made available for public comment is the draft WIIN Act contract for Westlands. And exhibits that are placeholders rather than real binding exhibits. The environmental review completed for Westlands interim contracts is inadequate, as we have documented. These sequential two year contract roll over reviews have failed to address reduction in exports, irrigability of these lands, drainage impacts and conversion to municipal and industrial uses as contemplated under the conversion of this 9(e) contract to a 9(d) repayment contract that would be issued in perpetuity. Given the numerous potential environmental effects associated with Westlands water deliveries, as outlined in this comment letter, a full EIS and ESA analysis must be completed prior to the execution of these new conversion contracts in perpetuity.

Conclusion

We conclude that continuing to renew interim water supply contracts, as presently proposed by Reclamation would violate NEPA, the Administrative Procedures Act, Central Valley Project Improvement Act, the Reclamation Reform Act and other federal statutes. We urge Reclamation not to renew the interim contracts unless and until there is full compliance with laws and Congressional directive. Using 'stale water needs assessment data' and delivering water outside of the Congressionally authorized area under the San Luis Act of 1960, inflates Westlands' water allocation. The proposed "interim water service contract" perpetuates these inflated water export amounts. These excessive exports have significant impacts upon the environment and communities from where these excessive amounts of water are exported. The Secretary under Reclamation Law must include an analysis of cessation of water deliveries to these badlands. We recommend strategic land retirement and curtailing

⁶⁵ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=33881

⁶⁶ https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/eirs/eir1999_ccpou/docs/ccpoufeir.pdf

⁶⁷ <https://www.usbr.gov/mp/wiin-act/negotiated-conversion-contracts.html>

⁶⁸ <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68443>

⁶⁹ <https://www.usbr.gov/mp/wiin-act/>

the importation of additional water supplies that mobilize these contaminants on the west side of the San Joaquin Valley. Only a full EIS that comprehensively assesses the far-ranging and complex direct and secondary effects of irrigation can illuminate the total environmental impact of contract renewal. Responsible decision making requires guidance from this EIS and adherence to established legal requirements. Reclamation law does not require delivery of water nor the operation of the CVP to deliver water to lands that are not practicably irrigated and where such action causes pollution. Alternatives that exclude water deliveries to these soils, incorporate contract provisions that require adherence to CVPIA mitigation measures are needed and required.

Thank you for considering our comments. Please make sure the undersigned are included in any future Reclamation actions with regard to CVP water exports from the San Francisco Bay-Delta Estuary and/or the CVP San Luis Unit contractors and/or conversion of CVP contracts pursuant to Section 4011 of the WIIN Act. Despite repeated comments (see exhibit A) many of the undersigned did not receive notice of the proposed interim contract renewals or the environmental assessment and none received notice of the proposed permanent Westlands' conversion contract negotiations.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
noah@ifrfish.org



John McManus
President
Golden State Salmon Association
john@goldengatesalmon.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



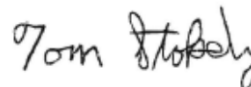
Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Lowell Ashbaugh
Conservation Chair
The Fly Fishers of Davis
ashbaugh.lowell@gmail.com



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



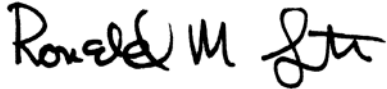
Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org




Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers International
mrockwell1945@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
Winnemem Wintu Tribe
caleenwintu@gmail.com



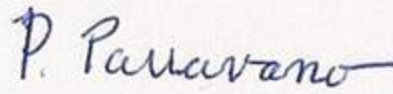
Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Larry Collins
Senior Policy Advisor
Crab Boat Owners Association
papaduck8@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

Attachments:

1. **Exhibit A: 29 Listed Public Interest Comments 2010 - 2018 Incorporated by Reference.**
2. **Solar Industrial Map Westlands Water District Solar Development March 16, 2016,**
Source: http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI02/TN210903_20160330T140735_Daniel_Kim_Comments_WSP_comments_to_RETI_20_plenary_group_meeti.pdf
3. **Map of Lands Retired Lands in Westlands S.E. Phillips 2006**
4. **USBR In Valley Drainaged Impaired Lands 310,000 Acres [2004] Released 2006**
5. **Westlands' Map of Peck & District Retired Lands 2008**
6. **San Luis Service Area Map Authorized by Congress from the 1956 Feasibility Study-- Plate I Central Valley West San Joaquin Project -Ultimate Plan Div. San Luis Unit-Calif. Service Area 805-20814. pg 36.**

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Deverel, S. 1998. Written Testimony for the SWRCB Bay-Delta Water Rights Hearing, Phase 5. San Joaquin Exchange Contractor's, Exhibit 5(a), 37 pp.

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Oppenheimer, E.I. and L.F. Grober. 2004a. Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Salt and Boron Discharges into the Lower San Joaquin River. Draft Final Staff Report of the Central Valley Regional Water Quality Control Board, San Joaquin River TMDL Unit, Sacramento, CA, 121 pp.

Presser, T.S., and S.N. Luoma. 2010. Ecosystem-Scale Selenium Modeling in Support of Fish and Wildlife Criteria Development for the San Francisco Bay-Delta Estuary, California. USGS Administrative Report, Menlo Park, CA, 34 pp. and appendices.

[USBR] U.S. Bureau of Reclamation. 2004. Broadview Water Contract Assignment Project Environmental Assessment/Finding of No Significant Impact. USBR, Fresno CA. 7 chapters and 3 appendices.

Exhibit A: Documented Public Interest & Comments Incorporated by Reference [All Documents can be found in the record of earlier contract renewals, earlier NEPA processes and in some cases on the BOR website.]

- 1. 1-29-10 “ Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts” To Rain Healer from Joseph Membrino for Hoopa Valley Tribe.**
- 2. 1-29-10 “Comments of The Bay Institute and NRDC on Draft Environmental Assessment (EA) and Draft Findings of No Significant Impact (FONSI) for the San Luis Unit interim renewal contracts (Central Valley Project, California)” To Rain Healer from Hamilton Candee**
- 3. 2-18-2010 “Comments Re Two Year Interim Renewal Central Valley Project Water Service Contracts: Westlands Water District [WWD] Contracts 14-06-200-8237AIR13; 14-06-200-8238A-IR13; WWD DD1-Broadview 14-06-200-8092-IR12; WWD DD1 Centinella 7-07-20-W0055-IR12-B; WWD1 Widren 14-06-200-8018-IR12-B; WWD DD2 Mercy Springs 14-06-200-3365A-IR12-C. To Karen Hall, USBR, from 11 Conservation, Fishery and Community Organizations.**
- 4. 3-2-2010 “Final Scoping Comments for Westlands Water District [Westlands] Proposed “Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct”. The project proposes to discharge up to 100,000 acre feet of groundwater into the State Water Project California Aqueduct, a Drinking Water Supply for Approximately 20 Million People”. To Russ Freeman from 14 Conservation, Fishery and Community Organizations.**
- 5. 5-19-10 Letter to Donald Glaser, USBR From David Ortmann, Pacific Coast Management Council**
- 6. 7-30-2010 “San Joaquin River Central Valley Selenium Basin Plan Waiver, 303 (d) Delisting of San Joaquin River for Selenium and the California Toxics Rule” To Jared Blumenfeld, EPA from 16 Conservation, Fishery and Community Organizations.**
- 7. 9-22-2010 USFWS “Comment Letter – San Joaquin River Selenium Control Plan Basin Plan Amendment” To: Ms. Jeanine Townsend, Clerk to the Board from Susan K. Moore.**
- 8. 11-16-2010 “Letter to Senator Feinstein on Long Term Solution to Westlands Drainage Problem” To Commissioner Connor from Environmental Working Group.**
- 9. 12-13-2010 Comments on the Draft Finding of No Significant Impact [FONSI] San Luis Water District’s [SLD] and Panoche Water District’s [PWD] Water Service Interim Renewal Contracts 2011-2013 FONSI-10-070. To Rain Healer, USBR, From 8 Conservation, Fishery and Community Organizations.**
- 10. 2-28-2011 “Scoping Comments Proposed Ten Year North to South Water Transfer of CVP and Non CVP Water Using State Water Project (SWP) and Central Valley Water Project (CVP) Facilities” To Brad Hubbard, USBR et. al from 10 Conservation, Fishery and Community Organizations.**

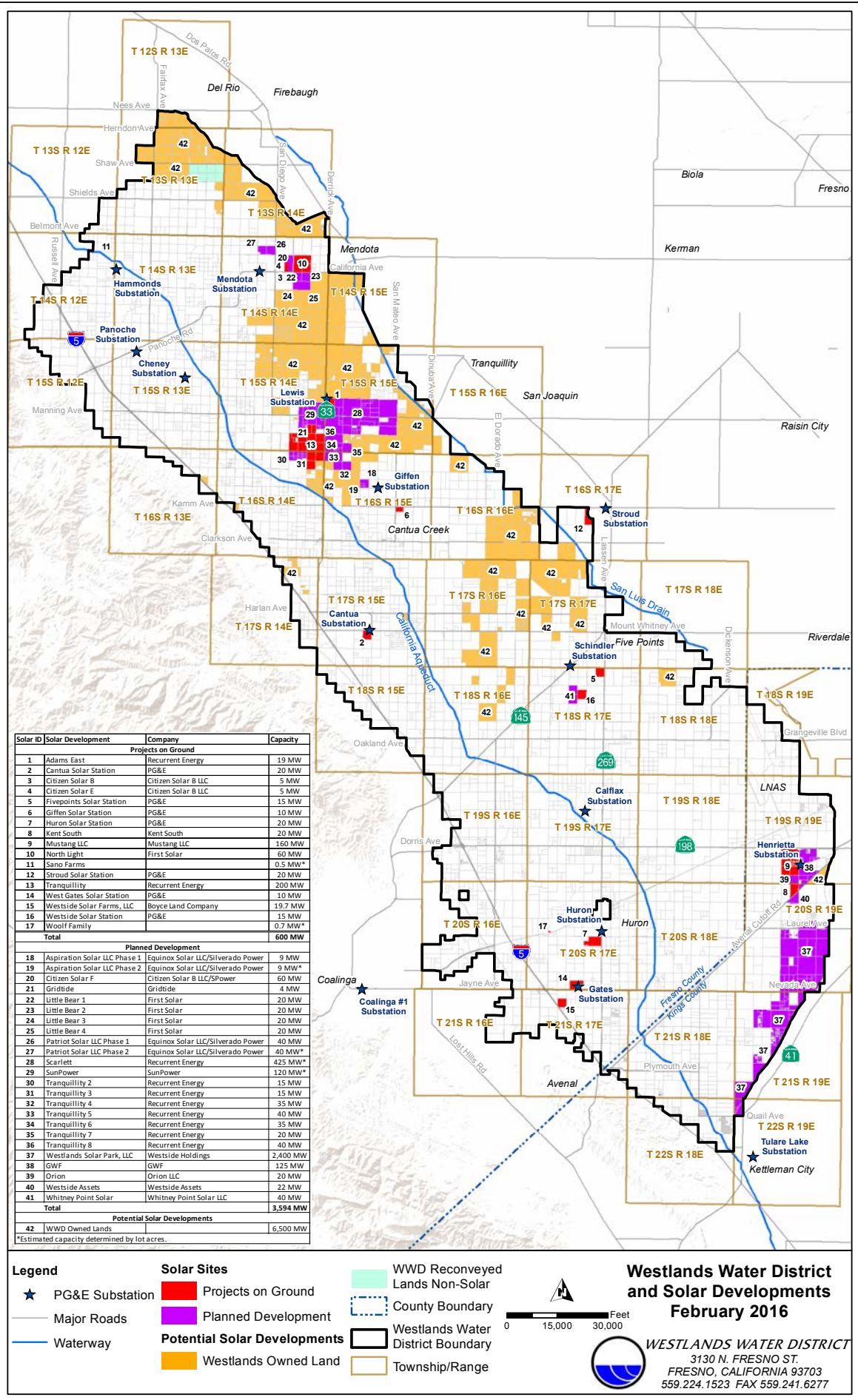
11. 5-5-11 “Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities” To Deputy Interior Secretary Hayes from 16 Conservation, Fishery and Community Organizations.
12. 8-11-2011 “Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project.” To Michael C. S. Eacock (Chris), Donald R. Glaser, USBR and Ren Lohofener USFWS et. al from 7 Conservation, Fishery and Community Organizations.
13. 10-17-2011 “Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District’s San Joaquin River Improvement Project (SJRIP) FONSI-10-030” To Rain Healer, USBR from 8 Conservation, Fishery and Community Organizations.
14. 11-15-2011 “Full Environmental Impact Statement Needed for San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District [FONSI-10-030]” To Donald Glaser from 13 Conservation, Fishery and Community Organizations.
15. 11-16-2011 Notice Inviting Public Comment on BDCP MOA to Hon. Kenneth Salazar, Secretary John Laird, Secretary from 190 Conservation, Fishery and Community Organizations.
16. 1-5-2012 “Comments on Draft EA/FONSI for Three Delta Division and Five San Luis Unit Water Service interim Renewal Contracts 2012-2014” To Rain Healer from Stephen Volker on behalf of 4 Tribal, Conservation, Fishery and Community Groups.
17. 1-18-2012 “Comments on Draft EA/FONSI for Oro Loma Water District Partial Assignment of Central Valley Project Water to Westlands Water District FONSI-11-092” To Rain Healer, USBR from 12 Conservation, Fishery and Community Organizations.
18. 1-20-2012 “Delta Division, San Luis Unite and Cross Valley CVP Interim renewal contracts—Comments of the Hoopa Valley Tribe on draft EA-11-049 and EA-11011 and FONSI 11-049 and FONSI 11-011” To Rain Healer, USBR from Leonard E. Masten Jr. Chariman.
19. 3-26-2012 “Comments on CVP Interim Renewal Contracts for three Delta Division and five San Luis Unit interim water service renewal contracts for: Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District (five contracts) 2012 to 2014 and Environmental Documents.” To Hon. David J. Hayes, Donald R. Glaser, Michael L. Connor, Hilary Tompkins and Michael Jackson from PCFFA et. al [13 Conservation, Fishery and Community Organizations.]
20. 11- 1-2013 EWC et. al to Karen Hall Bureau of Reclamation Central Valley Project Interim Contract Renewals: Pajaro Valley Water Management Agency, Westlands Water District Distribution District No. 1, and Santa Clara Valley Water District14-06-200-3365A-IR14-B Tracy, City of (The West Side)7-07-20-W0045-IR14-B Tracy, City of (Banta-Carbona)14-06-200-4305A-IR14-B Westlands Water District Distribution District 1 (Widren)14-06-200-8018-IR14-B Westlands Water District Distribution District 1 (Centinella)7-07-20-W0055-IR14-B Westlands Water District Distribution District 1 (Broadview)14-06-200-8092-IR14

**Westlands Water District Distribution District 2 (Mercy Springs)14-06-200-3365A-IR14-C
Westlands Water District 14-06-200-495A-IR4 Tracy, City of 14-06-200-7858A-IR1**

- 21. March 29, 2014, "Subject: Final Record of Decision and Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water. Rain Emerson Bureau of Reclamation.**
- 22. January 9, 2014, "The EA for Westlands Water District Central Valley Project Interim Contract Renewals listed below & the Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) Number EA-13-023, *Central Valley Project Interim Renewal Contracts for Westlands Water District, Santa Clara Valley Water District, and Pajaro Valley Water Management Agency 2014 – 2016*. Rain Emerson Bureau of Reclamation."**
- 23. January 13, 2014, "The Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim Contract Renewals" Rain Emerson. Bureau of Reclamation.**
- 24. February 13, 2014 "Coalition Of Environmental, Environmental Justice, Tribal and Fishing Organizations' Comments In Opposition To The Grassland Drainer Proposal To Discharge Selenium And Other Pollutants To Broadview Water District Lands—Another Kesterson In The Making". EWC letter to Sally Jewell, Secretary of Interior; Rod McInnis NMFS Regional Administrator & Jared Blumenfeld, Regional IX Administrator**
- 25. April 2, 2014, PCL et. al. Subject: "Final Record of Decision and Final Environmental Assessment [FEA] for Westlands Water District et. al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water" Rain Emerson Bureau of Reclamation**
- 26. June 4, 2014, Institute for Fisheries Resources (IFR COALITION) Comments on Proposed CVP Cost Allocation Methodology: A recipe for continuing deficits and failure to repay taxpayers, Brooke Miller-Levy Project Manager, Bureau of Reclamation.**
- 27. February 6, 2017, Environmental Advocates et. al. Re: Comments EA-17-021, FONSI-15-023A & Renewal of Six Interim Contracts for Westlands, Santa Clara et. al. Brenda Burman Commissioner of Reclamation David Murillo Mid-Pacific Regional Director Michael Jackson, Area Manager, SCC-100 South-Central California Area Office, Paul Souza Pacific Southwest Region Regional Director USFWS.**
- 28. January 12, 2018, PCL et. al. Re: Interim Renewal Contract for Central Valley Project Water Contracts for Westlands Water District (EA17-021& FONSI-15-023A1)--. Brenda Burman, Commissioner Bureau of Reclamation; Quentin Branch, Kate Connor Bureau of Reclamation, David Murillo, Regional Director Mid-Pacific Regional Office.**
- 29. January 16, 2018, Steve Volker, "Comments of PCFFA, SFCBOA, IFR and NCRA on 16 Central Valley Project Interim Renewal Contracts for Cross Valley Canal, Delta Division and American River Division" Brenda Burman, Commissioner Bureau of Reclamation; Quentin Branch, Kate Connor Bureau of Reclamation, David Murillo, Regional Director Mid-Pacific Regional Office.**

MAPS:

1. **Solar Industrial Map Westlands Water District Solar Development March 16, 2016,**
Source: http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI02/TN210903_20160330T140735_Daniel_Kim_Comments_WSP_comments_to_RETI_20_plenary_group_meeti.pdf
2. **Map of Lands Retired Lands in Westlands S.E. Phillips 2006** [Source:Phillips, S.E. (2006). In Progress Draft Environmental Baseline of the San Luis Unit Fresno, Kings and Merced Counties, California. California State University-Stanislaus, Endangered Species Recovery Program, Fresno, CA, 22 pp.]
3. **USBR In Valley Drained Impaired Lands 310,000 Acres [2004] Released 2006**
4. **Westlands' Map of Peck & District Retired Lands 2008**
5. **San Luis Service Area Map Authorized by Congress from the 1956 Feasibility Study-- Plate I Central Valley West San Joaquin Project -Ultimate Plan Div. San Luis Unit-Calif. Service Area 805-20814. pg 36.**



Solar ID	Solar Development	Company	Capacity
Projects on Ground			
1	Adams East	Recurrent Energy	19 MW
2	Cantua Solar Station	PG&E	20 MW
3	Citizen Solar B	Citizen Solar B LLC	5 MW
4	Citizen Solar E	Citizen Solar B LLC	5 MW
5	Fivepoints Solar Station	PG&E	15 MW
6	Giffen Solar Station	PG&E	10 MW
7	Huron Solar Station	PG&E	20 MW
8	Kent South	Kent South	20 MW
9	Mustang LLC	Mustang LLC	160 MW
10	North Light	First Solar	60 MW
11	Sano Farms		0.5 MW*
12	Stroud Solar Station	PG&E	20 MW
13	Tranquillity	Recurrent Energy	200 MW
14	West Gates Solar Station	PG&E	10 MW
15	Westside Solar Farms, LLC	Boyce Land Company	19.7 MW
16	Westside Solar Station	PG&E	15 MW
17	Woolf Family		0.7 MW*
Total			600 MW
Planned Development			
18	Aspiration Solar LLC Phase 1	Equinox Solar LLC/Silverado Power	9 MW
19	Aspiration Solar LLC Phase 2	Equinox Solar LLC/Silverado Power	9 MW*
20	Citizen Solar F	Citizen Solar B LLC/SPower	4 MW
21	Gridside	Gridside	4 MW
22	Little Bear 1	First Solar	20 MW
23	Little Bear 2	First Solar	20 MW
24	Little Bear 3	First Solar	20 MW
25	Little Bear 4	First Solar	20 MW
26	Patriot Solar LLC Phase 1	Equinox Solar LLC/Silverado Power	40 MW
27	Patriot Solar LLC Phase 2	Equinox Solar LLC/Silverado Power	40 MW*
28	Scarlett	Recurrent Energy	425 MW*
29	SunPower	SunPower	320 MW*
30	Tranquillity 2	Recurrent Energy	15 MW
31	Tranquillity 3	Recurrent Energy	15 MW
32	Tranquillity 4	Recurrent Energy	35 MW
33	Tranquillity 5	Recurrent Energy	40 MW
34	Tranquillity 6	Recurrent Energy	35 MW
35	Tranquillity 7	Recurrent Energy	20 MW
36	Tranquillity 8	Recurrent Energy	40 MW
37	Westlands Solar Park, LLC	Westside Holdings	2,400 MW
38	GWFF	GWFF	125 MW
39	Orion	Orion LLC	20 MW
40	Westside Assets	Westside Assets	22 MW
41	Whitney Point Solar	Whitney Point Solar LLC	40 MW
Total			3,594 MW
Potential Solar Developments			
42	WWD Owned Lands		6,500 MW

- Legend**
- ★ PG&E Substation
 - Major Roads
 - Waterway
 - Projects on Ground
 - Planned Development
 - Potential Solar Developments
 - Westlands Owned Land
 - WWD Reconveyed Lands Non-Solar
 - County Boundary
 - Westlands Water District Boundary
 - Township/Range

Coalinga
Coalinga #1 Substation

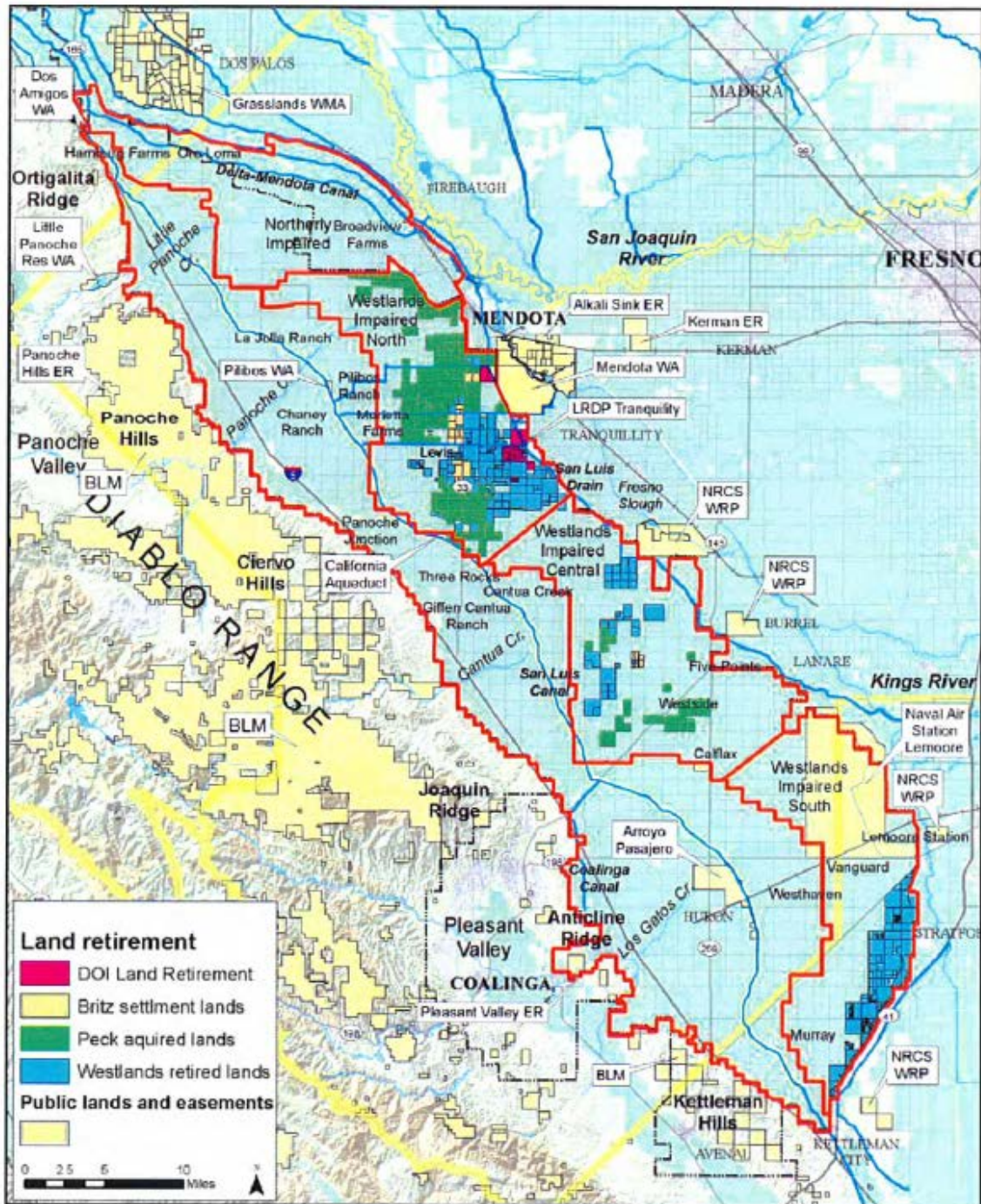
Scale: 0, 15,000, 30,000 Feet

Westlands Water District and Solar Developments
February 2016

WESTLANDS WATER DISTRICT
 3130 N. FRESNO ST.
 FRESNO, CALIFORNIA 93703
 559.224.1523 FAX 559.241.6277

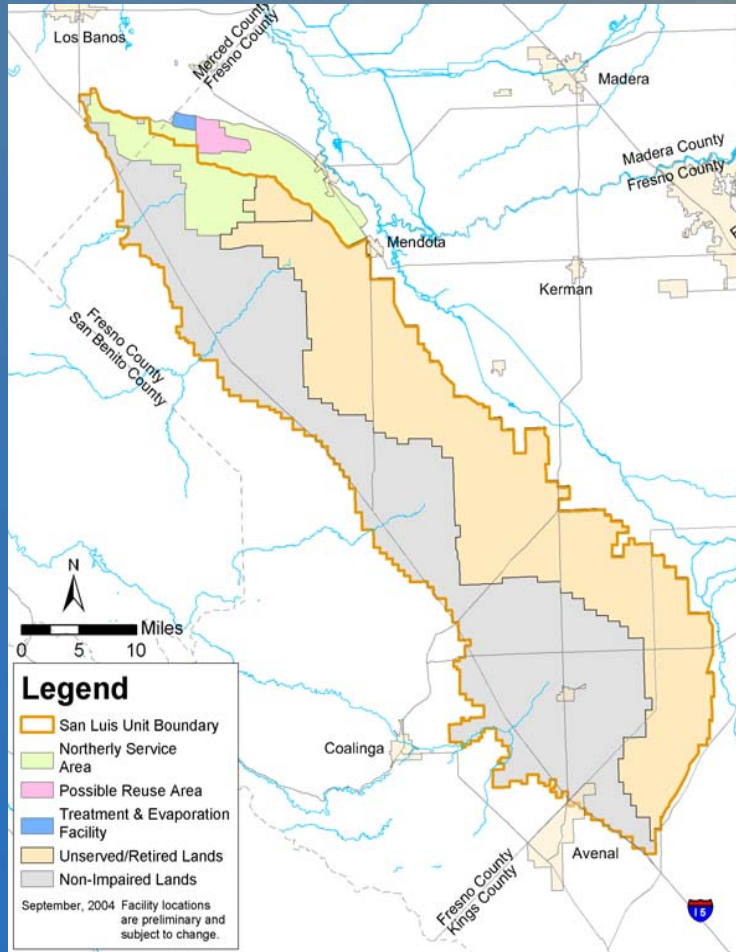
C:\WWD - Data\2016-02-20\Westlands Water District Solar Developments\2016-02-20-01-01-17.mxd
 Date: 2/23/2016

Map of retired lands in Westlands Water District Source: Westside Resource Conservation District



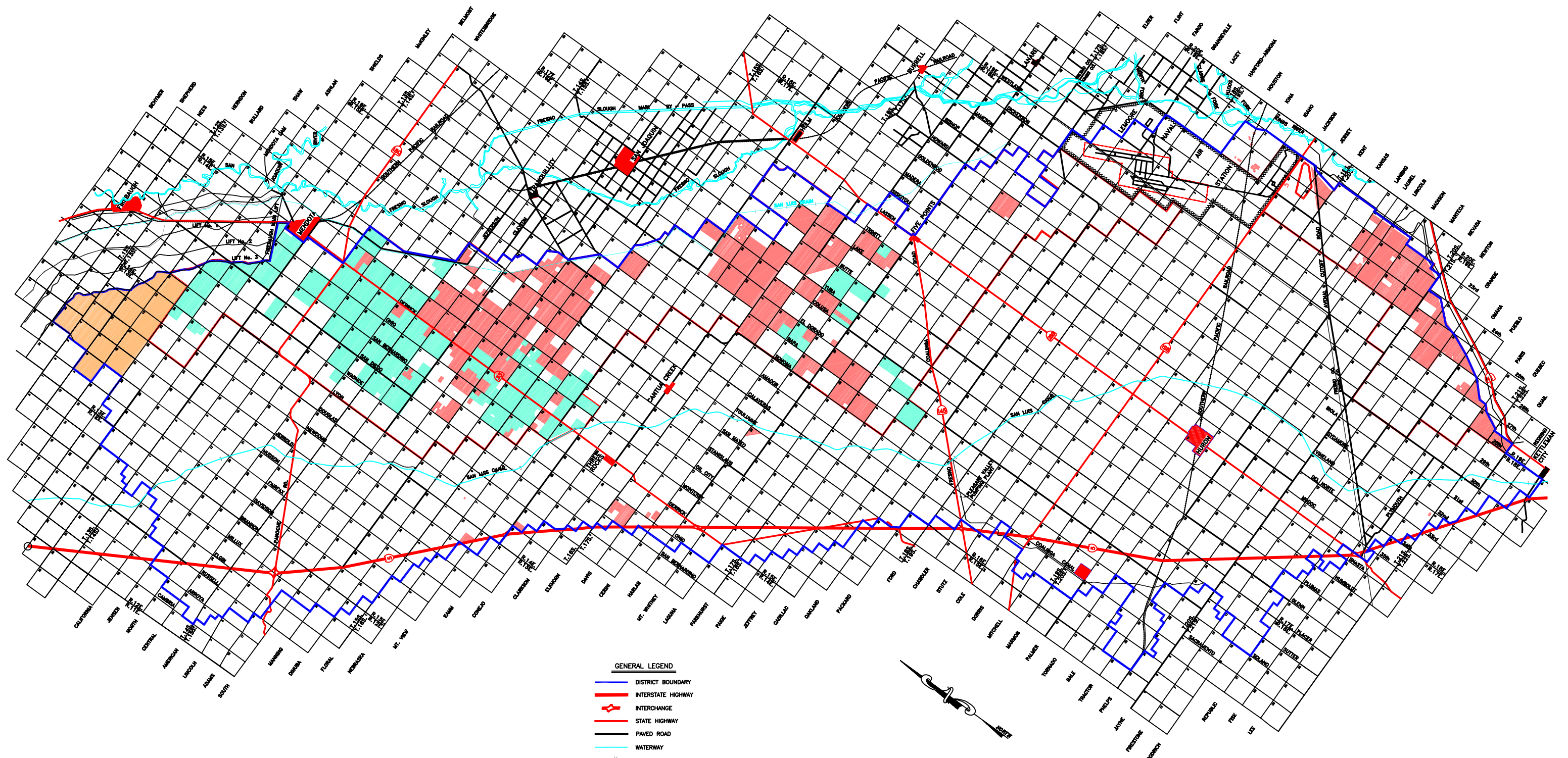
Map of 77,130 acres of retired land in Westlands Water District, including 33,864 acres from the Sumner Peck settlement, 3,100 acres from the Britz settlement, 38,022 acres acquired by Westlands as part of the Saguospe settlement, and 2,144 acres retired through the CVPIA land retirement program. From S.E. Phillips, Draft Environmental Baseline of the San Luis Unit, Fresno, Kings, and Merced Counties.

In-Valley Drainage-Impaired Alternative

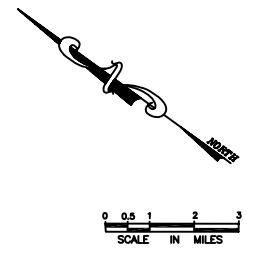


- Retire all drainage impaired lands in Westlands
- 310,000 acres retired

RECLAMATION



- GENERAL LEGEND**
- DISTRICT BOUNDARY
 - INTERSTATE HIGHWAY
 - ⬢ INTERCHANGE
 - STATE HIGHWAY
 - PAVED ROAD
 - WATERWAY
 - BRIDGE
 - CHECK
 - NOT IN DISTRICT
 - DISTRICT ACQUIRED UNDER BRITZ/PECK SETTLEMENT - 36,000 ACRES
 - DISTRICT OWNED SAGOUSPE SETTLEMENT - 44,000 ACRES AS OF 2/14/08
 - 200K LAND RETIREMENT BOUNDARY
 - DISTRICT ACQUIRED BROADVIEW WATER DISTRICT - 9,300 ACRES

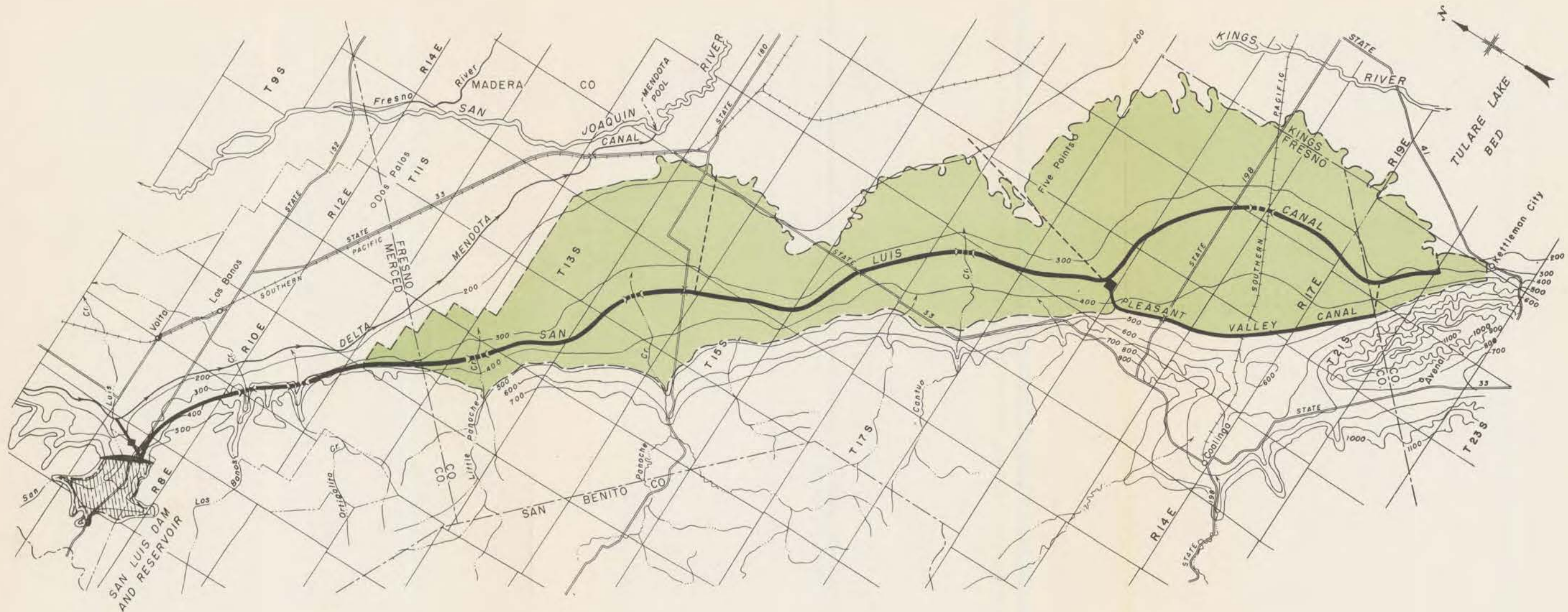


WESTLANDS WATER DISTRICT
 3130 N. FRESNO ST. FRESNO, CALIFORNIA 93703
 559.224.1523 Fax 559.241.6277

LOCATION MAP
**PECK AND DISTRICT
 ACQUIRED LANDS**

DWG:\ARCHIVED\2005-W-0012.DWG				
7	2/14/08	JJR		
NUMBER	DATE	DRAWN	CHECKED	APPROVED
REVISION				

DRAWN	J. RANGEL	APPROVED	
CHECKED			
DATE	3/10/05	DRAWING No	2005-W-0012A

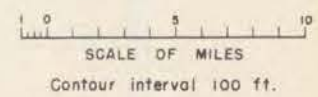


UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

CENTRAL VALLEY PROJECT-ULTIMATE PLAN
WEST SAN JOAQUIN DIV.-SAN LUIS UNIT-CALIF.

SERVICE AREA

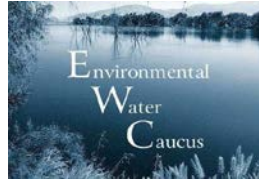
- EXPLANATION**
- Service area
 - Major pump lift
 - Canal
 - Siphon



NOTE: The western service area boundary is fixed by available water supply. Present location is at about El. 485.



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS



CA Save Our Streams Council



December 12, 2019

Mr. Colin Davis
U.S. Bureau of Reclamation
South-Central California Area Office
1243 N Street
Fresno, CA 93721

RE: Comments on Draft Environmental Assessment Cross-Valley Contractors Interim
Renewal Contracts (Draft EA-19-044¹)--An abuse of discretion and failure to comply with federal law.

Dear Mr. Davis,

¹ https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41281

Draft EA for Cross Valley interim water service contracts & the last Cross Valley contractors' draft interim contracts posted on the USBR.gov site is for 2016: https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2016-int-cts/index.html

The undersigned respectfully submit the following comments regarding the above referenced Draft Environmental Assessment (DEA) for the renewal of the Cross-Valley Contractors water service contract. We urge a full environmental impact analysis be conducted. We include by reference the documents previously submitted disclosing the environmental impacts associated with this type of serial “temporary” interim contract renewal included in Exhibit A and adopted here by reference.

Federal law and regulation *'require at least thirty (30) calendar days before making the decision on whether, and if so how, to proceed with a proposed action, the Responsible Official must make the EA and preliminary FONSI available for review and comment to the interested federal agencies, state and local governments, federally-recognized Indian tribes and the affected public. The Responsible Official must respond to any substantive comments received and finalize the EA and FONSI before making a decision on the proposed action.'*² Failure to provide these essential documents for public review prevents comment and does not comply with the disclosure and transparency required by the National Environmental Policy Act. We note that no draft FONSI was included for review during the public comment period for these interim contracts.

Broad Impacts from both CVP and SWP Project Water Deliveries Renewed Under the Proposed Project Have Not Been Disclosed.

Over two decades of interim contract renewals, USBR has used consecutive cookie cutter Environmental Assessments to thwart the Congressional intent and letter of the law, which requires tiered pricing for this taxpayer subsidized water and disclosure in a clear, complete, and straightforward manner for decision makers and the public of the full environmental impacts of this federal water delivery under Central Valley Water Project Contracts.³ Using two major federal and state water projects—both the State Water Project and Federal Central Valley Project –along with local water delivery projects and four counties—Fresno, Tulare, Kings, and Kern with source water impacts from Trinity, Sacramento, Placer, San Joaquin, Merced, and Stanislaus counties, just to name a few, this “new” DEA proclaims that renewal of up to 128,300 acre feet of exports from the Delta will have minor impacts to biological resources (DEA @pdf pg 32).² Without analysis or data, the DEA asserts that these eight interim renewal contracts and

² 40 CFR § 6.203 - Public participation.

³ A contract that binds the United States to renewal of interim contracts is contrary to Section 3404 (c) of the CVPIA. See also previous NEPA documents that along with this document fail utterly to allow the reader to follow the water to the specific place of use and specific user and to understand specific impacts of the delivered water.

proposed Article 5 exchanges will not have no more than a “minor” impacts to the environment.⁴ Further, it is claimed, there is no need for consultation the National Marine and Fishery Service and cites the CVP/SWP Coordinated Operations consultation (@ pg 42).⁵

We understand, according the DEA, @ pdf pg 42 that “*Reclamation will consult with USFWS on the Proposed Action. This EA will not be finalized until consultation is complete.*” Some of the Cross Valley and Article 5 Exchange service areas include designated critical habitat for federally listed species. As denoted in the DEA (@ pdf pg 25), Critical habitat exists in the affected environment for the following species: Buena Vista Lake shrew, California condor, California tiger salamander, Hoover’s spurge, San Joaquin Valley Orcutt grass, succulent owl’s-clover, vernal pool fairy shrimp, and vernal pool tadpole shrimp. The proposed actions could cause direct adverse modification to critical habitat, which will be compounded by the interrelated export of substitute water from the Delta to the Exchange Contractors.⁶

Finally, the DEA brushes aside impacts to the areas from where the water is taken, where it is delivered, land fallowing, and contract assignments as not needing analysis to reach an informed decision regarding environmental impacts. [DEA @ pdf pg 14] No analysis or data regarding impacts to air quality, visual resources, recreation resources, and global climate change are provided, and all are deemed by fiat to not be significant or necessary to analyze.

Failure to Consider a Full Range of Alternatives

Failing to consider a full range of alternatives, the DEA compares the project to itself. The only alternative considered, besides the proposed action, was the no action alternative. The no action alternative is briefly discussed and dismissed out of hand (DEA @ pdf pgs 15-16] The DEA incorrectly assumes that Reclamation is bound by law to renew these contracts. Reduction of contract water quantities due to delivery constraints on the CVP system was eliminated from the analysis of the eight IRCs. The DEA proposes to renew full contract quantities for a period of 2 years. These contract quantities are justified by outdated, inaccurate data, and bias that renders the Water Needs Assessment

⁴ “Up to 128,300 acre-feet (AF) per year (AF/y) of the Cross Valley Contractors’ contractual CVP water supply from the Delta would be allowed to be transferred under the exchange arrangements for Friant Division CVP supplies and other sources (other sources of water include rivers, streams, creeks, previously banked surface water, and State Water Project [SWP] water). The Cross Valley Contractors and potential exchange partners (CVP contractors and non-CVP contractors) are all located within Fresno, Tulare, Kings, and Kern counties. This EA covers the broadest flexibility for Article 5 exchange arrangements known at this time.” [DEA @pdf pg 13]. All of the Cross Valley Contractors are currently on their seventeenth interim renewal contract. The Proposed Action would be their eighteenth. The Proposed Action also includes Reclamation’s transfer approvals associated with the Cross Valley Contractors exchange arrangements with individually proposed exchange partners for the same time period as the interim renewal contracts for up to the full Cross Valley Contractors’ CVP contract supply (up to 128,300 AF/y). In addition, the Proposed Action would include the continued transfers associated with the historical exchanges between the Cross Valley Contractors and Arvin-Edison Water Storage District (Arvin-Edison). [DEA @pdf pg17].

⁵ DEA @pdf pg 42: “Reclamation has determined that there would be no effects to species and critical habitats for the Proposed Action under the jurisdiction of NMFS that have not already been addressed.”

⁶ NRDC v. Rodgers, No. S-88-1658 LKK, Order at 19-20 (May 31, 1995).

(WNA) insufficient in addressing shortcomings identified by the 9th Circuit Court⁷. Further, the 9th Circuit Court ruled in their July 25, 2016 Amended Memorandum that “Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion, and the agency did not adequately explain why it eliminated this alternative from detailed study... On remand, the district court shall direct Reclamation consider such an alternative in any future EA for an interim contract renewal.”⁸

Additionally, proposed contract renewals suggest that there are no environmental impacts from issuing water contracts that cannot be delivered or that there are no impacts from delivering these unsustainable supplies in wetter years. The DEA asserts:

“The eight interim renewal contracts contain provisions that allow for adjustments resulting from court decisions, new laws, and from changes in regulatory requirements imposed through re-consultations. Accordingly, to the extent that additional restrictions are imposed on CVP operations to protect threatened or endangered species, those restrictions would be implemented in the administration of the eight interim renewal contracts considered in this EA, to the extent allowed by law. As a result, by their express terms the interim renewal contracts analyzed herein would conform to any applicable requirements imposed under the federal ESA or other applicable environmental laws.” [DEA @pdf pg 17]

And yet recent data suggest otherwise. Water quality standards are not being met, temperatures are being exceeded, pulse flows are not being provided and species are in fact facing deteriorating habitat and extirpation. [See exhibit C] The DEA fails to recognize and consider that the Cross Valley water from Friant can be conveyed down the San Joaquin River and recirculated to a Cross Valley contractor or an exchange via the Mendota Pool or the Delta, and analyze the potential environmental benefits of this alternative. Further Reclamation’s absurdly limited range of alternatives in the DEA are also defective because the approach to the “needs analysis” fails to adequately address alternative needs for the water including environmental needs such as restoration of the Delta and the San Joaquin River and CVPIA water obligations including water for fisheries restoration and improvement as established in CVPIA Sections 3406 b(2) and b(3) and for refuge water management needs as established in 3406(d).⁹

Failure to Comply with the Endangered Species Act (16 U.S.C. § 1531 et seq.)

The DEA assumed that “Reclamation would continue to comply with commitments made or requirements imposed by applicable environmental documents, such as existing biological opinions including any obligations imposed on Reclamation resulting from re-consultations.” [@ pdf pg 17] Unfortunately, the existing Biological Opinions cited in the DEA have not been deemed adequate and species remain threatened with extirpation. The Bureau’s reliance on the USFWS opinion, in this circumstance, does not discharge its section 7(a)(2) procedural obligation to consult with the USFWS or

⁷ See Appendix B and C of the Draft EA, Central Valley Project (CVP) Water Needs Assessments (WNA) Purpose and Methodology, and Westlands WD WNA.

⁸ See: <https://cdn.ca9.uscourts.gov/datastore/memoranda/2016/07/25/14-15514.pdf>

⁹ <https://www.usbr.gov/mp/cvpia/docs/public-law-102-575.pdf>

its substantive obligation to ensure that its action would not jeopardize, or cause adverse modification to the critical habitat of, threatened or endangered species.¹⁰

During the course of its consultation on CVP contract renewals, USFWS was required to “[e]valuate the effects of the [contract renewals] on the listed species.” 50 C.F.R. § 402.14(g)(3). The biological opinion that USFWS produced after consultation was similarly required to include “[t]he Service’s opinion on whether the action is likely to jeopardize the continued existence of a listed species.” *Id.* at § 402.14(h)(3). The DEA relies on the USFWS Friant Biological Opinion which did not do so. The Opinion lists 42 species that were ostensibly considered, and then concludes that the long-term renewal of contracts is not likely to jeopardize 36 of these species. See USFWS Friant Biological Opinion at 1-5 to 1-7, 5-1. The biological opinion states no specific conclusion as to the effect of the contract renewals on the remaining six species, however. See *id.* These six other species include two, the Mountain Yellow-legged Frog and the Yosemite Toad, that were at that time candidate species; subsequently, the Mountain Yellow-legged Frog was listed as endangered. 67 Fed. Reg. 44382 (July 2, 2002). The other four species as to which FWS reached no conclusion are: the riparian brush rabbit; the riparian woodrat, the Little Kern golden trout; and the longhorn fairy shrimp. USFWS Friant Biological Opinion at 1-6, 3-30 to 3-31, 3-57. The Biological Opinion includes discussion of possible negative effects on each of these species. Yet the Opinion simply omits these species from its list of species as to which the contract renewals purportedly pose no jeopardy. The Opinion also contains no analysis demonstrating that the contract renewals will not cause jeopardy to these species or result in adverse modification of their critical habitat. Reliance on this Biological Opinion to renew these proposed contracts does not meet the requirements of the law. The Bureau has failed to consult and conclude consultation with the USFWS on several listed species. In fact there is no evidence from the documents listed in the DEA that the Bureau has consulted on these operations and impacts from the contract renewals and exchanges.¹¹

Typical operation and maintenance operations impacting endangered species are not mentioned or considered. Nor are these activities considered in the cited Biological Opinions. Among the maintenance activities not considered by the USFWS and NMFS in the Friant Biological Opinions are periodic applications of toxic aquatic pesticides to channels, gates, weirs, levees, and other water delivery facilities. See generally *Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526, 528-29 (9th Cir. 2001). These pollutants may, in some circumstances, reach stretches of the San Joaquin River and/or the San Francisco Bay-Delta that provide habitat for winter-run Chinook salmon, spring-run Chinook salmon, Central Valley steelhead, Delta smelt, and Sacramento splittail. See generally USFWS & NMFS Biological Opinion for the California Toxics Rule (March 24, 2000) (file no. 1-1-98-F-21). The referenced USFWS issued a BO (1-1-04-F-0368), dated February 17, 2005, for routine operations and maintenance (O&M) activities on SCCAO lands in San Joaquin, Stanislaus, Merced, Madera, Fresno, Santa Clara, San Benito and Contra Costa counties (USFWS, 2005) referenced DEA @ pdf pg 31 is insufficient and much of the information and monitoring required by that Opinion has never been provided and certainly is not provided in this DEA. Specifically Reclamation is required to provide:

¹⁰ <https://www.animallaw.info/case/natural-resources-defense-council-v-rodgers>

¹¹ “However, transfers and/or exchanges involving Friant Division or CV contractors were not addressed by the LTCR Opinion. In addition, the LTCR Opinion did not address some of the species and critical habitats covered in this EA, because their listings/designations occurred after the BO was issued. These species and critical habitats are: the vernal pool fairy shrimp, the vernal pool tadpole shrimp, all critical habitats for vernal pool species, and critical habitat for the California tiger salamander.”

- An update of the SCCAO O&M Plan every two to five years. Additionally “*Reclamation and the Service will meet every five years to review the effectiveness of avoidance and minimization measures, ...and reinitiate consultation as appropriate on newly listed species and designated critical habitat.*” [BO @ pg.7] No such plan is provided in the DEA nor has one been developed to the best of the signees knowledge. Within 2 years of the issuance of the BO, Reclamation “shall develop a final Integrated Pest Management Plan.” (BO @ pg 98) No such plan is provided in the DEA nor has one been developed to the best of the signees knowledge.
- Annually “*Reclamation must provide the Service with reports to describe the progress of implementation of all the commitments in the Conservation Measures and Terms and Conditions sections of this biological and conference opinion. The first report is due January 31, the first year after the issuance of this biological and conference opinion, and bi-annually thereafter.*” [BO @pg 99] No such report information is provided in the DEA nor has one been developed to the best of the signees knowledge.

The USFWS in their consultation of Cross Valley interim contract renewals in 2014, noted that Reclamation had approved a number of CVP water contract assignments without notifying the USFWS. As is noted in the consultation (@ pg 3)¹²:

The CVPIA BiOp included a commitment regarding coordination with the Service on CVP Water Assignments. As is noted on page 2-40 of the CVPIA BiOp, "Reclamation will provide information related to proposed new water assignments of Project water to the Service's SFWO Endangered Species Division prior to execution of the assignment." And further on page 2-70, item I. 8., stipulating that Reclamation will establish a process that will provide necessary information to the Service's SFWO Endangered Species Division in situations where a determination of "no affect" has been made, sufficiently in advance, to enable the Service's review.

Since the last round of CVC IRCs, Reclamation has executed CVP contract assignments for TriValley Water District (WD), Kern Tulare WD, and Hills Valley Irrigation District (ID) from Friant Division contractors. The Service was notified by Reclamation regarding the Kern Tulare WD contract assignment and the Service provided comments to Reclamation on the Draft EA for that water assignment on October 11, 2011. The Friant BiOp identified over 3,000 acres of land within Kern-Tulare Water District with moderate to high habitat value to listed species. The Service commented that it would be helpful to know what the current disposition of those land use types are in the district, and whether this water would be used on any of these lands that were not in cultivation at the time the Friant BiOp was completed. No mapping data was provided to the Service for the Kern Tulare WD water assignment.

The Service has no record of being notified for the remaining 3 water assignments involving Tri-Valley WD and Hills Valley ID.

1. An assignment of 400 acre-feet of Exeter ID's CVP Friant Division Class 1 water to Tri-Valley WD.

¹² See http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8831

2. An assignment of 250 acre-feet of Lewis Creek WD's CVP Friant Division Class 1 water to Hills Valley ID.
3. An assignment of 1,000 acre-feet of Porterville ID's CVP Friant Division Class 1 water to Hills Valley ID.

Excess water exports from the Delta have led to over 52 species being listed as threatened or endangered. The evidence before the Bureau and the Services demonstrates that these diversions from the Delta to the Cross Valley contractors may appreciably reduce the likelihood of survival and recovery of at least three listed species under NMFS jurisdiction (Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead) and at least two listed species of fish under USFWS jurisdiction (the Delta smelt and Sacramento splittail). The evidence also demonstrates that these Delta diversions do adversely modify the critical habitat for these species. Continued operation of the CVP and SWP is likely to jeopardize the continued existence of endangered species in the Delta, and stormwater runoff and subsurface agricultural drainage from GBP and nearby CVP-irrigated lands contaminates the San Joaquin River and hence the Delta with selenium and other toxic constituents. See testimony from Restore the Delta on Salinity and Selenium Science and Modeling for the Bay/Delta Estuary.¹³

Reclamation goes on to determine in the DEA without analysis or information that the “*Effects to Delta species and critical habitats, such as the Delta smelt, salmonids, and green sturgeon which are the result of CVP operations, are addressed in the CVP/SWP Coordinated Operations consultation. As such, Reclamation has determined that there would be no effects to species and critical habitats for the Proposed Action under the jurisdiction of NMFS that have not already been addressed.*” [DEA @pdf pg 42] This claim is not supported by fact. The 2019 Biological Opinions identified in the document has been challenged in court¹⁴, and the specific impacts of the tiered actions have not been disclosed or analyzed. Nor have the impacts from operational changes. The exchanges when added to the Article 55 provision in the SWP contracts could result in more frequency of DWR pumping and conveying the 128,300 af/y of water. This fails to consider violations of temperature, salinity and flow requirements of D-1641. There have been repeated violations of the Clean Water Act standards¹⁵ and Endangered Species Act requirements under the Reasonable and Prudent Alternatives. CVP operations and the exports of water pursuant to this interim contract have consistently violated the Coordinated Operation Act of 1986 requiring adherence to Delta Water Quality Standards contained in D-1485 and subsequent water quality standards. [Also see Exhibit C]

¹³ Testimony on Recent Salinity and Selenium Science and Modeling for the Bay/Delta Estuary Submitted by Tim Stroshane Senior Research Associate California Water Impact Network (CWIN) August 17, 2012 https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/RestoretheDelta/part2/RTD_161.pdf

¹⁴ See: <http://www.courthousenews.com/wp-content/uploads/2019/12/Bay-Delta-Complaint.pdf>

¹⁵ Of particular note, the SWRCB, referencing WR Order 90-05, stated in WR 92-02 at page 9: *The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery.* SWRCB warned against USBR decisions to maximize water deliveries in the initial years of a drought and failing to maintain sufficient carryover storage to protect fisheries and public trust resources.

Land Use Effects of the Interim Water Service Contract have not been Adequately Addressed in the Draft EA

The DEA (@ pdf pg 18) includes an environmental protection measure for biological resources, “No CVP water would be applied to native lands or land untilled for three consecutive years or more without additional environmental analysis and approval.” Yet, no land use data analysis is provided in the DEA to ensure compliance with this measure. The DEA also does not identify a mechanism that Reclamation would use to confirm compliance with this measure. Lastly, the DEA fails to identify what the consequences of non-compliance would be.

Reclamation goes on to determine in the DEA without analysis or information that the “*Under the Proposed Action, only minor indirect impacts would occur to biological resources. The species detailed in the Affected Environment may be subject to minor impacts due to routine farming activities. Critical habitat and other native lands would not be affected due to restrictions on land use, or because in some cases, the critical habitat lies outside the Proposed Action area.*” [@ pdf pg 32]

Although the DEA professes, “*The Proposed Action would meet environmental commitments in existence as a result of existing biological opinions, including those for the CVPIA*”, none of the monitoring or mapping required in the Biological Opinion on Long Term Contract renewal of Friant and Cross Valley Unit Contracts January 19, 2001, File Number 1-1-01-F-0027 (Friant BO) is provided in this DEA. It is critically important to understand and evaluate the effectiveness and effects of the 20 years of water deliveries that have occurred. USFWS. See pages 2-31 to 2-32 of Friant BO:

*“Monitoring will be used to assess the condition and impacts of Reclamation actions on listed species. Reclamation and the Service are actively developing a monitoring strategy based on the comprehensive mapping program. **The land cover database for year 2000, described in Phase III above, will be revisited every 5 years for monitoring purposes.**”... “Additionally, Reclamation and the Service **commit to revisit and update the land cover database for year 2000 every 5 years for monitoring and trends analysis purposes.**” [emphasis added.]*

“The Land Use Monitoring and Reporting Program will be implemented immediately to test and track, for the purpose of validating over the life of the project, the assumptions made in this biological opinion that the baselines of the species on Table 1.1 are stable or increasing.

*Monitoring will be used to assess the condition and impacts of Reclamation actions on listed species. Reclamation and the Service are actively developing a monitoring strategy based on the comprehensive mapping program. **The land cover database for year 2000, described in Phase III above, will be revisited every 5 years for monitoring purposes.**” [emphasis added]*

The Friant BO in Table 4.1 identified nearly 100,000 acres of land within the Friant and Cross Valley Service Areas that provide “Moderate to High Habitat Value” [an attached to these comments as Exhibit B]. Reclamation’s failure to track the fate of these lands in the current DEA is inexplicable.

In February 2014 the USFWS determined in a consultation on Cross Valley interim contract renewals that Reclamation and Cross Valley interim contractors had failed to abide by monitoring and mapping required and concluded that without consistent land use classification, loss of habitat cannot be reliably

tracked. The CVPIA BO included a Comprehensive Mapping and Land Use Monitoring and Reporting Program to test and track, for the purpose of validating over the life of the project, the assumptions made in the CVPIA BO that the baselines of the species in Appendix B are stable or increasing:¹⁶

“In the CVPIA Programmatic biological opinion, dated November 2000 (Service File No. 98-F-0124), Reclamation and the Service committed to develop a Comprehensive Mapping Program to identify remaining natural habitats and cropping patterns within CVP Service Areas and identify any changes within those habitats that have occurred from 1993 to 1999, and then every 5 years thereafter (pages 2-62 and 2-63). Reclamation completed a mapping assessment of habitat changes from 1993 to 1999 and then every 5 years thereafter. The Service is unaware of any recent habitat/crop mapping efforts for CVP Service Areas completed by Reclamation since 2005. Habitat maps provided by Reclamation in the BE for this consultation for Article 5 Exchange contractors date back to 2003. The land use data in those maps was not classified the same as previous datasets for the Comprehensive Mapping Program and varies by County with regard to the date. Additional habitat maps for the CVC contractors provided by Reclamation via e-mail on December 18, 2013 came from various data sources from 2008 and 2010, and the land use classifications are also, not the same as previous datasets for the Comprehensive Mapping Program. Without consistent land use classification, loss of habitat cannot be reliably tracked. No information was provided by Reclamation on habitat trends for listed species (e.g., comparing current extent of listed species habitats with prior datasets).”

The Service referred Reclamation to the language regarding the Comprehensive Mapping Program on page 2-64 of the CVPIA BO:

“Reclamation and the Service will use the best scientific and commercial information available, in conjunction with data from aerial photograph analysis to monitor trends in the environmental baseline for listed species. It is the ultimate goal of Interior to assure that listed species are being recovered. For any species affected by the CVP that are continuing to decline, the Service and Reclamation will immediately assess critical needs for the species and determine whether it is appropriate to expand the Conservation Program or implement other conservation measures. Any native habitat converted to agricultural or municipal/industrial use within the water service area without prior biological surveys, as required by Reclamation prior to the delivery of Reclamation water, will be evaluated to determine what mitigation measures will be required.”

The Service identified a number of information needs for future Cross Valley interim contracts (@ pg 8-9). It appears that none of these information needs have been met for these interim contract renewals in the current DEA:

“In order to facilitate future consultations on CVC IRCs or long term contract renewals (whichever comes first) the Service asks that the following be included with Reclamation's materials provided for initiation of those consultations under the Act:”

Applicant Status or Change to Contract Language

Article 3(e) of the IRC contracts for the CVC IRCs includes the following language with respect to consultation under the Act:

“The Contractor shall comply with requirements applicable to the Contractor in biological opinion(s) prepared as a result of a consultation regarding the execution of this Contract undertaken pursuant to Section 7 of the Endangered Species Act of 1973 (ESA), as amended,

¹⁶ [USFWS ESA consultation on Cross Valley Interim Contracts, 2014-2016, Appendix G of the Final EA available here: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=16785](https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=16785)

that are within the Contractor's legal authority to implement." Because the contract includes language relevant to the Contractors' compliance with the Act in their use of the CVP water authorized by these IRCs, the Service recommends that prior to the next IRC or Long Term Contract Renewal, Reclamation will complete one of the following:

- *ensure Applicant status from the Contractors involved, or,*
- *amend the language in Article 3(e) of the CVP contract to include, "the Contractor shall notify the Service prior to delivery of Project Water to undeveloped land to verify compliance with the Endangered Species Act."*

Comprehensive Mapping Commitment from CVPIA BiOp

Prior to the next IRC or long term contract renewal, whichever comes first, the comprehensive mapping effort from the CVPIA BiOp should be updated in coordination with the Service, using current imagery and compared with the previous habitat mapping efforts of the CVP POU completed by Reclamation. This mapping effort is necessary to update the environmental baseline and to verify assumptions by Reclamation that these IRCs do not result in land use changes that would affect federally-listed species or critical habitat. As denoted on page 2-64 of the CVPIA BiOp, for any species affected by the CVP that are continuing to decline (i.e., additional habitat loss is identified), the Service and Reclamation will immediately assess critical needs for the species and determine whether it is appropriate to expand the Conservation Program or implement other conservation measures.

Water Supply Deliveries and Sources and Off-Site Conjunctive Use of CVP Water

As part of the baseline information provided by Reclamation, the Service asks that Reclamation provide recent data on the following:

- *Summary of recent water deliveries and Article 5 Exchanges for the contractors under consideration in this consultation.*
- *Summary of off-site conjunctive use projects used to store CVP water supply (e.g., the amount of water stored, location and information on where the water was stored, used etc.).*

Cumulative Impacts Are Not Disclosed or Analyzed from Over a Decade of “Interim” Contract Renewals.

The specific cumulative impacts of these serial contract renewals and the specific impacts from the proposed Cross Valley Contract renewals have not been analyzed, nor have the required monitoring data and mapping required under existing biological opinions. Reclamation has failed to consult or complete consultation on numerous actions specifically authorized by the contracts, renewals, exchanges and transfers [sales].

The list of EA's (@pdf pgs 9-10) from 1994 to 2017, which do not include adequate environmental or biological review, document how USBR has thwarted the law and Congressional intent to disclose the impacts from these discretionary water deliveries and diversions from the Delta, surrounding watersheds and site-specific impacts. This failure to disclose environmental impacts has been further compounded by the litany of EA's from 2005 to 2019 for exchanges and transfers [water sales] that are related, but have been put forward in a segmented, piece-meal fashion that precludes analysis of impacts of the project as a whole. For the first time in 2012, Article 5 Exchanges were incorporated into the EA for the Cross Valley interim contracts rather than as a separate EA. This change was made because the two elements are interrelated and it was determined that a combined EA presents a clearer explanation of the

overall project. [DEA @pdf pg 12] This change, while an improvement in disclosing the impacts, still is deficient and documents the piece-meal analysis that historically has occurred. As presented in the DEA, the exchanges and transfers [water sales] and associated biological and environmental impacts provide insufficient data and information to support the conclusion that there are no impacts. Further the failure disclose in a straightforward manner specifically where the water has been used and how much was used and which of those transfers [sales of water] or exchanges will continue does not provide sufficient information on the necessary site-specific review that NEPA requires.¹⁷

Still other impacts not addressed in the DEA and serial contract renewals are the cumulative impacts from Delta exports to the Westside of the San Joaquin Valley from the Delta Mendota Canal, San Luis Unit and Cross Valley Contractors. For example, exchanges, transfers [water sales] and diversions impact water quality of refuge water supplies in the San Joaquin Valley which can affect habitat for a variety of listed species. Further, as part of the Grassland Bypass Project, Reclamation has continued to authorize use of the San Luis Drain to discharge drainage and stormwater to Mud Slough (North) and the San Joaquin River, and ultimately to the San Francisco Bay-Delta and each of these waterways is impaired by selenium. Monitoring data on these discharges indicates that the drains and sumps discharge mass loadings and concentrations of selenium that could reasonably be expected to contribute to the jeopardy of numerous listed species (including the Buena Vista lake ornate shrew, giant garter snake, Sacramento winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, and green sturgeon). These discharges also contaminate, and adversely modify, critical habitat for several of these species.¹⁸ The undersigned organizations have long-standing interests in the GBP because contaminants in agricultural drainage discharges have profound effects to the environment, including effects to downstream waterways, aquatic life, and migratory birds. We hereby include our previous comments on the GBP EIR/EIS and Basin Plan Amendment by reference.¹⁹

¹⁷ In 2012 a federal budget rider relaxed water transfer [sales] rules allowing the sale of water outside of the CVP service area to areas for example such as Kern Water Bank and other non CVP contractors. See: The Consolidated Appropriations Act, 2012, Division B, Energy and Water Development Appropriations Act, Section 207(c) and deemed the water transfer [sale] also “ meet the conditions described in subparagraphs (a) and (i) of §3405(a)(1) of CVPIA.” The impacts of this expanded water use and delivery are not disclosed.

¹⁸ *Not considered in the DEA are impacts from CV renewal contracts to Critical Habitat designated since the Friant Biological Opinion and not considered in this DEA: Vernal pools plant and invertebrate species in 2006* <https://www.fws.gov/sacramento/es/Critical-Habitat/Vernal-Pool/CA-Tiger-Salamander-in-2005> <https://www.fws.gov/sacramento/es/Critical-Habitat/CA-Tiger-Salamander/Along-with-other-critical-habitat-designated-in-CV-counties-that-impact-the-Buena-Vista-Lake-Shrew-in-2012-and-2013> <https://ecos.fws.gov/ecp0/profile/speciesProfile?sId=1610>

¹⁹ These comments are as follows: Coalition comments of environmental, fishing, and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. Available at <http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-CaSelenium-Criteria-Doc-No.-EPA-HQOW-2018-00....pdf>; Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker. June 22, 2015. Available at https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf; Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR. September 8, 2014. Available at <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-toLongley-re-gbp-land-retirement.pdf>; Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project.

The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta including Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta are listed as impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).²⁰ Sources of selenium contamination include agricultural drainage from irrigation of drainage impaired lands in the CVP on the west-side of the San Joaquin Valley and effluent discharges from oil refineries (Linares et al 2015; Presser and Luoma 2010). At risk species include federally listed as threatened or endangered, green sturgeon, Chinook salmon, steelhead trout, delta smelt, Sacramento splittail and the California Ridgway's rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters. At the State of the Estuary Conference in 2019, Dr. Rachel Johnson of NOAA Fisheries gave a presentation that included discussion of high numbers of spinal deformities in Sacramento splittail observed in the Delta. These kinds of deformities are consistent with selenium toxicity effects.²¹

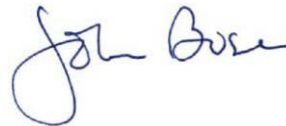
Conclusion

We conclude that continuing to renew interim water supply contracts, as presently proposed by Reclamation would violate NEPA, the Administrative Procedures Act, Central Valley Project Improvement Act, Endangered Species Act and other federal statutes. We urge Reclamation not to renew the interim contracts unless and until there is full compliance with laws and Congressional directives. Only a full EIS that comprehensively assesses the far-ranging and complex direct and secondary effects of irrigation can illuminate the total environmental impact of contract renewal. Responsible decision making requires guidance from this EIS and adherence to established legal requirements.

Thank you for the opportunity to comment. Please contact John Buse, Senior Counsel, Center for Biological Diversity 1411 K St. NW, Suite 1300 3. Washington, D.C. 20005 if there are any questions.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://www.planningandconservationleague.org)
jminton@pcl.org



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org

June 30, 2014. Available at <http://calsport.org/news/wp-content/uploads/Finalcoalition-comments-on-Draft-GBP-WDR-6.30.14.pdf>.

²⁰ https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

²¹ <https://mavensnotebook.com/2019/12/05/state-of-estuary-standing-too-close-to-the-elephant-addressing-scales-in-restoration-and-fisheries-conservation/>



John McManus
President
Golden State Salmon Association
john@goldengatesalmon.org



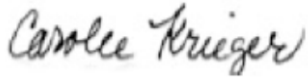
Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers Int.
mrockwell1945@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



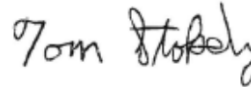
Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Lowell Ashbaugh
Conservation Chair
The Fly Fishers of Davis
ashbaugh.lowell@gmail.com



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com




Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



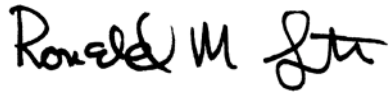
Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org

Exhibit A: Documented Public Interest & Comments Incorporated by Reference [All Documents can be found in the record of earlier contract renewals, earlier NEPA processes and in some cases on the BOR website or NGO websites]

1. 1-29-10 “ Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts” To Rain Healer from Joseph Membrino for Hoopa Valley Tribe.
2. 1-29-10 “Comments of The Bay Institute and NRDC on Draft Environmental Assessment (EA) and Draft Findings of No Significant Impact (FONSI) for the San Luis Unit interim renewal contracts (Central Valley Project, California)” To Rain Healer from Hamilton Candee
3. 2-18-2010 “Comments Re Two Year Interim Renewal Central Valley Project Water Service Contracts: Westlands Water District [WWD] Contracts 14-06-200-8237AIR13; 14-06-200-8238A-IR13; WWD DD1-Broadview 14-06-200-8092-IR12; WWD DD1 Centinella 7-07-20-W0055-IR12-B; WWD1 Widren 14-06-200-8018-IR12-B; WWD DD2 Mercy Springs 14-06-200-3365A-IR12-C. To Karen Hall, USBR, from 11 Conservation, Fishery and Community Organizations.
4. 3-2-2010 “Final Scoping Comments for Westlands Water District [Westlands] Proposed “Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct”. The project proposes to discharge up to 100,000 acre feet of groundwater into the State Water Project California Aqueduct, a Drinking Water Supply for Approximately 20 Million People”. To Russ Freeman from 14 Conservation, Fishery and Community Organizations.
5. 5-19-10 Letter to Donald Glaser, USBR From David Ortmann, Pacific Coast Management Council
6. 7-30-2010 “San Joaquin River Central Valley Selenium Basin Plan Waiver, 303 (d) Delisting of San Joaquin River for Selenium and the California Toxics Rule” To Jared Blumenfeld, EPA from 16 Conservation, Fishery and Community Organizations.
7. 9-22-2010 USFWS “Comment Letter – San Joaquin River Selenium Control Plan Basin Plan Amendment” To: Ms. Jeanine Townsend, Clerk to the Board from Susan K. Moore.
8. 11-16-2010 “Letter to Senator Feinstein on Long Term Solution to Westlands Drainage Problem” To Commissioner Connor from Environmental Working Group.

9. **12-13-2010 Comments on the Draft Finding of No Significant Impact [FONSI] San Luis Water District's [SLD] and Panoche Water District's [PWD] Water Service Interim Renewal Contracts 2011-2013 FONSI-10-070. To Rain Healer, USBR, From 8 Conservation, Fishery and Community Organizations.**
10. **2-28-2011 "Scoping Comments Proposed Ten Year North to South Water Transfer of CVP and Non CVP Water Using State Water Project (SWP) and Central Valley Water Project (CVP) Facilities" To Brad Hubbard, USBR et. al from 10 Conservation, Fishery and Community Organizations.**
11. **5-5-11 "Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities" To Deputy Interior Secretary Hayes from 16 Conservation, Fishery and Community Organizations.**
12. **8-11-2011 "Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project." To Michael C. S. Eacock (Chris), Donald R. Glaser, USBR and Ren Lohofener USFWS et. al from 7 Conservation, Fishery and Community Organizations.**
13. **10-17-2011 "Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District's San Joaquin River Improvement Project (SJRIP) FONSI-10-030" To Rain Healer, USBR from 8 Conservation, Fishery and Community Organizations.**
14. **11-15-2011 "Full Environmental Impact Statement Needed for San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District [FONSI-10-030]" To Donald Glaser from 13 Conservation, Fishery and Community Organizations.**
15. **11-16-2011 Notice Inviting Public Comment on BDCP MOA to Hon. Kenneth Salazar, Secretary John Laird, Secretary from 190 Conservation, Fishery and Community Organizations.**
16. **1-5-2012 "Comments on Draft EA/FONSI for Three Delta Division and Five San Luis Unit Water Service interim Renewal Contracts 2012-2014" To Rain Healer from Stephen Volker on behalf of 4 Tribal, Conservation, Fishery and Community Groups.**
17. **1-18-2012 "Comments on Draft EA/FONSI for Oro Loma Water District Partial Assignment of Central Valley Project Water to Westlands Water District FONSI-11-092" To Rain Healer, USBR from 12 Conservation, Fishery and Community Organizations.**
18. **1-20-2012 "Delta Division, San Luis Unite and Cross Valley CVP Interim renewal contracts—Comments of the Hoopa Valley Tribe on draft EA-11-049 and EA-11011 and FONSI 11-049 and FONSI 11-011" To Rain Healer, USBR from Leonard E. Masten Jr. Chariman.**
19. **3-26-2012 "Comments on CVP Interim Renewal Contracts for three Delta Division and five San Luis Unit interim water service renewal contracts for: Pajaro Valley Water**

Management Agency, Santa Clara Valley Water District, and Westlands Water District (five contracts) 2012 to 2014 and Environmental Documents.” To Hon. David J. Hayes, Donald R. Glaser, Michael L. Connor, Hilary Tompkins and Michael Jackson from PCFFA et. al [13 Conservation, Fishery and Community Organizations.]

20. November 1, 2013 EWC et. al to Karen Hall Bureau of Reclamation Central Valley Project Interim Contract Renewals: Pajaro Valley Water Management Agency, Westlands Water District Distribution District No. 1, and Santa Clara Valley Water District 14-06-200-3365A-IR14-B Tracy, City of (The West Side) 7-07-20-W0045-IR14-B Tracy, City of (Banta-Carbona) 14-06-200-4305A-IR14-B Westlands Water District Distribution District 1 (Widren) 14-06-200-8018-IR14-B Westlands Water District Distribution District 1 (Centinella) 7-07-20-W0055-IR14-B Westlands Water District Distribution District 1 (Broadview) 14-06-200-8092-IR14 Westlands Water District Distribution District 2 (Mercy Springs) 14-06-200-3365A-IR14-C Westlands Water District 14-06-200-495A-IR4 Tracy, City of 14-06-200-7858A-IR1
21. March 29, 2014, "Subject: Final Record of Decision and Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water. Rain Emerson Bureau of Reclamation.
22. January 9, 2014, "The EA for Westlands Water District Central Valley Project Interim Contract Renewals listed below & the Finding of No Significant Impact (FONSI) is supported by Reclamation’s Environmental Assessment (EA) Number EA-13-023, *Central Valley Project Interim Renewal Contracts for Westlands Water District, Santa Clara Valley Water District, and Pajaro Valley Water Management Agency 2014 – 2016*. Rain Emerson Bureau of Reclamation."
23. January 13, 2014, "The Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim Contract Renewals" Rain Emerson. Bureau of Reclamation.
24. February 13, 2014 "Coalition Of Environmental, Environmental Justice, Tribal and Fishing Organizations’ Comments In Opposition To The Grassland Drainer Proposal To Discharge Selenium And Other Pollutants To Broadview Water District Lands—Another Kesterson In The Making". EWC letter to Sally Jewell, Secretary of Interior; Rod McInnis NMFS Regional Administrator & Jared Blumenfeld, Regional IX Administrator
25. April 2, 2014, PCL et. al. Subject: "Final Record of Decision and Final Environmental Assessment [FEA] for Westlands Water District et. al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water" Rain Emerson Bureau of Reclamation
26. June 4, 2014, Institute for Fisheries Resources (IFR COALITION) Comments on Proposed CVP Cost Allocation Methodology: A recipe for continuing deficits and failure to repay taxpayers, Brooke Miller-Levy Project Manager, Bureau of Reclamation.
27. February 6, 2017, Environmental Advocates et. al. Re: Comments EA-17-021, FONSI-15-023A & Renewal of Six Interim Contracts for Westlands, Santa Clara et. al. Brenda Burman Commissioner of Reclamation David Murillo Mid-Pacific Regional Director

Exhibit C:

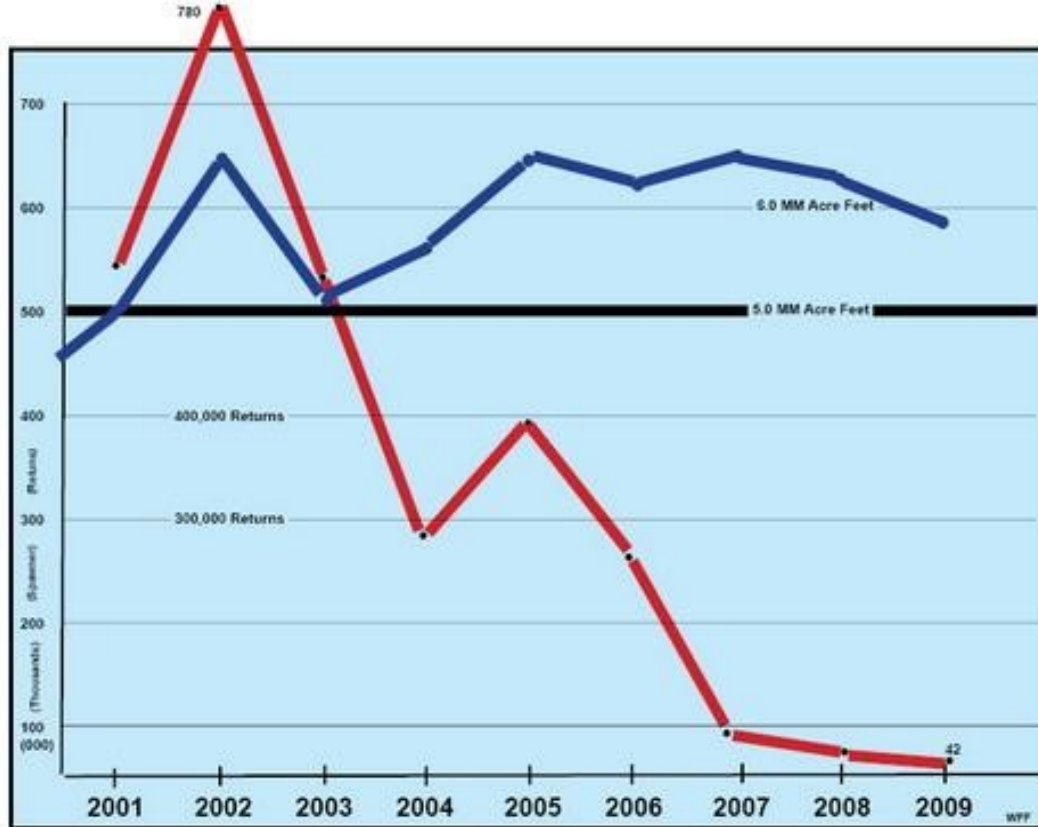


Figure 1. *Pumping increased and salmon crashed* <http://water4fish.org/>

<http://www.counterpunch.org/2012/05/07/carnage-in-the-pumps/>

Report Documents Record Delta Water Exports and Massive Fish Kills

Carnage in the Pumps

by DAN BACHER

A report written by Geir Aasen of the California Department of Fish and Game documents the massive numbers of fish salvaged at the federal Central Valley Project's Tracy Fish Collection Facility (TFCF) and the State Water Projects' Skinner Delta Fish Protective Facility (SDFPF) during the 2011 water year, as well as the record amounts of water exported to corporate agribusiness and southern California by the state and federal projects.

The report appeared in the [Interagency Ecological Program for the San Francisco Estuary Newsletter](#), Fall/Winter 2012 edition.

The State Water Project reported record high water exports, 4.90 billion cubic meters of water, the highest export rate recorded since 1981, the report stated. The federal Central Valley Project exported 3.13 billion cubic meters of water, an increase from exports in 2008-2011, but comparable to exports from 2002 to 2007.

Translated into acre feet, the annual export total via the state and federal Delta pumps was 6,520,000 acre-feet in 2011 – 217,000 acre-feet more than the previous record of 6,303,000 acre-feet set in 2005.

“Annual fish salvage (all species combined) at the TFCF (federal) was high (8,724,498), but well below the record high salvage of 37,659,835 in 2006,” according to the report. “Annual salvage at the SDFPF (state) was 3,0092,553, an increase from 2007 to 2010 which ranged from 646,290 to 2,484,282.”

When you combine the fish “salvaged” in the state and federal facilities, the total count is 11,817,051 fish of all species.

“Splittail were the most salvaged species at both facilities,” the report said. “Threadfin shad (591,111) and American shad (100,233) were the 2nd and 3rd most salvaged fish at TFCF. American shad (558,731) and striped bass (507,619) were the 2nd and 3rd most salvaged fish at SDFPF. Relatively few Chinook salmon, steelhead, delta smelt and longfin smelt were salvaged at the SDFPF (<8=0.7% of total annual salvage combined) and the TFCF (<0.3% of total annual salvage.)”

The total splittail salvage was 7,660,024 in the federal facilities and 1,326,065 in the state facilities, a total of 8,986,089 fish, nearly 9 million splittail and a new salvage record for the species. The fish, formerly listed as “threatened” under the Endangered Species Act (ESA), is no longer listed.

Conservation organizations first petitioned for federal ESA protection for splittail in 1992 and the species was listed as threatened in 1999. After litigation by water agencies challenging the listing, the Bush administration improperly removed the splittail from the threatened list, despite strong consensus by agency scientists and fisheries experts that it should retain protected status.

The Center for Biological Diversity sued, and the Fish and Wildlife Service agreed to revisit the tainted Bush-era decision. The critically endangered splittail was again denied Endangered Species Protection by the Obama administration in October 2010, in spite of an analysis of splittail population trends by the Bay Institute showing that there has been a significant decline in the abundance of splittail during the past several decades.

The total chinook salmon salvage in the state facilities was 18,830 and the federal facilities was 18,135, a total of 36,965 fish. While the report says that is “relatively few” salmon, fish advocates note that this is still a lot of wild spring run and fall run salmon.

The report says record low numbers of Delta smelt, 51, were salvaged at the federal facilities, while no Delta smelt were salvaged at the state facilities for the first time recorded for 1981 to 2011. Salvage was also low in 2010 (22).

The report breaks down the total amount of fish salvaged by species in a number of charts and graphs.

CWIN, Winnemem Wintu Tribe and GGSA respond to report

After reading the report, Carolee Krieger, president of the California Water Impact Network, commented, “It’s outrageous that the greed of a few growers, who are irrigating poisoned land south of the Delta on the west side of the San Joaquin Valley, is causing this unnecessary fish kill. At the same time, these growers have the most junior water rights in the state of California.”

Caleen Sisk, Chief and Spiritual Leader of the Winnemem Wintu Tribe, emphasized that the “salvaged” salmon mentioned in the report are only a fraction of the total number of salmon that die in the state and federal pumping facilities.

“It seems to me that when a DFG report claims that they only counted 36,965 salmon, which they claim represents ‘relatively few,’ there still remains the gross ‘uncounted and uncountable’ and ‘underestimated’ numbers of salmon that die in the pumps yearly that is not addressed,” Sisk said. “This should be a major concern in the report when the over all return of all wild salmon are on a steady, clear decline. Where is the report that evaluates the health of the estuary from these huge unnecessary fish kills?”

“There seems to be enough studies that verifies the Delta pumps are killing the fish by the millions and they are the reason our water to ocean system is dying,” she stated. “An estuary is like a beaver pond, it is a sacred pool that brings life! We call a beaver pond “k’Od Bisus” (giver of life). Man cannot make an “estuary,” – after such damage, all water systems will respond and change. This is a major concern of the Winnemem Wintu Tribe who sing and dance for the return of salmon to the McCloud River.”

“The salmon are the indicators of how healthy the water systems are from the high mountain waters to the oceans and back again. There should be better safeguard for such an irreplaceable ‘public trust’ asset that provides water for all. This is not about ‘money’ or ‘who gets the water’ - it is about how an estuary and salmon surviving corporate greed,” concluded Sisk.

“The pumps continue to kill our salmon at alarming rates,” responded Victor Gonella, President of the Golden Gate Salmon Association (GGSA). “Thanks to the hard work of many, we do have the biological opinions in place to reduce pumping slightly in critical times of migration. We must all remain steadfast to insure the biops are adhered to and push for further pumping reductions in the future.”

Bay Institute report documents carnage in the pumps

In March, the Bay Institute released a ground breaking report titled “Collateral Damage” revealing the enormous numbers of fish that are “salvaged” by the state and federal pumps on the South Delta every year.

The report revealed that the record number of any fish salvaged in one year, 13,541,203, was set by striped bass. The annual “salvage” numbers for striped bass from 1993 to 2011 averaged a horrendous 1,773,079 fish.

The report said the average salvage total for all species is 9,237,444 fish, including striped bass, splittail and threadfin shad, as well as ESA listed Sacramento River chinook salmon, Central Valley steelhead, Delta smelt, green sturgeon, and longfin smelt. Over 42 species have been recorded in the state and federal pumping facilities.

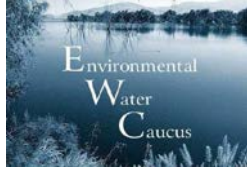
However, salvage numbers are only the “tip of the iceberg” of the total fish lost in the pumping facilities. “Salvage numbers drastically underestimate the actual impact,” according to the Bay Institute. “Although the exact numbers are uncertain, it is clear that tens of millions of fish are killed each year, and only a small fraction of this is reflected in the salvage numbers that are reported.”

A conservative estimate (Kimmerer, 2008) is that, for juvenile salmon that have been pulled towards the pumps, only 1 in 5 will survive long enough to be counted in salvage (the rest are lost to predators or other factors), resulting in an overall loss of up to 10% of the migrating fish (Castillo, 2010). Another study of “pre-screen loss” estimated that as many as 19 of every 20 fish perished before being counted (Castillo, 2010).

“The fact is, the salvage numbers look really bad but the real impact of export-related mortality is probably far worse,” the report added.

You can download the Bay Institute’s report, Collateral Damage, by going to: <http://bay.org/publications/collateral-damage>).

While this massive carnage takes place in the Delta pumps every year, the Brown administration is fast-tracking the construction of the peripheral canal or tunnel through the Bay Delta Conservation Plan (BDCP). The canal is likely to lead to the extinction of Central Valley steelhead, Sacramento River chinook salmon, Delta smelt, longfin smelt, green sturgeon, Sacramento splittail and other species.



January 12, 2018

Brenda Burman
Commissioner
Bureau of Reclamation
1849 C Street NW
Washington DC 20240-0001
email: bburman@usbr.gov

David Murillo, Regional Director
Mid Pacific Regional Office
Federal Office Building
2800 Cottage Way
Sacramento CA 95825-1898
email: dmurillo@usbr.gov

Quentin Branch &
Kate Connor
Bureau of Reclamation,
2800 Cottage Way, MP-440, Sacramento,
CA 95825-1898
email: qbranch@usbr.gov
kconnor@usbr.gov

Re: Interim Renewal Contract for Central Valley Project Water Contracts for Westlands Water District (EA17-021& FONSI-15-023A¹)--An abuse of discretion and failure to comply with federal law.

Dear Ms. Burman:

For more than 20 years, Reclamation's Mid-Pacific Region has circumvented federal law by serial issuance of "Interim Renewal" water service contracts, each lasting approximately two years. The

¹ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=30703: EA for WWD interim water service contract & FONSI-15-023A: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=28023 & Westlands' contracts see: https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2018-int-cts/index.html

undersigned groups have previously called attention to the serious legal deficiencies of this pattern and practice. Legal challenge to this serial renewal of water service contracts resulted in a recent 9th Circuit Court ruling,² whereby Reclamation's interim contract renewal and circumvention of the NEPA process was determined an abuse of discretion. The court ordered a *rejection* of Reclamation's premise that the interim contracts merely continued the status quo. Unfortunately, Reclamation repeats these same mistakes under the proposed contract renewals. [*PCFFA*, 655 Fed. Appx. at 598-599.] *PCFFA et. al* on December 22, 2017³ again attempted to gain Reclamation compliance with federal law, including analysis of significant public health and environmental impacts from more than 20 years of serial renewals.⁴

Despite the 2016, 9th Circuit Court ruling, Reclamation continues to abuse its discretion in issuing interim water service contracts for Westlands Water District (Westlands). Issuance of the newly proposed two year interim contracts to Westlands and other San Luis Unit federal contractors would violate Congressional direction and federal law. Much of the agricultural land serviced by Westlands and other federal contractors is contaminated with selenium and other pollutants that are carried into ground and surface waters and pollute the San Joaquin river and Delta Estuary when the lands are irrigated with these water deliveries. There is no legal requirement that this interim water service contract be renewed, yet Reclamation seems determined to do whatever it takes, legal or not, to renew these contracts.

Proceeding to renew these water supply contracts, in addition to not complying with NEPA, violates the Administrative Procedures Act, Central Valley Project Improvement Act [PL 102-575], the Reclamation Reform Act of 1982 [PL 97-293], the Coordinated Operations Act of 1986 [PL 99-546], and other federal statutes. Reclamation would be committing these additional illegal actions if it issues the proposed Westlands' interim water service contracts:

I. Issuing a contract for water service contrary to Congressional authorization is illegal:

The authorization for the San Luis Unit, Central Valley Project⁵ limits the gross service area to 500,000 acres of land and refers to the feasibility report⁶, which includes a map⁷ that clearly describes the location, size, and elevation of that service area. Subtracting out

² Ninth Circuit's Amended Memorandum in *Pacific Coast Federation of Fishermen's Associations v. Bureau of Reclamation* ("PCFFA"), 655 Fed. Appx. 595 (9th Cir. 2016)

³ Case 1:16-cv-00307-LJO-MJS Document 64 Filed 09/28/17: & Case 1:16-cv-00307-LJO-MJS Document 71 Filed 12/22/17-- North Coast Rivers Alliance, California Sportfishing Protection Association, Pacific Coast Federation of Fishermen's Associations, et. al.

⁴ These shortcomings in the proposed Interim Contract Renewal project (Project) for Westlands Water District were filed with the court: (1) approving the Project may affect public health and safety, (2) the Project's water diversions from the Delta may affect the unique environment of the Delta – the largest estuary on the West Coast of North America; (3) the Project's impacts are highly controversial and uncertain; (4) defendants' serial approval of short-term interim contracts "establish[es] a precedent for future actions with significant effects"; (5) the Project may have potentially significant cumulative impacts; and (6) the Project may have a significant impact on endangered species, which have significant scientific value. FAC ¶ 58; 40 C.F.R §1508.27(b); *see also* 40 C.F.R. § 1508.7 (defining cumulative impacts).

⁵ In 1960, Congress passed the San Luis Act, Pub.L. No. 86-488, 74 Stat. 156 (1960). Section 1(a) of the San Luis Act authorized Reclamation to "*construct, operate, and maintain the San Luis unit as an integral part of the Central Valley Project,*" in accordance with the 1956 Feasibility Study for the purpose of irrigating only 500,000 acres in the entire San Luis Unit in three counties—Merced, Fresno, and Kings.

acreage for San Luis Water District and Panoche Water District, leaves roughly 400,000 acres of eligible land in Westlands according to the federal authorization and confirmed in the Special Task Force Report on the San Luis Unit [PL 94-46]. Subtract the roughly 100,000 acres that has already been retired and largely put to other industrial uses and that leaves approximately 300,000 acres eligible for CVP water allocation.⁸ Yet, the proposed interim water service contract renewal proposes to irrigate over 600,000 acres in Westlands Water District alone. The additional unauthorized allocation of water to lands not authorized to receive federal CVP water represents a taking of water from other CVP contractors, communities, and the environment. The inflation of acreage and water deliveries is further shown by the map provided in the Draft EA for the Interim Contract. This map expands the acreage beyond what was Congressionally authorized.⁹ Any water supply contract would be invalid to the extent that it provides for delivery contrary to limitations Congress clearly specified in the authorizing legislation and the referenced feasibility report.

II. Issuing the proposed Interim Water Service Contracts would violate Reclamation Law:

A. Congressional Intent is Clear --Water Service Contracts are to guard against land monopoly and excess profits.

1. One of the 1902 Reclamation Act's purposes was to promote living on the land, and the distribution of the Act's benefits was limited accordingly in the original statute.¹⁰ Later statutory amendments were added to prevent speculative profits from the sale of "excess" lands and allocated water rights.¹¹ The Omnibus Adjustment Act of 1926 expressly restricted the sale price for such excess land to a dryland valuation (e.g., as though the

⁶ U.S. Dept Of The Interior, Feasibility Report (approved by President Roosevelt, December 2, 1935), *reprinted in* House Committee On Interior & Insular Affairs, Central Valley Project Documents-Part One: Authorizing Documents, H.R. Doc. No. 416, 84th Cong., 2d Sess. 563 (1956).

⁷ *Ibid.* See the Feasibility Report page 36 and attachment #1.

⁸ Special Task Force Report on San Luis Unit 1978 available online [see pages 18 and 20 for the finding of 500,000 gross acres authorized for all three districts finding an unauthorized expansion of more than 100,000 acres or 30%.] <http://babel.hathitrust.org/cgi/pt?id=umn.31951002836772c;view=1up;seq=35>. Also see Lloyd Carter's law review http://sjc.ca.lwvnet.org/files/REAPING_RICHES_IN_A_WRETCHED_Golden_Gate_Law_review_1.pdf And Friends of the Trinity water rights testimony before the State Water Resources Control Board. https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/FO_TR/for_94.pdf

⁹ The 1956 Feasibility Report can be found online: <http://cdm15911.contentdm.oclc.org/cdm/ref/collection/p15911coll10/id/2106>

¹⁰ The Act limited land acquisition. No one could acquire land without living on it for five years. Congress sought to limit speculation or monopoly, because, in addition to the five years' residence, no homesteader can take more than 160 acres, and in many cases he can take no more than 40 to 80 acres. These provisions have since changed to 960 acres and residency requirements were not enforced. See <https://digitalcommons.law.ggu.edu/gguelj/vol3/iss1/3/>

¹¹ The Reclamation Extension Act of 1914 required the owners of large, private holdings adjacent to projects to dispose of "excess" land before project construction. The Omnibus Adjustment Act of 1926 expressly restricted the sale price for such excess land to a dryland level (e.g., as though the project were not planned or built) and also regulated later sales of formerly excess land. See also the Reclamation Act of 1902 32 Stat 388 43 USC.

project were not planned or built) and also regulates later sales of formerly excess land. The Reclamation Reform Act of 1982 largely reconfirms this policy by requiring that, henceforth, project water be delivered to excess land only at full cost and limited the size to 960 acres.

2. Despite these federal protections against excessive profits and speculation, Westlands has proceeded to sell or lease tens of thousands of acres for solar farms, while still claiming 2.6 acre feet per acre of water for these lands under the existing interim water service contract.¹² Reportedly WWD has received tens of millions of dollars for these municipal and industrial leases, while still receiving subsidized water for these lands courtesy of the American taxpayer.¹³ The EA mentions solar farms and suggests a water need, but provides no information, data, or contract approvals sanctioning this land use change. The EA does not show how the federal government has complied with Reclamation law—and specifically the 1960 San Luis Act—while allowing these lands to be inappropriately included in the acreage for determining water supply allocation.

B. Municipal Water Service contracts must be approved by Reclamation, interest must be charged on capital and construction costs, and they must adhere to specified repayment provisions--the proposed Westlands interim contract renewal does not meet these requirements:

1. No approvals or analysis of water shifted to municipal and industrial uses by Westlands are provided, nor is this water identified separately in the Reclamation water needs assessment. The Reclamation Project Act requires that every contract for water delivery include provisions for repayment of specified costs of construction, operation, and maintenance.¹⁴ Any conveyance of project water to an M&I customer must be approved by Reclamation. Westlands disclosed in their 2008 debt filing¹⁵ that a portion of the

¹² See this 2016 overview of transmission lines, towers and land conversion maps for Westlands WD: http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI02/TN210903_20160330T140735_Daniel_Kim_Comments_WSP_comments_to_RETI_20_plenary_group_meeti.pdf & <http://web.energyacuity.com/REProject.aspx?id=16887> *Westlands Solar Park is a public-private effort to master plan renewable development and infrastructure for large scale solar projects in California's central valley. The Westlands Solar Park study area includes approximately 24,000 acres ...within the Westlands Water District, located in western Fresno and Kings Counties..... Initial development planning estimates that phased projects totaling upwards of 2.4 GWs of solar power could be developed before 2025. Early Phase 1 projects are expected to begin operation as early as 2013-2015."* See also Conditional Use Permit (UCUP) Application Nos. 3451 through 3458 for the Tranquillity Solar Generating Facility Project, Westlands Water District 3,732 acres, 39 parcels: October 9, 2014: Tranquillity LLC, RE Tranquillity 2 LLC, Tranquillity 3 LLC, RE Tranquillity 4 LLC, Tranquillity 5 LLC, RE Tranquillity 6 LLC, Tranquillity 7 LLC, RE Tranquillity 8 LLC

¹³ See <http://articles.latimes.com/2002/dec/20/local/me-settlement20> LA Times Mark Arax *Four Families to Split Big Share of Farm Deal.*

¹⁴ Under the Reclamation Project Act: No water may be delivered for irrigation of lands in connection with any new project, new division of a project, or supplemental works on a project until an organization, satisfactory in form and powers to the Secretary, has entered into a repayment contract with the United States, in form satisfactory to the Secretary43 U.S.C. § 485h(d) (1982).

¹⁵ See WWD 2008 Bond Debt Statement: 30,065,000 Westlands Water District adjustable Rate Refunding Revenue Certificates Of Participation, Series 2008a _ Westlands Water District Notes To Financial Statements Years Ended FEBRUARY 28, 2007 AND 2006 @ page 31: *"In February and March 2005, the District acquired approximately 8,750 acres of land within the Broadview Water District, which is substantially all of Broadview's irrigable acreage. In conjunction with the acquisition, the District initiated the process to annex all of Broadview's lands and*

Broadview Water District water would be shifted to M&I. This change in use, required changes to repayment provisions, and contract modifications could not be located in any of the proposed Reclamation interim water supply service contracts for Westlands.

2. No such contract or changes in capital obligation repayments (e.g. interest or other changes) were identified in either the contract or environmental assessment.
3. Westlands also disclosed that less expensive CVP water, previously destined for the Lemoore Naval Air Station, would be shifted to Westlands' agricultural users and more expensive water would be purchased for the Navy.¹⁶ And yet, in 2015 Westlands sought additional supplies for the Lemoore NAS after shifting those supplies to other users, thereby claiming municipal priority and augmenting Westlands' water allocation during drought shortages. Westlands charged the Navy a land-based rate for the water and required the Navy to repay Westlands debt and a surcharge per every acre foot. . No records or data were provided regarding this "enhanced" municipal and industrial supply nor were the environmental impacts of these shifts from agricultural use to industrial use analyzed.¹⁷

III. The conclusions of the draft EA and FONSI are in conflict with the facts and the law and an EIS is required.

Without NEPA compliance, the proposed interim contract, if signed, would be illegal. We include by reference the comments filed with Reclamation on behalf of PCFFA et. al. on January 5, 2018, by Steve Volker. Additionally, the FONSI and EA brush aside, without facts or data, the Westlands' interim water supply contract impacts to the following:

A. The San Francisco Bay-Sacramento and San Joaquin River Delta Estuary. There have been repeated violations of the Clean Water Act standards¹⁸ and Endangered Species Act

will seek a permanent assignment of Broadview's Central Valley Project Water Contract totaling 27,000 acre-feet to the District from the Bureau of Reclamation. Of this water supply, the District plans to annually make available 6,000 acre-feet of entitlement to the Naval Air Station – Lemoore pursuant to the Supplemental Water Allocation Agreement between the District and NASL."

¹⁶ **Ibid.** Westlands charges Lemoore NAS both a thirty year surcharge to recover Westlands' debt with interest [more than \$30 million] in addition to a land base charge per acre. Despite federal rules and regulations, it is not clear whether Westlands is reaping the sole benefits of these "extra" charges, mortgage debt, interest and operation charges or whether Reclamation has a separate contract and charge for this M& I assignment collecting additional revenue per Reclamation rules and regulations. The impacts including irrigating selenium laden lands and Lemoore's resulting discharges into wastewater ponds was not analyzed in the Reclamation EA on interim contracts. See page 101 of 2008 A Financial Statements. For discussion of Lemoore NAS wastewater pond impacts and elevated selenium discharges see:

https://wwwrcamnl.wr.usgs.gov/Selenium/Library_articles/Moore_etal_1990_selections.pdf

¹⁷ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=30703 EA @ pages 20,21, 26 and 40.

¹⁸ Of particular note, the SWRCB, referencing WR Order 90-05, stated in WR 92-02 at page 9: *The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery.* SWRCB warned against USBR decisions to maximize water deliveries in the initial years of a drought and failing to maintain sufficient carryover storage to protect fisheries and public trust resources.

requirements under the Reasonable and Prudent Alternatives. CVP operations and the exports of water pursuant to this interim contract have consistently violated the Coordinated Operation Act of 1986 requiring adherence to Delta Water Quality Standards contained in D-1485 and subsequent water quality standards.

B. Indian Trust Assets. The Yurok and Hoopa Tribe's fishing and associated water rights in the Trinity River are Indian Trust Assets. Without data or analysis, Reclamation claims there will be no physical changes to existing facilities, no new facilities, and that continued delivery of CVP water to the contractors listed under the interim renewal contract will not affect any Indian Trust Assets. As the Hoopa Tribe commented as far back as 2010, the CVP water diversions to Westlands and other west side San Luis Unit, significantly impact their Indian Trust Assets:

"..It is irrelevant to the environmental review that the Tribe's reservation is not in the vicinity of the Proposed Action Area. The water to which the Tribe has a right and whose use is essential to its fishery resources is being delivered and will continue to be delivered pursuant to the proposed federal action from the vicinity of the reservation to the contractors' area by CVP facilities that divert water from the Tribe's watershed." ¹⁹

C. Water transfers, exchanges, and non-project water diverted from various watersheds, rivers, and the S.F. Bay-Delta Estuary. These diversions and downstream impacts are major. In 2015 alone, more than 533,000 AF was diverted to Westlands. Impacts from these diversions were not analyzed in the EA. The majority of the water diverted came at the expense of flows, water quality, and temperatures in the American River, the Yuba River, and the Delta Estuary. The impacts to imperiled fisheries facing extinction have been severe, but the EA does not analyze these impacts or include new information.²⁰

¹⁹ See January 29, 2010 Letter to Rain Healer, USBR from Joseph Membrino Re Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts. pg 3.

²⁰ See pages 7& 8 of the EA. Both the Coordinated Operation Act and Central Valley Project Improvement Act place limitations on the operations of the Central Valley Project to ensure water quality standards are met and fish and wildlife resources are protected and restored to specified levels. On 3 June 2015, The California Sportfishing Protection Alliance (CSPA), California Water Impact Network (C-WIN), AquAlliance and Restore the Delta (RTD), collectively "Petitioners," filed a complaint for declaratory and injunctive relief, under the Administrative Procedures Act, and a Petition for Writ of Mandate, under California Code of Civil Procedure, in federal District Court for the Eastern District of California. Natural production of Sacramento winter-run and spring-run Chinook salmon have decline by 98.2 and 99.3%, respectively, and are only at 5.5 and 1.2 percent of doubling levels mandated by the Central Valley Project Improvement Act, California Water Code and California Fish & Game Code. Toxic algal blooms like *Microcystis* pose a serious risk to drinking water quality and human health in the Delta; these are the type that [shut down](#) the water supply for the city of Toledo, Ohio in 2014, and that have caused the death of at least [three dogs](#) that jumped into northern California's waterways this year. The State predicts that toxic algal blooms will get worse in a climate-changed future if we don't take action now to address the problem.

'USBR is presently violating water quality standards protecting fish & wildlife and agricultural beneficial uses. USBR has failed to comply with the SWRCB 2010 Cease & Desist Order. CSPA additionally alleges that, USBR failed to comply with their responsibilities and obligations under the ESA, Public Trust Doctrine and Article X of the California Constitution. Violations of salinity standards at Three-mile Slough and Jersey Point have occurred in 2015 and are continuing. USBR and DWR are now in violation of WR Order 2010-0002 and the southern Delta salinity objectives at Old River Near Tracy, Old River near Middle River and San Joaquin River at Brandt Bridge. Further, the Vernalis salinity objective was violated on 5 days in July 2015. Significant because a key to Delta smelt abundance, X2, is determined by the concentration of salinity and not by flow.'

https://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/tucp/2015/cspa_jennings072215.pdf

D. Retaining the full historic water quantities under the proposed contract without analyzing reduction of maximum contract quantities. Outdated, inaccurate data, and bias, renders the Water Needs Assessment insufficient in addressing shortcomings indentified by the 9th Circuit Court. The PCFFA case held that Reclamation's previous assessment relied on "stale water needs data." Reclamation once again acts unreasonably and fails to use current data. [See Attachment 1 Central Valley Project (CVP) Water Needs Assessments (WNA): Purpose And Methodology]:

1. Without data or analysis, the WNA claims that the acreage in Westlands requiring drainage is reduced by 2/3 in just over 10 years, going from 298,000 acres in 2006 to just 100,000 acres in 2017. No water quality data, depth to shallow groundwater assessment, or monitoring of salt and selenium is provided to support this arbitrary conclusion. The EA mentions the Federal Settlement Agreement²¹, but this is of marginal relevance because the Agreement has not been approved by Congress, much less complied with NEPA, the Endangered Species Act, the Federal Clean Water Act, nor State of California law as required under Section 8 of the Reclamation Reform Act of 1982.²²
2. The WNA announces, without data or analysis, that productive acreage in Westlands is 560,700 acres from 2011 to 2050 and in 2051 shrinks to 460,700 acres. As mentioned earlier for the entire San Luis Unit, Congress specifically authorized only 500,000 acres across all districts and three counties. Even Westlands' recent documents do not inflate eligible CVP acreage as much as Reclamation. Westlands' 2017 Engineer Study²³ relying on data from 1988 to 2016, identifies only 453,466 acres that are eligible for CVP water @ pg 5-2. The figures used in the EA and the WNA appear arbitrary, inflated, and biased in order to justify avoiding the accurate Water Needs Assessment ordered by the court.
3. Reclamation references in the EA the 1963 Water Supply Contract with Westlands, which includes the following requirement in the contract @ pg 24 :

DRAINAGE STUDIES AND SOLUTIONS [lines 10 to 18 see page 24] To aid in determining the source and solution of future potential drainage problems the District shall, in a manner satisfactory to the Contracting Officer, initiate and maintain a program of ground-water observation in order to delineate shallow water table areas and shall furnish annually to the Contracting Officer, during the period of this contract and any renewal thereof, records and analyses of such observations as they relate to potential drainage problems. The District

The U.S. Supreme Court observed that a lowering of quantity or flow could destroy all of the beneficial uses of a river, and specifically that "... there is recognition in the Clean Water Act itself that reduced stream flow, i.e., diminishment of water quantity, can constitute water pollution." PUD No. 1 of Jefferson County v. Washington Department of Ecology, (1994), 511 U.S. 700, 17.

²¹ See USBR Drainage Settlement September 15, 2015 with Westlands Water District, April 2017 San Luis Agreement and proposed Northerly District Agreements <https://www.usbr.gov/mp/wds.html>

²² See Friends of the River letter to Justice, June 24, 2015, Drainage Settlement Fails to Comply with NEPA and Endangered Species Act--George Wright FOR Counsel to Stephen M. Macfarlene et. al. adopted here by reference.

²³ http://wwd.ca.gov/wp-content/uploads/2017/07/WWD_Engineers_Rpt_revised-7-21-17.compressed.pdf

shall construct such drainage works as are necessary to protect the irrigability of lands within the District. (emphasis added)

No such data was provided in the EA or Appendices. Nor is this provision included in the proposed contract. There is no analysis of the polluted ground water being pumped into the California Aqueduct despite records showing elevated levels of selenium, arsenic, and boron are present. The DWR monthly monitoring shows levels of concern for selenium in the water for fish and wildlife. The 50 ppb drinking water Se objective in the aqueduct is not protective of fish and wildlife resources downstream. Kern NWR receives their refuge water supplies from the California Aqueduct. Endangered species, such as the Buena Vista Lake Shrew, are likely to be impacted from cumulative levels of selenium in this source water contaminated by Westlands' groundwater discharges. The once-a-month water quality sampling is insufficient to capture selenium spikes that accumulate downstream, or to assess the bio-accumulation in the food chain.²⁴

4. Federal and State law prohibit degradation of the waters of the State and Nation. Without data or analysis, Reclamation has continued to deliver water known to create pollution when applied to irrigate these soils, deform fish and wildlife, and create reproductive failure and impacts to endangered species. Continued delivery of water to these soils, as contemplated by this contract renewal, will degrade the waters of the State and Nation. Reclamation has promoted treatment solutions that have been going on for more than two decades with repeated treatment failures.
5. There is currently an investigation by the Inspector General²⁵ into the failure of the current San Luis Unit treatment facility that has relied upon federal funding and a federal contract. The Inspector General recently warned of fraud, indicating that "work at the "pilot" drainage treatment plant found: "invalid single audits, conflicts of interest with key personnel, a general absence of project oversight, and questionable use of a cooperative agreement as the legal instrument." The IG also raised federal fraudulent funding issues, stating: "*We also question how and why the project grew from a pilot-scale \$15 million demonstration and research and development plant to a full-size \$37 million plant. Further, we have been told*

²⁴ Selenium & Arsenic concentrations in the California Aqueduct, downstream of where groundwater has been pumped into the canal, have increased markedly in 2015 and in the case of Arsenic are approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L.
See http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

²⁵ One of the primary methods proposed by WWD and other San Luis Unit federal contractors for disposing of high-selenium drainage water is to irrigate designated areas of salt tolerant crops with polluted drainage water, as has been tested since 2002 as part of the San Joaquin River Quality Improvement Project (SJRIP). The 2015 Wildlife Monitoring Report for the SJRIP, however, shows that unacceptably high levels of selenium in avian eggs in both the project area and the mitigation area: "Nearly all analyzed eggs contained at least partially elevated selenium concentrations. The geometric mean egg- selenium concentrations on the project site in 2015 were 18.7 parts per million (ppm) for killdeer and 7.5 ppm for red-winged blackbirds. The geometric mean selenium concentration of recurvirostrid eggs from the mitigation site was 11.9 ppm." An environmental setting in which avian eggs exceed 5 ppm Se is an area of concern and selenium levels in both the project area (drainage water irrigation) and the mitigation area exceed this level of concern. These findings show that it is unlikely that this management approach will result in adequately controlled contaminant levels and would be a risky experiment

that the costs to operate and maintain the plant could outweigh the benefits of the treated water produced.”²⁶

Represented by David Bernhardt et.al., Westlands sued in 2012, claiming the federal government had breached a contractual obligation to provide drainage service. But in a ruling Jan. 15, 2013, Judge Emily C. Hewitt concluded that Westlands “failed to show that drainage service was a bargained-for benefit of any of these contracts” and dismissed the suit.²⁷

6. Federal courts and reclamation law require a drainage plan. There is no plan. There is an unauthorized settlement agreement, as mentioned in the EA, whereby Reclamation suggests implementation would occur in 2051. Westlands would be required to contain all drainage within their district. As pointed out, this promise is one of a long line of promises broken by Westlands, designed to get a contract for water without an effective drainage plan.²⁸

We conclude that continuing to renew interim water supply contracts, as presently proposed by Reclamation, would violate NEPA, the Administrative Procedures Act, Central Valley Project Improvement Act, the Reclamation Reform Act and other federal statutes. We urge Reclamation not to renew the interim contracts unless and until there is full compliance with laws and Congressional directive. Using '*stale water needs assessment data*' and delivering water outside of the Congressionally authorized area under the San Luis Act of 1960, inflates Westlands' water allocation. The proposed "interim water service contract" perpetuates these inflated water export amounts. These excessive exports have significant impact upon the communities from where these excessive amounts of water are exported and the environment. We recommend these contracting flaws be remedied before proceeding with renewal.

Thank you for considering our comments. Please make sure the undersigned are included in any future Reclamation actions with regard to CVP water exports from the San Francisco Bay-Delta Estuary and/or the CVP San Luis Unit contractors. Despite repeated comments many of the undersigned did not receive notice of the proposed interim contract renewals and environmental assessment.

Regards,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://www.planningandconservationleague.org)
jminton@pcl.org



Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://www.pacificcoastfishermen.org)
noah@ifrfish.org

²⁶ See https://www.doioig.gov/sites/doioig.gov/files/ManagementAdvisory_ProposedModification_112717.pdf

²⁷ “Because (Westlands) failed to show that drainage service was a bargained-for benefit of any of these contracts, (Westlands) has not shown that drainage service is a ‘fruit’ of any of the contracts,” she reasoned.
<https://www.courtlistener.com/opinion/816096/westlands-water-district-v-united-states/>

²⁸ Taxpayers in 2002, paid roughly [\\$140 million dollars](#) in a previous settlements to “solve” the drainage problem where four families reportedly reaped most of the financial gains and Westlands got the land and the water. Also see http://www.lloydgcarter.com/content/120329554_how-westlands-was-won-a-two-part-series-part-one

Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com

Barbara Barrigan-Parrilla
Executive Director
Restore the Delta
Barbara@restorethedelta.org

Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](mailto:connere@gmail.com)
connere@gmail.com

Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](mailto:caleenwintu@gmail.com)
caleenwintu@gmail.com

Bill Jennings
Chairman Executive Director
California Sportfishing Protection
deltakeep@me.com

Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net

Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net

Eric Wesselman
Executive Director
Friends of the River
Eric@friendsoftheriver.org

John McManus
Executive Director
[Golden Gate Salmon Association](mailto:john@goldengatesalmon.org)
john@goldengatesalmon.org

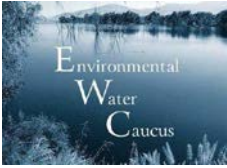
Larry Collins
President
Crab Boat Owners Association
papaduck8@gmail.com

Jacky Douglas
Captain Wacky Jacky
Board of Directors
Golden Gate Fishermen's Association
ladyfisher33@gmail.com

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

Attachments:

1. Solar Industrial Map Westlands Water District Solar Development March 16, 2016, Source:
http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI02/TN210903_20160330T140735_Daniel_Kim_Comments_WSP_comments_to_RETI_20_plenary_group_meeting.pdf
2. Westlands' Map of Retired Lands 2008
3. San Luis Service Area Map Authorized by Congress from the 1956 Feasibility Study-- Plate I
Central Valley West San Joaquin Project -Ultimate Plan Div . San Luis Unit-Calif. Service Area 805-208-14. pg 36.



February 6, 2017

Brenda Burman (91-00000)
Commissioner of Reclamation
1849 C Street NW
Washington DC 20240-0001

David Murillo
Mid-Pacific Regional Director
Federal Office Building MP-100
2800 Cottage Way Sacramento CA 95825

Michael Jackson,
Area Manager, SCC-100
South-Central California Area Office
1243 N. Street
Fresno CA 93727

Paul Souza
Pacific Southwest Region
Regional Director USFWS
2800 Cottage Way, Suite W-2605
Sacramento, CA 95825

Re: Comments EA-17-021, FONSI-15-023A & Renewal of Six Interim Contracts for Westlands, Santa Clara et. al.¹

Dear Commissioner, Reclamation and U.S. Fish and Wildlife Service:

Reclamation has prepared an EA² to support renewal of six interim renewal contracts for the period March 1, 2018 through February 29, 2020. Under these contracts, Westlands Water District is the largest beneficiary at 1,192,948 acre-feet (AF) per year of water and Santa Clara Valley Water District (Santa Clara) would continue to receive up to 6,260 AF, all from the San Francisco-Sacramento-San Joaquin River Delta Estuary, and ultimately the Sacramento, American and Trinity rivers.³ The USBR Project Action (Project) proposes to deliver CVP water for agricultural and municipal and industrial (M&I) purposes within Westlands and Santa Clara's identified CVP service area boundaries, including more than 308,000 acres of drainage impaired lands known to have soils with large quantities of selenium and salt pollutants that are mobilized when irrigated.⁴

¹ <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=60958> & https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2018-int-cts/index.html

² https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=30703 EA-17-021

³ https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2018-int-cts/index.html

⁴ http://www2.co.fresno.ca.us/0110a/questys_Agenda/MG195674/AS195675/AS195692/AI195749/DO196339/25.PDF See USBR SDFRE Feasibility Report pg IV: Westlands (298,000acres) and 10,000 acres in Broadview Water District.

New Interim Water Contracts Should not be Issued: Reclamation has Excluded the Public from Essential Biological Impact Analysis and has Not Complied with Required Mitigation and Monitoring Measures Necessary to Protect Endangered Species.

Reclamation requested comments on the proposed Project by January 16, 2018. Filing a Freedom of Information Act Request on December 28, 2017, PCL et. al. sought copies of the Biological Assessment and any consultation correspondence between Reclamation and Fish and Wildlife Service.⁵ The consultation history and Biological Assessment are essential documents needed to inform the public and these groups and their members as to the significant impacts to species whose existence is hanging in the balance due to drought conditions over much of the last decade, combined with impacts from pollutants discharged to ground and surface waters resulting from continued irrigation of hundreds of thousands of acres of contaminated soils within these districts. These pollutants are transported by irrigation to groundwater and surface water supplies, resulting in concentrations that are lethal to fish and wildlife and pose a hazard to public health. Unfortunately, the FOIA request for information from USFWS by January 16th was denied and then the 20-day FOIA deadline for response (January 23, 2018) was not met and the needed biological impact information was not provided. As a result, the undersigned cannot determine whether Reclamation and Fish and Wildlife Service have complied with the Endangered Species Act and associated federal laws. Waiting further for a response to the December 28, 2017 FOIA request would only hamper public comment from our members. Please include these comments in the record.

We urge that, until there is compliance and the public has an opportunity to review and comment, the proposed interim contracts for water service should not be issued. Renewal without completion of the public process and without addressing environmental degradation resulting from contract issuance would violate the federal regulations and statutes. Despite over a decade of commenting on these serial interim contract renewal proposals, Reclamation has consistently failed to notify many of the undersigned of the environmental analysis and contract renewal.

Reclamation and the Water Districts Have Failed to Comply with Biological Opinions (BiOps), Reasonable and Prudent Alternatives, and Required Monitoring.

Monitoring that is essential to determining compliance has been haphazard, not implemented, or arbitrarily waived. The EA cites compliance with previous Biological Assessments as an indication of compliance but provides no data or information to document the required adherence to these documents.

A. Biological Opinion Monitoring Shortfalls⁶:

1. The EA, does not provide a current Biological Assessment, nor consultation with USFWS, but instead references the 2016-2018 BiOp in which Reclamation makes specified promises and yet provides no evidence or monitoring to support the assertions that they have indeed complied:

Reclamation will continue to adhere to the conservation measures from previous IRC consultations, specifically to ensure that project water is not used in a manner that adversely affects listed, proposed or candidate species. The Service considers the scope of this conservation measure to include the assurance that project water will not be used

⁵ FOIA Correspondence 12-28-17 from Pacific Advocates on behalf of the Planning and Conservation League, Sierra Club of California, the Institute for Fishery Resources and the Southern California Water Alliance FOIA FNS-2018-00402 .

⁶ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=28029 BiOp 2016-2018

in whole or in part to facilitate the conversion of existing natural habitat to agricultural or other purposes. This determination is essential to add support to the conclusions made regarding the overall effects of the proposed action.

2. Further, Reclamation commits to compliance with the CVPIA BiOps, the 2008 and 2009 BiOps on the Coordinated Operations of the CVP and SWP, the San Luis Drainage Feature Re-Evaluation EIS and BiOp, and the Grasslands Bypass Project 2010-2019 BiOp⁷:

Reclamation will continue to implement in a timely manner relevant environmental commitments, conservation measures, and terms and conditions from other biological opinions...

3. Finally, the BiOps included the assumption that Reclamation compliance *with other CVP-related, non-CVPIA actions benefiting fish, wildlife, and associated habitats and related to effects of IRCs, will continue, with at least current funding levels, including:*
 - a. the Central Valley Habitat Monitoring Program's Comprehensive Mapping Effort;*
 - b. implementation of the Central Valley Habitat Monitoring Program's Land Use Monitoring and Reporting; and,*
 - c. CVP Conservation Program and CVPIA B(1)(other) Habitat Restoration Program.*

The Project, tiered to the CVPIA PEIS and Biological Opinion, required comprehensive mapping every 5 years along with the land use monitoring and reporting, but this was not provided. There is no evidence that Reclamation complied with this condition. Without this required mapping and monitoring the impacts to Federally-listed species such as the giant garter snake, San Joaquin woolly threads, California Least Tern, San Joaquin kit fox, blunt-nosed leopard lizard and critical habitat impacts to the Buena Vista Lake Ornate Shrew cannot be accurately assessed and determined.

B. Inconsistencies with Applicable Biological Opinions:

1. The previous BiOps by USFWS have consistently been based upon the assumption that CVP water contract amounts and deliveries will meet the conditions of the 2008 & 2009 OCAP biological opinions. And yet, Reclamation admits in the EA that they refuse to analyze Contract Service Areas (1.4.1), Water Transfers and Exchanges (1.4.2), Contract Assignments (1.4.3), Purpose of Water Use (1.4.5), and Drainage (1.4.6). This is an arbitrary and illegal exclusion of consideration of impacts to endangered species and biological resources. This is especially concerning given that the biological opinions governing these contract renewals stated clearly:

For the purposes of this consultation on these IRCs, we assume that any drainage service implemented in the SLU will be consistent with the project description and assumptions in the San Luis Drainage Feature Re-evaluation (SLDFR) BiOp (Service File 06-F-0027). Any drainage management implemented in a manner not considered in the SLDFR BiOp will need to undergo separate section 7 or section 10 consultation pursuant to the Act.

The water demand discussion in the EA instead assumes implementation of the 2015 drainage settlement,⁸ which has not undergone a NEPA analysis nor does it with the federal or state endangered

⁷ These commitments include implementation of the CVPIA and Continued Operations and Maintenance of the CVP (November 21, 2000, Service File No., 98-F-0124), and the Grassland Bypass Project 2010-2019 (Service File No., 09-F-1036). See https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=28029

⁸ <https://www.usbr.gov/mp/docs/Notice-of-Filing-Settlement-Agreement-AS-FILED-with-attachment-091615.pdf>

species act protections--a violation of civil laws.⁹ The demand study assumes 100,000 acres in Westlands will be retired by 2051. A review of the lands listed in the 2015 Settlement¹⁰, however, show that currently all but roughly 3,000 acres have already been retired. Accurate mapping and monitoring required under existing BiOps and CVPIA mitigation measures would have clearly documented that much of these 'retired' lands have been sold or leased for solar or utility uses.¹¹ In addition, the EA assumes a reduction in full contract quantity to 895,000 AF being applied in 2051. The drainage settlement, however, does not say that it's going to take 30+ years for the minimal land retirement to be implemented and the contract quantity to be reduced. If such is the case the Project needs to analyze and disclose this impact.

No basis is provided for this new conclusion in the Project EA. The 2006 SLDFR BiOp was based upon at a minimum retiring roughly 200,000 acres of drainage impaired acreage within Westlands. This was a reduction from the roughly 300,000 acres documented in the SLDFR FEIS. Reducing the retired acres in the Westlands' service area to 100,000 acres of already retired lands and extending the date for compliance to 2051, substantially understates the extent of contamination problems and overstates the acreage suitable for irrigation, thus falsely supporting extra water contract deliveries. There is no basis in current law for this assumption.

Non-Compliance with San Luis Drainage Feature Re-Evaluation(SLDFRE), FWCA and BiOp: The arbitrary reduction in impaired acreage and associated conclusions in the Project EA are inconsistent with the SLDFRE ROD and Biological Opinions, all of which govern the Project unless and until they are changed.¹² There are no data or information provided in the EA to show compliance. In fact, recent monitoring data for the Project indicate selenium levels in discharges to Mud Slough and the San Joaquin River in excess of the required 10 µg/L. Furthermore, proposed treatment demonstrations have not worked.

....Reclamation indicated that the project is predicated on the successful compliance with the 10 µg/L waterborne selenium concentration following pre-treatment. Further, it was agreed that the effluent would be treated to oxidize the selenium to selenate. These thresholds form the basis for the underlying risk assessments, and this agreement is therefore a critical project element. The Service's understanding of this agreement is that failure to meet this objective will necessitate future FWCA, National Environmental Policy Act, and ESA consultation.(See pg. iv)¹³

In addition, Reclamation was required under the SLDFRE FWCA and BiOp to..."include mandates and directives as provided under the Central Valley Project Improvement Act, CALFED, the ESA, the Clean Water Act, and the MBTA. As an example, retiring drainage impaired lands in the SLU should reduce water demand such that unmet environmental needs, including refuge level 4 water supplies, could be met through water made available via land retirement."

This has not been done.

⁹ <http://www.digitaljournal.com/news/environment/op-ed-advocates-claim-a-secret-pact-has-occurred-with-california-water/article/437847> and by reference 6-24-15 Letter from Friends of the River to Justice Re " Draft Proposed Settlement terms in *Firebaugh Canal Water District and Central California Irrigation District v. United States of America and Westlands Water District* CV-F-88-634-LJO/DLB and CV-F-91-048-LJO/DLB Violate Civil Laws of the United States."

¹⁰ *Ibid.* #7 see the attachment list of APNs for properties listed for retirement.

¹¹ <http://web.energyvacuity.com/REProject.aspx?id=16887> Westlands' Growing Solar Operations and Utility Developments & <http://wwd.ca.gov/resource-management/land-management/>

¹² FEIS, Also see Appendix M part 3 & 4: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=61

¹³ *Ibid.* @ pg iv.

Compliance with the San Luis Drainage Feature Re-evaluation EIS (@ pg 25) required and assumed that current GBP drainwater discharges to the San Joaquin River would stop by 2009. The discharges have not stopped and in fact will continue past 2019 when the current Use Agreement for the San Luis Drain ends. However, the Project EA is silent regarding the impact of continuing to import water to irrigate these contaminated west side soils, collect the resulting agricultural waste water, and discharge it to the San Joaquin River and Delta Estuary via Mud Slough. This occurs most directly from irrigated lands within the GBP boundary, but also includes increased transport of contaminated groundwater and runoff from areas of Westlands that are upgradient of the GBP.

Migratory Bird Treaty Act (MBTA)

Federal courts have recently affirmed that Federal agencies are subject to prohibitions outlined in the MBTA, including restrictions on “take” of migratory birds.

The MBTA prohibits the intentional or unintentional takings of migratory birds except under specific authorized and permitted activities. On January 10, 2001, Executive Order 13286 was signed by the President of the United States. The order requires Federal agencies to incorporate migratory bird conservation measures into their agency activities. Furthermore, the order stipulates that Federal agencies are required to develop a Memorandum of Understanding (MOU) with the USFWS outlining how the agency will promote conservation of migratory birds. No MOU could be located for the Project in the EA. This lack of compliance is further compounded by monitoring reports that documented a deformed embryo in 2008 at the drainage treatment site dubbed the SJRIP. Additional elevated levels of selenium have also been reported in the eggs of migratory birds.¹⁴ Recently, biological monitoring has been curtailed and this lack of monitoring further confounds enforcement.¹⁵ Recent 2016 biological data¹⁶ from the SJRIP 2016 wildlife monitoring report indicate, “ that the average egg-selenium concentration for killdeer shorebirds on the project site was 20.7 parts per million (ppm), which “continues[s] to be above selenium levels associated with a high probability of reproductive effects, including reduced hatchability... One killdeer egg on the project site had an alarmingly high selenium concentration of 54 ppm, and the biological monitoring report indicates that selenium concentrations in bird eggs on the project site are increasing over time.”¹⁷ The selenium concentrations found in bird eggs on SJRIP lands are concerning and clearly indicate that modern drainage management efforts continue to pose substantial

¹⁴ Results of the 2008 wildlife monitoring program for the San Joaquin River Water Quality Improvement Project were released in a July, 2009 report. As described on page 10 of the July, 2009, wildlife monitoring report, part of the normal monitoring protocol implemented by H.T. Harvey & Associates (hereafter H.T. Harvey) The narrative description of the condition of the embryo in question can be found on page 22 of the July, 2009, wildlife monitoring report. Also note that this embryo is identified in Table 4 on page 25 of the July, 2009, report as ID Number 04, Field Number S-03, from an egg collected May 23rd, 2008, and containing 74.6 ppm Se dw. The embryo was estimated to be at an incubation stage (age) of 17 days when the egg was collected. Joseph Skorupa confirmed in an email dated 7-9-15: *I can confirm that the types of embryo deformities illustrated in photos 04 and 04A thru 04D are quite typical of what I have observed and documented in my own research examining black-necked stilt embryos from eggs containing similar concentrations of selenium. At egg exposures as high as 70-80 ppm Se dw, black-necked stilt embryos have about an 80% probability of being deformed based on 16 randomly sampled eggs in that exposure range that I have compiled records for (13 of the 16 eggs contained deformed embryos) during about the last 25 years.*

¹⁵ See https://www.waterboards.ca.gov/rwqcb5/board_decisions/tentative_orders/1408/19_grasslandbypass_proj/9_gp_wdr_cwin_com.pdf & <http://calsport.org/news/wp-content/uploads/2013/12/Coalition-Letter-on-GBP-ESA-Violations-Monitoring-Reductions-LTR.Corrected-.pdf>

¹⁶ <http://www.sfei.org/projects/grassland-bypass-project#sthash.yKvX5pXT.dpbs>

¹⁷ *Ibid.* See the HT Harvey 2016 SJRIP Wildlife Monitoring Report.

dangers to migratory birds and other wildlife. No mitigation or compliance with this take under the Migratory Bird Treaty Act is addressed in the Project.

Failure to Comply with the Central Valley Project Improvement Act Mandates.

The more than 20 years of perpetual renewals of the interim contracts without completing the NEPA EIS requirement established by Congress is contrary to Section 3404 (c) of the CVPIA which reads in pertinent part as follows:

(c) **Renewal of Existing Long-Term Contracts.**—Notwithstanding the provisions of the Act of July 2, 1956 (70 Stat. 483), *the Secretary shall, upon request, renew any existing long term repayment or water service contract for the delivery of water from the Central Valley Project for a period of 25 years and may renew such contracts for successive periods of up to 25 years each. (1) No such renewal shall be authorized until appropriate environmental review, including the preparation of the environmental impact statement required in section 3409 of this title, has been completed. Contracts which expire prior to the **completion of the environmental impact statement required by section 3409 may be renewed for an interim period not to exceed three years in length, and for successive interim periods of not more than two years in length, until the environmental impact statement required by section 3409 has been finally completed, at which time such interim renewal contracts shall be eligible for long-term renewal as provided above . . .*** . [Emphasis added.]

The contract also violates Reclamation’s duties to comply with NEPA. Reclamation’s commitment to renew the contracts before environmental review takes place renders that review a meaningless charade. By way of example, each of the new “interim two year” contracts contains language that basically perpetually renews the contracts: “This Contract shall be effective from March 1, 2018, and shall remain in effect through February 28, 2020, **and thereafter will be renewed as described in Article 2 of IRI if a long-term renewal contract has not been executed with an effective commencement date of March 1, 2020.**” [Emphasis added] Pre-deciding an action precludes meaningful analysis and weighing of project alternatives. Moreover, compliance with other environmental laws such as the ESA, CESA, CEQA, MBTA and the Fish and Wildlife Coordination Act is likewise rendered meaningless because approval of the action is preordained. Some of the undersigned have already commented on the failure of the EA to sufficiently analyze the full range of alternatives.

Just as Reclamation’s environmental analysis failed to consider the impacts of the proposed action upon the water source, these interim contracts will perpetuate these impacts without sufficient analysis and mitigation of the impacts to the areas being dewatered—the American, Trinity, and Sacramento rivers, and the Delta. Limiting the study area and analysis to the lands receiving the water deliveries precludes meaningful analysis of the impacts to the watersheds where the water is being diverted and extracted. Reclamation’s decision to enter into a contract to deliver water *by taking it from these watersheds and water sources* has significant impacts on fish and wildlife. These cumulative impacts will be compounded by this ever- renewing “interim” contract for water diversion and delivery. Reclamation’s deficient review of the watershed's most impacted by the water diversions renders unlawful Reclamation’s proposal to execute these flawed contracts.

Another fundamental flaw is Reclamation’s reliance on the outdated and unrealistic quantity terms of the old 1940’s and 1950’s CVP contracts that exaggerate water supplies and fail to consider the environmental impacts of continuing to irrigate toxic soils that poison lands and waters downstream while deforming migratory birds and other wildlife. Reducing these inflated quantities to reflect these factors is also clearly required by the reasonable and beneficial use requirements of federal and state law. Therefore, Reclamation’s decision to roll over all previous maximum water quantity terms, regardless of

Reclamation's ability to provide such water quantities, and then by contract to obligate the federal government to such renewals, is a fundamental policy mistake and an illegal agency action.

The defects in the quantity terms are part of a larger problem in that the contracts fail to make adequate provision for environmental protection and mitigation required to restore fish and wildlife impacted by these water diversions and extractions that have left source areas with lethal temperatures, poor water quality, and insufficient water to serve area of origin and public trust needs. The interim contracts fail to ensure existing standards under the ESA, CVPIA, Clean Water Act, and state water law will be met and implemented as part of these new contract commitments. Specifically, the export contracts have not considered the potential impacts to the Delta, the San Joaquin River, Sacramento River, American River and Trinity River. Reclamation's failure to provide for adequate environmental protection in the contracts or even to adequately consider and evaluate the environmental impacts of the proposed contracts, means that the Bureau cannot legally execute the proposed contracts.

In addition, the CVPIA (section 3406[a][2]) amends the Central Valley Project Authorizations Act of 1937 to include equal consideration for agricultural, domestic, and fish and wildlife enhancement. In the SLDFR EIS and BiOp, USFWS assumed some portion of surplus water made available from any future reassessments of district water needs analyses by Reclamation would be used for fish and wildlife enhancement. The serial renewal of these "interim" water contracts has failed to comply with CVPIA mandates including:

The CVPIA(Section 3404(c)(2)), which states, with emphasis added:

Upon renewal of any long-term repayment or water service contract providing for the delivery of water from the Central Valley Project, the Secretary shall incorporate all requirements imposed by existing law, including provisions of this title, within such renewed contracts. The Secretary shall also administer all existing, new, and renewed contracts in conformance with the requirements and goals of this title.

We recognize the first sentence refers to long-term contracts and that, technically, the Project is an interim contract. However, when short-term interim contracts are serially renewed for decades they become similar to long-term contracts. In addition, the second sentence emphasized above is broader and carries an administration mandate that the Secretary has failed to administer. Section 3404(c)(1)'s modification mandate--"Such interim renewal contracts shall be modified to comply with existing law, including provisions of this title"-- is supplemented by 3404(c)(2)'s administration mandate.

One might incorrectly conclude that the highlighted administration mandate in 3404(c)(2) is redundant to the modification provision of 3404(c)(1). But those provisions actually accomplish two different objectives, and the rules of statutory construction require that laws be interpreted to give substance and meaning to all parts of a law. The first says the Secretary has to make the amendments and the second is a mandate to administer the amendments. The Secretary has no discretion to give a pass to the contractors on enforcement. By law the interim contracts 'shall be modified to comply with existing law', as required by 3404(c)(1) and the Secretary is also required to fulfill the enforcement/administration mandate in 3404(c)(2). The interim renewal of these contracts fails on both counts and should not be renewed. Reclamation has no legal obligation to renew the contracts.

The Project renewal contract deliveries have several components with potential adverse effects on listed species (e.g., effects from agricultural drainage management and disposal, and changes to land use and cropping patterns, etc.).The effects of agricultural drainage management are assumed to have been

addressed in other consultations, however, compliance is shoddy at best.¹⁸ The EA provided no data to show that Reclamation has in fact complied with the reasonable and prudent alternatives designed to protect endangered species such as the giant garter snake, salmon, steelhead and the San Joaquin Kit fox.

Expanded Service Areas for Exported Water within Westlands without Legal Justification and Compliance with San Luis Act P.L. 86-488.

P.L. 86-488 clearly establishes that Reclamation is limited to 'furnishing water for irrigation to 500,000 acres of land in Merced, Fresno, and Kings County. The current Project, proposes to irrigate roughly 600,000 acres in Westlands Water District alone. The Project does not provide the legal justification for this expanded service area outside of the Congressional authorization. In addition the EA is equally silent on the requirement to provide mitigation required for the expanded CVP service area. The Final EIR for Consolidated and Conformed Place of Use (CPOU) for the CVP (SWRCB, 1999) identified and analyzed impacts associated with CVP deliveries to encroachment lands (lands within the boundaries of CVP water contractor service areas that have already received CVP water, but are located outside the authorized CVP Place of Use). Of the 45,390 acres of encroachment lands that served CVP water for agricultural purposes, the following encroachment was identified in the SLU:

Westlands WD: 1,611 acres of valley-foothill riparian/fresh emergent wetland
 6,653 acres of annual grassland
 22,343 acres of alkali scrub

The Final EIR for CPOU (from page 2-91) stated,

“Reclamation shall be required to develop a schedule for feasible implementation and monitoring of mitigation or restoration actions subject to approval of the SWRCB. In addition, the SWRCB will also compare each mitigation or restoration project’s environmental/habitat benefits with a set of criteria to be developed jointly by Reclamation and the USFWS, that will assign environmental/habitat target values that need to be restored or mitigated for, pursuant to the approval of the petition to change the CPOU focusing primarily on listed species habitats lost on encroachment lands as identified in Table 2-36 found on page 2-79.” Despite changes in the CPOU, there is no data provided to document the required mitigation acres have been identified, acquired and enforced.

¹⁸ In 2006 Reclamation completed an Environmental Impact Statement (EIS) and Record of Decision (ROD) under the National Environmental Policy Act (NEPA), and the Service completed a Biological Opinion (Service File No. 2006-F-0027) and a Fish and Wildlife Coordination Act Report in accordance with the provisions of section 2(b) of the Fish and Wildlife Coordination Act (48 stat. 401, as amended; 16 U.S.C. 661, et seq.) on San Luis Drainage Feature Re-evaluation (SLDFR). The purpose of the SLDFR project was to meet Reclamation's obligations under the Federal San Luis Unit Act of June 3, 1960, Public Law 86-488, 74 Stat. 156, Section 5, to provide drainage service to drainage-impacted lands within the San Luis Unit (including drainage impacted lands within WWD).

On December 18, 2009, the Service issued a Biological Opinion to Reclamation on the continued agricultural drainage management and disposal called the Grassland Bypass Project (GBP), involving seven agricultural water districts downslope of WWD (Service File No. 2009- F-1036). The Service concluded that the GBP is likely to adversely affect, but is not likely to jeopardize the continued existence of the giant garter snake and the San Joaquin kit fox, and not likely to adversely affect the Delta smelt (including Critical Habitat). The 2009 Biological Opinion provided reasonable and prudent measures and terms and conditions to implement those measures.

Cumulative Impacts to Endangered Species of Related Activities in the Action Area Are Ignored and Monitoring to Ensure Compliance is Inadequate, Leading to Ongoing Export of Selenium Contamination Beyond the Project Area.

The Project failed to consider cumulative impacts from changes to land use, transfers, and groundwater pump-ins within the “action area.” In accordance with 50 CFR 402.02, the action area includes all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action. No data are provided to assess the following several types of potential impacts to the environment:

1. Impacts to CVP and SWP water supply canals used to deliver the water to the districts (the San Luis and Delta-Mendota Canals), and the resultant impact from irrigating these toxic soils.

After the water is applied to the agricultural lands within Westlands and the other San Luis Unit districts, the irrigation results in polluted water containing a composition of compounds introduced from its use, some of which is directed to the Grassland Bypass Project and associated channels, the San Joaquin River Water Quality Improvement Project, or other programs and components included in the term ‘Grasslands Bypass Project’ to reuse, retain, or treat the drainage water. Thus, all of these areas and impacts must be included in the action area. Ultimately, the water exported from the San Francisco Sacramento-San Joaquin River Estuary for irrigation of Project lands results in agricultural waste-drainage water that is directed into the federal San Luis Drain and then Mud Slough North, from which it is discharged into the San Joaquin River. The agricultural waste-drainage water discharged from the San Luis Drain has been shown to contain and introduce toxic levels of selenium to downstream areas even after treatment and reuse (Reclamation, 2016a), due to the extreme toxicity of selenium (Hamilton 2004). Areas that may be directly or indirectly impacted by the Project include the San Luis Drain and all natural waterways down to, and including, the Delta. By name, these natural waterways include Mud Slough North starting from the discharge point, the main stem of the San Joaquin River receiving water from this action, down to the southern Delta, including Old River and Middle River, and the southern Delta, ending where the Delta joins with the San Francisco Bay. Selenium contaminants are known to accumulate in the food chain and impact salmon, steelhead, sturgeon and other aquatic food chain resources. NMFS recommended in 2000 and 2010 a limited 2-year extension to assess the viability of treatment plans due to impact and take of endangered species:

The potential effects of the WY 2010 Interim Flows on selenium levels at Hills Ferry and downstream are currently under review. The high levels observed in the San Joaquin River at Hills Ferry from August 2009 to January 2010 are a cause for concern....Changing the water quality objective from a 5 ug/L 4-day average to a 15 ug/L monthly mean could allow significant elevation(s) in selenium levels that could cause take of listed anadromous species in the lower San Joaquin River Basin and Delta...NMFS, therefore, supports extending the Basin Plan Amendment compliance date for meeting selenium objectives in Mud Slough and the San Joaquin River from the confluence with the Merced to Mud Slough for an interim period of two years...¹⁹

Reclamation has instead reduced the monitoring for selenium in the San Joaquin River, Mud Slough and to the confluence with the Merced to Mud Slough and in the south Grasslands wetland supply channels.

¹⁹ Howard Brown, Acting Supervisor, Central Valley Office NOAA, September 22, 2010 letter to SWRCB Re Comment Letter--San Joaquin River Selenium Control Plan Basin Plan Amendment ARN 151422SWR2001SA5967.

2. **Impacts from the groundwater pump-in projects to the Delta Mendota pool from Widren Water District²⁰ and Westlands Water District²¹.** Pump-in projects refer to the practice of pumping groundwater from wells into receiving waters, such as the Delta Mendota Pool and the California Aqueduct, in order to lower the water table. This practice will likely increase if more irrigation water is supplied to areas like Westlands. Monitoring for this and other pump-in projects is limited and has not been subject to public review. No data is provided in the Project EA as to selenium contamination levels or cumulative impact from these pump-in discharges to receiving waters. Additionally another pump-in project for the San Joaquin Exchange Contractor's transfer program that expired in 2015 and was recently re-authorized by Reclamation for an additional 25 years. And there is yet, another 25 year groundwater pump in and exchange transfer program that was authorized in 2008.²² These additional project approvals of more federal contractor discharges, have the potential to cumulatively impact endangered species such as the giant garter snake and California Least Tern that rely the habitat created by ground water seepage into wetland channels and also reproductive impacts from selenium contamination that accumulates in the water, food chain and food sources.

3. **Impacts from Westlands Water District's pump-in of groundwater to the California Aqueduct.²³** This is a 5-year pilot project under a 25-year authorization whereby Westlands is allowed to pump-in up to 30,000 acre feet a year under specified conditions, required that the ground water being pumped into the aqueduct is not contaminated with selenium and other contaminants beyond MCL drinking water standards. Unfortunately, the drinking water standard for selenium is not protective of fish and wildlife and these waters are the sole source of water feeding the critical habitat for the Buena Vista Lake Ornate Shrew. The monitoring required (only monthly) and the discharge limits do no protect of designated beneficial uses. It is doubtful selenium spikes will be caught with such limited monitoring. No NPDES permit for discharge of this water into the California Aqueduct was required and the Project provides no analysis regarding the impact from spreading selenium contamination throughout the aqueduct where it can accumulate and impact fish and wildlife, as well as humans who ingest fish from the canal. Ribbons of selenium contaminated water flowing through the western San Joaquin Valley also will likely result in takings of migratory birds, and yet there is no monitoring, analysis, or compliance with the Migratory Bird Treaty Act provided in the Project.

Conclusion

The Project falls short of protecting beneficial uses and of evaluating, disclosing, regulating and monitoring the impacts of the proposed water exports and the resulting pollution discharge. Reclamation needs to ensure the protection of the quality of the Nations' waters and adherence to non-degradation

²⁰ https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=30446 In 2017 Reclamation sanctioned the Discharge of 1,000 acre feet of shallow groundwater from Widren Water District into the Delta Mendota Canal for export to south of the Delta use including Westlands.

²¹ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=11472 November 2012 Reclamation sanctioned a ten year pump-in project to convey 50,000 acre feet of groundwater to Westlands and other south of the Delta users with a monitoring program that is suppose to report constituents of concern including monitoring for Selenium. No data or reports have been provided to the public.

²² https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=9086. SJEC 150,000 AF transfer program 2014 Water Transfer Program for the San Joaquin River Exchange Contractors Water Authority, 2014-2038 EIS/EIR & https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=3037 25 year 2008 SJEC Pump-in Project.

²³ Environmental Comments on the Draft Environmental Assessment Westlands Water District Groundwater Warren Act Contract EA-15-001 & FONSI-15-001. March 26, 2015 to Bruce Lawrence, Bureau of Reclamation See also https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=21023

requirements of surface waters including the San Joaquin River along with endangered and threatened species including salmon, steelhead, sturgeon, other aquatic species and migratory birds that are likely adversely impacted.

The Project is not consistent with federal and state law and fails to implement required federal and state mitigation requirements contained in the FEIR/EIS, USFWS Reasonable and Prudent measures required in USFWS's Biological Opinion and the USBR governing 3rd Use Agreement. The failure of the Project to adhere to these required mitigation measures and monitoring requirements renders protection of beneficial uses of sloughs, wetlands, river and the Bay-Delta estuary at risk from extensive contamination and leaves the costs of cleanup and remedies upon the public.

In our view, Reclamation has displayed a staggering:

- Lack of public disclosure and consideration of public comment across an extended period of serial renewals of interim water contracts.
- Disregard for meeting commitments made in previous renewals and related projects.
- Disregard for considering impacts of water contract renewals on endangered species and water quality beyond the physical boundary of the Project.
- Disregard for legal requirements of the Endangered Species Act, Migratory Bird Treaty Act, Central Valley Project Improvement Act, the National Environmental Policy Act, and other federal requirements.

For these and other reasons presented above we recommend nonrenewal of the interim contract as proposed. Reclamation must prepare a full EIS that evaluates a full range of alternatives to the proposed action, including reduced contract delivery alternatives. Reclamation must also reinitiate consultation under the Endangered Species Act with the U.S. Fish and Wildlife Service, and pursuant to section 7(d) of the Act, must avoid any irreversible or irretrievable commitment to resources that have the effect of foreclosing the formulation or implementation of any reasonable and prudent measures developed during this consultation. Thank you for considering our comments, please submit these for the record.



John Buse
Senior Counsel
Center for Biological Diversity
1411 K St. NW, Suite 1300
Washington, D.C. 20005
jbuse@biologicaldiversity.org



Adam Keats
Senior Attorney
Center for Food Safety
303 Sacramento St., Second Fl.
San Francisco, CA 94111
akeats@centerforfoodsafety.org



Jonas Minton
Senior Policy Advisor
Planning and Conservation League
jminton@pcl.org



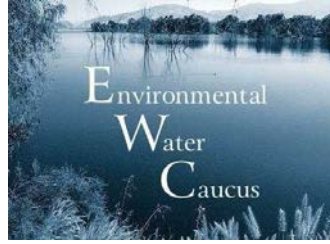
Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Conner Everts
Executive Director
Southern California Watershed Alliance
Environmental Water Caucus
connere@gmail.com



Noah Oppenheim
Executive Director
Institute for Fisheries Resources
Pacific Coast Federation of Fishermen's Asso.
noah@ifrfish.org



NORTH
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CA Save Our Streams Council



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180



April 2, 2014

Rain Emerson
Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Subject: Final Record of Decision and Final Environmental Assessment [FEA] for Westlands Water District ET. Al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water.¹

Dear Ms. Emerson:

On behalf of the undersigned groups and the hundreds of thousands of members they represent, we respectfully request these comments be included in the record regarding the six interim contract renewals for delivery of over one million acre feet of water from the Central Valley Project, as referenced above. No opportunity for public comment or review was provided prior to the adoption of the Final Environmental Assessment [FEA], the final Record of Decision [ROD] and the Biological Opinion [BO]. These final decisions were made the same day after the 5:30 p.m. receipt of the USFWS Biological Opinion dated February 28, 2014.

After the decision was made, the final documents were not made available to the undersigned until March 21, 2014. Notice was received of the document's availability on the web on March 7th; however, they were not posted until after March 21, 2014. Here are our comments and review of the Final Environmental Assessment and Record of Decision (ROD). As our comments on the DEA pointed out, we find the proposed contract renewals will cause significant environmental impacts that have not been evaluated, issuance of the contracts would violate federal law, and a full Environmental Impact Statement is required by law.

As noted in our January 2014 comments and as reflected in the attached materials, the proposed interim renewal contracts are a threat to California's environment and constitute misguided federal policy. Furthermore, the contracts and their supporting environmental documents have numerous legal deficiencies. We re-iterate that the proposed interim contracts and their supporting Environmental Assessments and other environmental documents violate the Administrative Procedure Act (APA), the Central Valley Project Improvement Act (CVPIA), the Reclamation Reform Act (RRA), the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), the Coordinated Operations Act of 1986 (PL 99-546), and P.L. 86-488 Central Valley Project San Luis Unit. We urge the Bureau to withdraw the proposed interim renewal contracts and reinstate negotiations after adequate public review is afforded and all environmental impacts are disclosed.

The Bureau has basically excluded public comment and proceeded with the project. In the FEA and ROD, the Bureau contends there is no need to consider alternatives, impacts, or cumulative impacts because this project continues the "status quo." The problem is the status quo. The status quo has resulted in the continued decline in the health of endangered species, water-quality degradation, increased down-slope selenium and salt pollution of ground and surface waters, all from the continued diversion, export and taking of water supplies for delivery to these west side properties. In the FEA and ROD the Bureau contends, "*There would be no effects to salmonid species' designated critical habitat or green sturgeon since none inhabit or exist in Westlands or Santa Clara.*" (FEA at page 33.) It is true fish do not inhabit the irrigated fields of Westlands or Santa Clara. The proposed project does, however, export, divert, and take fish and the habitat—the water necessary for survival along with aquatic species and food essential to these species while grinding up these and other species up in the pumps in the process of diversion and

export. The FEA determines there will be no impact from the “status quo” project on other endangered or threatened species including the California least terns, the giant garter snake and migratory birds. This finding is made despite the fact that these species feed on aquatic species found in the Westlands Water District (Westlands) evaporation ponds, adjacent canals, standing water of the 55 miles of the San Luis Drain located in the district, and wetland channels and the San Joaquin River located down-slope of the District. Further, no monitoring data and required mapping under existing BOs has been provided in the FEA to support the conclusion of no impact from the “status quo”.

No analysis of cropping changes and water application rates are provided. Despite permanent crop conversion within Westlands, which has more than doubled from 2005 to 2013, from 88,833 acres to 160,728 acres, with the attendant increase in applied water, again without data or monitoring, the FEA determines that foraging San Joaquin Kit Foxes are not present and there is no reason to analyze the impacts of increased irrigation because this project renews the “status quo.” (BO at pages 12 to 14) The same conclusions and lack of data has been presented now 14 times in the last decade or so as interim contracts are rolled over without adequate environmental review because they are “short term.”

Further the FEA at page 21 makes vague reference to.... *a stipulated agreement dated September 14, 1981*, indicating Westlands’ contractual entitlement to CVP water was increased to 1.15 million AF. The FEA suggests that this expired 2007 agreement trumps Congress and the legal requirements of the CVPIA, the Coordinated Operations Act of 1986, and the CVP San Luis Unit authorizing statute PL 86-488. No documentation is provided to support this inflated claim of water. The stipulated agreement could not be located on the Bureau’s website. This undocumented assertion is just another curtain pulled to ensure the public is left in the dark, comments are not considered and alternatives are not entertained.

The FEA at page 23 states, “*Execution of interim renewal contracts, with only minor administrative changes to the contract provisions, would not result in a change in contract water quantities or a change in water use.*” No information is provided regarding the “minor administrative changes.” We learned, however, on January 21, 2014, from a Westlands’ Board meeting and associated public record documents that these ‘minor administrative changes’ include an extensive funding agreement between the Bureau and Westlands to redirect operation and maintenance payments to pay for a massive conveyance project to deliver even more water called the Delta Habitat Conservation and Conveyance program. This engineering and planning effort is part of the federal and State of California’s Bay Delta Conservation Project to transport some 9,000 cubic feet per second directly from the Sacramento River under the Delta estuary to the pumps for export to the San Luis Unit and west side irrigators. The FEA contends these changes are minor and thus the funding and agreements provided by the changes are not part of this project and do not warrant analysis. But this contention is not supported with legal and factual analysis.

We have the following specific comments regarding the failure of the FEA, FONSI, and ROD to meet the requirements of federal environmental law:

1. The National Environmental Policy Act (NEPA) regulations, guidance from the Council on Environmental Quality (CEQ), and the Department of the Interior's NEPA regulations require adequate public review and comment of the BO and FEA.

As mentioned the final EA, Record of Decision and the USFWS biological opinion dated February 28, 2014 (which were not on the website) were not provided to the undersigned until March 21, 2014. It appears from the final documents that the ROD and Final EA were also signed February 28, 2014. This sequence of actions has created a wall that deliberately excludes the public from commenting on these documents and prevents our comments from being considered prior to adopting the Record of Decision. USBR provided a draft EA for public comment on December 13, 2014. Contrary to the provisions of 50 CFR 402.12(f)], when section 7 requires a Federal agency to prepare a biological assessment, the assessment should be part of the draft and final environmental document and, where formal section 7 consultation is required when a Federal action may affect listed species or destroy or adversely modify designated critical habitat (50 CFR 402.14), the results of such consultation should be addressed in the draft and final environmental document, or, as appropriate, in the record of decision. The consultation and resulting Biological Opinion was not made available for public review or comment prior to the federal decision on the project. Thus, there was no provision for public comments or consideration of these comments. Thus the assertion that "*the EA-13-023 and its scope of analysis were developed consistent with National Environmental Policy Act (NEPA) regulations, guidance from the Council on Environmental Quality (CEQ), and the Department of the Interior's NEPA regulations*" is not correct. [At page pg 94 of the PDF]

2. Failure to Comply with Federal Law: The Bureau claims that renewal of the contracts is the status quo and, thus, concludes that consideration of impacts especially to endangered and threatened salmon species and alternatives is not necessary, nor is further compliance with the Fish and Wildlife Coordination Act required. This conclusion is not supported and violates federal law.

As stated, the FEA fails to provide survey data, comprehensive mapping, or monitoring data to support compliance with previous Biological Opinions or ESA provisions. Current survey data are not provided to support the conclusion that the Giant garter snake, California least tern, and migratory birds are not being harmed by pollutants in Westlands' evaporation ponds, standing water found in the 55 miles of the San Luis Drain and associated drainage and conveyance facilities, or wetland channels and the San Joaquin River located down slope of the District. Harm to these species can occur from consuming prey that has accumulated selenium and other pollutants found in drainage waters originating in the District.

No response is provided in the FEA, nor information or data, to assess the impacts from almost doubling amounts of applied irrigation water and the resultant additional subsurface movement along with the attendant pollutant and drainage impacts. Further, no monitoring data or mapping was provided to support the contention that lands previously fallowed or untilled for three years as required under previous BOs have remained uncultivated.

Finally no biological or monitoring data is presented to support the conclusion that the San Joaquin kit fox, western burrowing owl, Swainson's hawk and other raptors (known to use and forage on crop lands) will not be harmed or impacted from the extended water service contract for irrigation and/or the associated selenium pollution resulting from irrigating toxic soils within the district.

Further the Bureau claims, "*Since there would be no construction and water would move in existing facilities, FWCA does not apply and compliance is unnecessary*" at page 96 of FEA PDF. This claim is not supported by law. The 1992 CVPIA² requires compliance with the San Luis Unit authorizing act and feasibility study.³ Because of the impacts of the San Luis Unit to the Sacramento-San Joaquin Rivers and the Delta Estuary fisheries, the San Luis Unit feasibility study stated clearly: "*(d) Additional detailed studies of fish and wildlife resources affected by the San Luis Unit be conducted as necessary, after project authorization, in accordance with Section 2 of the Act of August 14, 146 (60 Stat. 1080)*"⁴ This authorization act and feasibility study required continued studies of fish and wildlife resources impacted by the project and was not conditioned upon "new" construction as stated in the FEA.

3. The Final Environmental Assessment (FEA), ROD and Project Approvals do not comply with the 1992 CVPIA, PL 86-488 or PL 99-546 CVP Coordinate Operations.

In the FEA at page 21, the Bureau makes vague reference to a "*stipulated agreement dated September 14, 1981 (in which) the contractual entitlement to CVP water was increased to 1.15 million*" and suggests that the Bureau is bound to this upper water contract amount and thus, cannot consider alternatives. The public is left in the dark once again. The curtain is drawn and the public and decision makers are precluded from the details and public comments. It is curious, as some contend, that some agreement that terminated in 2007 should trump federal law and Congress, but that seems to be how the Bureau puts a legal veneer upon this project proposal.

Under the proposed project, Westlands is laying claim to enough water to serve some 14 million people and to irrigate 600,000+ acres in Westlands alone. This is a classic case of how to grab water with a legal veneer by a federal agency that serves Westlands first and the folks paying their salary, the taxpayers, last. The Federal Central Valley Project serves water to the west side through the Central Valley Project, San Luis Unit. The Act authorizing water deliveries to Westlands Water District can be found in PL 86-488. This law provides "*water for the irrigation of approximately five hundred thousand acres of*

land in Merced, Fresno, and Kings Counties, California..." [Emphasis added] That is 500,000 acres of land in three counties serving three water districts that are authorized by law to receive water. Under this interim contract renewal project the Bureau is allowing Westlands to claim water to irrigate 610,000 acres in the Westlands district alone. The problem is that, after counting the acreage identified in the authorizing act and feasibility study in San Luis Water District (51,290 irrigated acres) and Panoche Water District (36,210 irrigated acres), the maximum acres entitled to receive CVP San Luis Unit water in Westlands is only 399,000 acres.⁵ The arithmetic for the excessive amounts of acreage to be irrigated in the authorized San Luis Unit and the proposed amounts under this project does not work. Further the resulting excessive diversions of fishery habitat—water and aquatic food sources—and entrainment of fish violates both ESA and the CVPIA.

How is it that the federal agency charged with carrying out the legal mandate of Congress is not following the law and that mandate? Further these acreages do not square with the some 100,000 acres of land retired because the lands are toxic (loaded with salts, metals and selenium deposits).⁶ The selenium, boron, salts and other pollutants adversely impact ducks, migratory birds, cattle, fish, and wildlife. The claim is that this contract is required because it is apparently based on an agreement to provide additional water contained in a 1981 stipulated agreement. As noted, however, this settlement agreement and provisional water expired in 2007. (See exhibit A). No explanation is provided as to why this expired agreement would trump federal law and Congressional directives. The referenced stipulated agreement is not provided, so the public and decision makers are left in the dark once again.

As mentioned, the 1992 CVPIA by definition requires compliance with both the feasibility study and the authorization act. The San Luis Unit feasibility study starting at page 264 notes,

"... since the water to be utilized with the project will be diverted from the Sacramento-San Joaquin Delta via the existing Tracy Pumping Plan and the Delta-Mendota Canal, all the fisheries of the Delta which are affected by the pumping plant will be affected by the San Luis Unit...These fisheries include those for the king salmon, striped bass, shad, catfish, largemouth black bass and many other species...Pumping at Tracy will be markedly increased with the San Luis Unit during the months of October, November, and January through March; and it will be increased to an important extent in other months in many years (table 1). Such pumping will increase the losses of young fish at the pumping plant and aggravate the fishery protection problem there....Diversions of water at Tracy will be increased for the San Luis Unit during all months (table 1). Of particular concern with regard to salmon is that pumping will be increased 1.7 times during March...Obviously, since about three-fourths of the young salmon pass through the Delta during this month, king salmon will be greatly affected by the project. . . Losses will be particularly severe in years when runoff is just sufficient to balance all demands of the Delta including those of the project. . . Further, it has been

assumed that these fish facilities will be at least 90-percent efficient in salvaging young salmon and striped bass of lengths of 1 inch or longer which enter the facilities. If such facilities should fail to be completed or prove to be less efficient than assumed here, losses to fishery resources would be greater than those indicated.” [Emphasis added]

The fish facilities at the Tracy pumping plants have not been 90-percent efficient. Thus the recommended “reasonable modifications” in the “authorized facilities” are needed to “*preserve and propagate these resources.*” Unfortunately, the “status quo” interim water contract renewals promoted by this project allow more water than the “authorized” facilities anticipated be diverting and exporting to the San Luis Unit without weighting the consequences and impacts. Further the feasibility study found only 199,000 acres out of the 496,000 in the three districts within the San Luis Unit to be Class 1 lands, and yet, under this contract water deliveries have been expanded and extended to vast acreages not sanctioned for water deliveries under the feasibility study and Congressional authorization.

4. PL 99-546, the Coordinated Operations Act, requires the Bureau in renewing water supply contracts to meet specified contract provisions, repayment provisions, fish and wildlife mitigation, and water quality measures. The FEA brushes aside these compliance issues (FEA PDF at page 98), stating they are not part of the proposed project.

It is unclear how the Bureau has determined a project that proposes to divert up to 1,192,948 million acre feet from the Sacramento San Joaquin Rivers Delta Estuary will comply with the Coordinated Operations Act. PL 99-546, among other things, amends the Rivers and Harbors Act of 1937 to specify that the CVP must provide for “the mitigation, protection, restoration and enhancement of fish and wildlife” and that any losses of fish and wildlife must be mitigated concurrent with CVP construction and operations and maintenance activities. The FEA does not evaluate how the renewal of these water contracts and pertinent “*operations and maintenance*” will meet the required fish and wildlife restoration provisions and water quality provisions. Further the ‘automatic’ interim contract renewals do not enforce the required repayment provisions. The FEA suggests that a failure to repay obligations by the Congressional deadline and shifting these costs to power users will not have an impact. This assumption and conclusion is not supported by facts.

Pursuant to law, in March 1989 the Bureau’s reported on Refuge Water Supply Investigations⁷ listed necessary water levels for 15 wetland refuges within the CVP’s service area. The Bureau estimated 500,000 acre-feet per year are necessary to provide an optimal amount of water to sustain these wetlands. Yet on average, only 380,000 acre-feet have been available. These interim water service contract renewals do not take into account these federal obligations. Over promising water supplies in these interim water contracts have far-reaching impacts on the native species Congress has required the CVP to preserve, restore and protect. Further these inflated promises also impact ratepayers, municipal bond holders and surrounding communities.

Further funding for these mitigation measures and water are required under both PL 99-546 and the 1992 CVPIA. Sufficient funds are to be obtained through an operations and maintenance surcharge on all sales of CVP water users and other charges as specified. Thus, a failure to require sufficient funds and to over allocate water supply contract amounts does have a potential impact on meeting these federal obligations to fish and wildlife and are likely to impact power users.

Now we learn under the vague term “administrative” changes, that these interim contracts provide for the redirection of these federally appropriated operation and maintenance funds to the planning, construction and design of additional water export facilities from the Sacramento-San Joaquin River Delta Estuary. (See exhibit B) These are not insignificant changes. The impacts and cumulative impacts of these changes need to be disclosed and considered. It is anticipated the final decision of the Westlands’ Board to expend funds pursuant to these agreements is likely by June or September 2014 when the contract provisions expire. In 2009 according to the Fitch Bond rating, Westlands used these inflated promises of water and the ability to sell this water to urban areas as “collateral” for its debt.⁸

Climate changes are summarily dismissed in the FEA at page 6, indicating merely that, *“While pumping will be necessary to deliver CVP, the Proposed Action will not require additional electrical production beyond baseline conditions and will therefore not contribute to additional greenhouse gas emissions.”* The FEA dismisses water supply impacts along with fish and wildlife impacts indicating these impacts will be handled through “flexible” operations and allocations *“...Therefore surface water resource changes due to climate change will be the same with or without the Proposed Action.”* The anticipated “flexible operations” and allocations are not disclosed. These undisclosed changes in operations can be significant and the impact far reaching. For example under the current drought CVP water supply allocations (announced in February 2014) allocations to wildlife refuges would be reduced by 6 percent in WY 2014. But the BO for the Coordinated CVP-SWP operations assumed no more than a 25 percent reduction in these supplies. Further 60% reductions are not provided for under the CVPIA requirements⁹ and the 2001 NEPA documents and refuge water contracts assumed no more than a 25% reduction in Level 2 refuge water supplies.¹⁰ Thus, the proposed ‘operational’ changes violate the premise for the BO, rendering it inapplicable and invalidating the project’s compliance with ESA.

For all of these reasons we urge the U.S. Bureau of Reclamation to fully comply with the National Environmental Policy Act, the Endangered Species Act and existing Biological Opinions, and the Clean Water Act, and to rescind these interim contracts. This is what needs to be done to meet the requirements of federal law. A full Environmental Impact Statement is required to address the impacts of these renewals.

Thank you for your consideration



Jonas Minton
Senior Policy Advisor
Planning and Conservation League
jminton@pcl.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@gmail.com



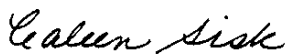
Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Caleen Sisk
Chief of the
Winnemem Wintu Tribe
caleenwintu@gmail.com



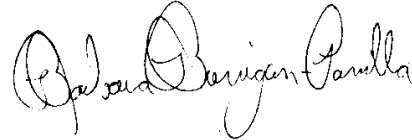
Barbara Vlamis
Executive Director
AquaAlliance
barbarav@aqualliance.net



Larry Collins
President
Crab Boat Owners Asso.
lcollins@sfcrapboat.com

Pietro Parravano
President
Institute for Fisheries Resources

John McManus
Executive Director
Golden Gate Salmon Asso.
john@goldengatesalmon.org



Barbara Barrigan-Parrilla
President
Restore the Delta
Barbara@restorethedelta.org

Frank Egger,
President
North Coast Rivers Alliance
fegger@pacbell.net

Stephen Green
Vice President
Save the American River Association
gsg444@sbcglobal.net

EXHIBIT A: EXCERPTS Barcellos & Wolfesen, Inc v. U.S. et al.

16 _____)
17 BARCELLOS AND WOLFSEN, INC.,)
18 et al.,)
19 Counterclaimants and)
20 Cross-Claimants,)
21 v.)
22 UNITED STATES OF AMERICA,)
23 et al.,)
24 Counterclaim and)
25 Cross-Claim)
26 Defendants.)
27 _____)
28

1 UNITED STATES DISTRICT COURT
 2 EASTERN DISTRICT OF CALIFORNIA

OFFICE OF THE SOLICITOR Pacific Southwest Regional Office	
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FILE	LIBRARY

3 BARCELLOS AND WOLFSEN, INC.,)
 4 et al.,)
 5 Plaintiffs,)
 6 v.)
 7 WESTLANDS WATER DISTRICT,)
 8 et al.,)
 9 Defendants.)

No. CV 79-106-EDP

STIPULATION TO MODIFY
 PROPOSED JUDGMENT

10 WESTLANDS WATER DISTRICT,)
 11 Counterclaimant and)
 12 Cross-Claimant,)
 13 v.)
 14 BARCELLOS AND WOLFSEN, INC.,)
 15 et al.,)
 16 Counterclaim and)
 17 Cross-Claim)
 18 Defendants.)

19 BARCELLOS AND WOLFSEN, INC.,)
 20 et al.,)
 21 Counterclaimants and)
 22 Cross-Claimants,)
 23 v.)
 24 UNITED STATES OF AMERICA,)
 25 et al.,)
 26 Counterclaim and)
 27 Cross-Claim)
 28 Defendants.)

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FRANK ORFF, as representative)
of 1B Class,)
Counterclaimant and)
Cross-Claimant,)
v.)
UNITED STATES OF AMERICA,)
et al.,)
Counterclaim and)
Cross-Claim)
Defendants.)
_____)

_____)
WESTLANDS WATER DISTRICT,)
et al.,)
Plaintiffs-in-)
Consolidation,)
v.)
UNITED STATES OF AMERICA,)
et al.,)
Defendant-in-)
Consolidation.)
_____)

BARCELLOS & WOLFSEN, INC.,)
et al.,)
Plaintiffs,)
v.)
WESTLANDS WATER DISTRICT,)
et al.,)
Defendants.)
_____)

CONSOLIDATED
No. CV F-81-245-EDP

1 this Judgment may be filed only after 60 days prior written
2 notice to all other parties that such a motion will be filed if
3 another party or other parties fail or refuse to perform in the
4 manner described in said notice. The parties entitled to file
5 such a motion and to receive such prior written notice thereof in
6 these present actions shall be limited to the Area representa-
7 tives provided for in Paragraph 22 below (who shall represent the
8 interests of the class members within the areas they represent),
9 the United States, the District, and any landowners or water
10 users who have heretofore appeared in these present actions on
11 their own behalf. The parties shall not seek judicial enforce-
12 ment of this Judgment in any other manner than described above.
13 During the term of this Judgment, each party shall perform all
14 acts it is obligated hereunder to perform. This Judgment shall
15 not alter or impair, or deprive any party of, any existing legal
16 rights or confer on any party any right except as expressly
17 provided herein.

18
19
20 4. 1963 Contract.

21
22 4.1. Beginning the first day of the month after this
23 Judgment is entered, the District and the United States shall
24 perform the 1963 Contract; provided, that the District waives the
25 right to make payment for water requested and delivered under
26 Articles 4(c) or 8 of said contract at the rate provided in
27 Article 6 thereof so long as the rate charged for said water does
28 not exceed the applicable Central Valley Project water rate as of
the date of delivery; provided further, that to facilitate and

1 implement the existing water conservation policies of the United
2 States, (a) Article 1(f) of said contract shall be revised to
3 state: "'year' shall mean the period commencing March 1 of each
4 year through the last day of February of the following year"; (b)
5 Article 6(b) of said contract shall be revised by substituting
6 "March 1" for "January 1" and "September 1" for "July 1"; and (c)
7 notwithstanding the provisions of Article 3(d) of said contract,
8 the quantity of water the United States shall be obligated to
9 furnish, and the District to pay for, pursuant to Article 3 of
10 said contract during the period commencing March 1, 2007, and
11 ending December 31, 2007, shall be 811,000 acre-feet. The 1963
12 Contract is a valid, enforceable and implementable contract enti-
13 tling the District through the end of 2007 to water and other
14 service by the United States as specified therein.

15
16 4.2. The District acknowledges that it entered into
17 the 1963 Contract for the benefit of Areas 1A and 1B and the
18 lands therein. The District will enforce the prior rights of
19 said areas to the benefits of said contract and acknowledges that
20 water users in Areas 2A and 2B may purchase water under the 1963
21 Contract not purchased by water users in Areas 1A and 1B as
22 provided in this Judgment. To the extent that water under the
23 1963 Contract is purchased by a water user in Area 2A or Area 2B,
24 the District shall collect from such water user and pay the
25 United States for such water the water service rate set forth in
26 Article 6(a) of the 1963 Contract, Paragraph 4.4 below or 4.5.4
27 below, whichever is applicable, plus a \$0.50 per acre foot
28 drainage service charge, until such water user becomes entitled
to water service pursuant to the long-term contract described in

1 Paragraph 12.1(a) below, whereupon the contracting improvement
2 district of the District shall collect from such water user and
3 pay the United States for such water the applicable rates set
4 forth in such long-term contract.

5 4.3. The District shall not enter into any contract
6 which would modify the rights and obligations under the 1963
7 Contract prior to 2008, except with the concurrence of Area I as
8 provided in Paragraph 22.5 below; provided, that such concurrence
9 may be obtained only by lack of objection by Area I representa-
10 tives and not by an advisory election under said paragraph.

11 4.4. The agricultural water service component of the
12 rates to be paid to the United States for water delivered under
13 Article 3 of the 1963 Contract to lands which become subject to
14 the Discretionary Provisions of the 1982 Act shall be the higher
15 of (a) \$7.50 per acre foot or (b) the appropriate rate as of the
16 date of delivery established pursuant to the 1982 Act.

17 4.5. Water deliveries under the 1963 Contract for M&I
18 Uses shall be in accordance with Paragraph 4.5.1 through 4.5.4
19 below.

20 4.5.1. Such water shall be quantified and iden-
21 tified in the schedule or any revision thereof submitted by the
22 District in accordance with Article 4(a) of the 1963 Contract;

23 4.5.2. Such water shall be measured at canalside
24 delivery points established pursuant to Article 9 of the 1963
25 Contract which are used exclusively to deliver water for M&I
26 Uses, as determined by the United States, with equipment in-
27 stalled, operated and maintained by the United States. The
28 District shall measure all water furnished by the District for

1 M&I Uses at other delivery points with equipment installed,
2 operated and maintained by the District. Said equipment and its
3 installation, service and use shall be approved by the United
4 States. The United States shall have full access at all
5 reasonable times to inspect said measuring equipment to determine
6 the accuracy and conditions thereof and any errors in measure-
7 ments disclosed by said inspections shall be adjusted. If said
8 facilities are found to be defective or inadequate they shall be
9 adjusted, repaired or replaced by the District. In the event the
10 District neglects or fails to make such repairs or replacements
11 within a reasonable time as may be necessary to satisfy the
12 operating requirements of the United States, the United States
13 may cause repairs or replacements to be made and the costs
14 thereof charged to the District, which charge shall be paid to
15 the United States before April 1 of the year following that in
16 which the cost was incurred and a statement thereof furnished by
17 the United States;

18 4.5.3. The Federal Parties shall submit a report
19 to the District as to the quantity of water the United States
20 measures and the District shall submit a report to the Federal
21 Parties as to the quantity of water the District measures. Said
22 reports shall be submitted on or before the 10th day of each
23 month following the month in which the water is measured;

24 4.5.4. Such water shall be paid for in accordance
25 with Article 6(b) of the 1963 Contract at the applicable Central
26 Valley Project water rate as of the date of delivery.
27
28

///

1 5. Provisional Water Service.

2

3

4 5.1. The provisions of Paragraphs 5.2 through 5.3

5 below are included in this Judgment in light of the facts recited

6 in this Paragraph 5.1, as agreed to by the parties. Each year

7 from 1964 through 1981, the Federal Parties have permitted the

8 District to take various quantities of water from the Mendota

9 Pool pursuant to annual contracts to supplement the water pro-

10 vided to the District under the 1963 Contract. Since 1965 when

11 the Former Westplains District was merged into the Original

12 Westlands District, the Federal Parties have recognized that a

13 firm water supply from the San Luis Unit of 200,000 acre feet per

14 year in addition to the water from the San Luis Unit provided for

15 in the 1963 Contract and a firm water supply of 50,000 acre feet

16 per year from the Mendota Pool, are necessary within the boun-

17 daries of the District as it was expanded by the merger. Such

18 additional water supplies have consistently been allocated and

19 provided to the District by the Federal Parties each year from

20 1972 through 1981, inclusive, pursuant to a series of annual

21 contracts. Thereafter, such additional water supplies have been

22 provided pursuant to the Stipulated Agreement, as amended,

23 Exhibits C, D, E, F and G attached hereto. The District has

24 claimed that, pursuant to the provisions of the memorandum from

25 Kenneth Holum, Assistant Secretary of the Interior, Water and

26 Power Development, to Stuart Udall, Secretary of the Interior,

27 dated October 4, 1964, approved by Secretary Udall on October 7,

28 1964, and related activities, it is entitled as of right to both

of these additional supplies of water, a claim which the United

1 States disputes herein. The parties have agreed to settle this
2 claim by recognizing the claim for the purposes of this settle-
3 ment only to the limited extent set forth in Paragraphs 5.2
4 through 5.3 below and subject to the provisions of Paragraph
5 14.1.1 below.

6
7 5.2. In addition to the quantity of water specified in
8 Article 3 of the 1963 Contract, the District shall be entitled to
9 provisional water service from the United States of 200,000 acre
10 feet per year from the San Luis Unit and 50,000 acre feet per
11 year from the Mendota Pool under the conditions specified in
12 Paragraphs 5.2.1 through 5.2.4.7 below.

13 5.2.1. The District shall pay the United States
14 for water delivered to lands which are not subject to the discre-
15 tionary provisions of the 1982 Act the Central Valley Project
16 water rates applicable to the District as of the date of
17 delivery.

18 5.2.2. The District shall pay the United States
19 for water delivered to lands which are subject to the Discretion-
20 ary Provisions of the 1982 Act the higher of (a) the rates
21 payable under Paragraph 5.2.1 above or (b) the appropriate rate
22 established pursuant to the 1982 Act.

23 5.2.3. The District shall pay the United States
24 for water delivered for M&I Uses at the applicable Central Valley
25 Project water rates as of the date of delivery.

26 5.2.4. Provisional water service under this Para-
27 graph 5 shall commence the first day of the month after this
28 Judgment is entered and end February 28 next following the
conclusion of the action entitled Contra Costa Water District v.

1 Donald Hodel, as Secretary of the Interior, U.S. Dist. Ct., N.D.
2 Calif., Civil No. C-75-2508-SW, unless said action is concluded
3 by a final dismissal with prejudice, in which event said
4 provisional water service shall end two years after such
5 dismissal. All other terms and conditions of such provisional
6 water service shall be the same as under the "Contract between
7 the United States and Westlands Water District for Temporary
8 Water Service from San Luis Unit and Mendota Pool," R.O. Draft
9 4/10-1981, (hereinafter "Draft Contract") attached to the Stipu-
10 lated Agreement identified in Paragraph 1.29(b) above (Exhibit C
11 hereto), except as modified in Paragraphs 5 and 7 of the
12 Stipulated Agreement and further modified in Paragraphs 5.2.4.1
13 through 5.2.4.7 below.

14 5.2.4.1. No change in the rates to be paid
15 for water delivered for agricultural use or M&I Uses shall be
16 effective for any year unless written notice of the estimated
17 rate is given to the District on or before the preceding Septem-
18 ber 1 and written notice of the actual rate is given to the
19 District on or before the preceding December 1.

20 5.2.4.2. The following is substituted for
21 Article 6(c) of the Draft Contract:

22 "By February 1 of each year, the District shall
23 make any additional payment it is obligated to
24 make for the year."

25 5.2.4.3. The following is substituted for
26 Article 15 of the Draft Contract:

27 "(a) The parties agree that the delivery of
28 irrigation water or the use of Federal facilities

1 pursuant to this contract is subject to the
2 acreage and ownership limitations and pricing
3 provisions of reclamation law, as amended and
4 supplemented, including but not limited to the
5 1982 Act.

6
7 "(b) The Contracting Officer shall have the
8 right to make, after an opportunity has been
9 offered to the Contractor for consultation, rules
10 and regulations consistent with the provisions of
11 this contract, the laws of the United States and
12 the State of California, to add to or to modify
13 them as may be deemed proper and necessary to
14 carry out this contract, and to supply necessary
15 details of its administrations which are not
16 covered by express provisions of this contract.
17 The Contractor shall observe such rules and
18 regulations."

19 5.2.4.4. The following is substituted for
20 Article 19 of the Draft Contract:

21 "Where the terms of this contract provide for
22 action to be based upon the opinion or determina-
23 tion of either party to this contract, whether or
24 not stated to be conclusive, said terms shall not
25 be construed as permitting such action to be
26 predicated upon arbitrary, capricious, or unrea-
27 sonable opinions or determinations. In the event
28 that the Contractor questions any factual determi-
nation made by the Contracting Officer, the

1 findings as to the facts shall be made by the
2 Secretary only after consultation with the Con-
3 tractor and shall be conclusive upon the parties."

4 5.2.4.5. The following is substituted for
5 Article 20 of the Draft Contract:

6 "The Contractor shall pay a late payment
7 charge on installments or charges which are
8 received after the due date. The late payment
9 charge percentage rate calculated by the Depart-
10 ment of the Treasury and published quarterly in
11 the Federal Register shall be used; provided, that
12 the late payment charge percentage rate shall not
13 be less than 0.5 percent per month. The late
14 payment charge percentage rate applied on an
15 overdue payment shall remain in effect until
16 payment is received. The late payment rate for a
17 30-day period shall be determined on the day
18 immediately following the due date and shall be
19 applied to the overdue payment for any portion of
20 the 30-day period of delinquency. In the case of
21 partial late payments, the amount received shall
22 first be applied to the late charge on the overdue
23 payment and then to the overdue payment."

24 5.2.4.6. Article 31 of the Draft Contract is
25 deleted.

26 5.2.4.7. To facilitate and implement the
27 existing policies of the United States, Article 1(d) of the Draft
28 Contract shall be revised to state: "'Year' shall mean the period

1 commencing March 1 of each year through the last day of February
2 of the following year."

3 5.3. The District acknowledges that all water to which
4 the District is entitled pursuant to Paragraph 5.2 above shall be
5 for the benefit of the 2A Parties and the 2B Parties and the
6 lands in Area 2A and Area 2B.
7

8
9 6. Drainage Service Facilities.

10 6.1. The Federal Parties, in consultation and coopera-
11 tion with the District, shall develop, adopt and submit to the
12 District by December 31, 1991, a Drainage Plan for Drainage
13 Service Facilities, which shall have at least the elements set
14 forth in Paragraphs 6.1.1 and 6.1.2 below; provided, that the
15 remedies available to a party for an alleged breach of this
16 paragraph by the Federal Parties shall be strictly limited to (a)
17 the release to the District of the money then deposited in the
18 Drainage Trust Fund, plus accumulated interest, pursuant to
19 Paragraphs 7.1.8 and 7.1.8.1, below, and (b) the revival of any
20 claim against the United States of the right to drainage service
21 or Drainage Service Facilities pursuant to and in accordance with
22 the terms of Paragraph 14.1.2, below.
23

24 6.1.1. The Drainage Service Facilities included
25 in the Drainage Plan shall (a) in the aggregate have sufficient
26 capacity and capability to transport, treat as necessary, and
27 dispose of, the annual quantity of subsurface agricultural
28 drainage water from the District (not less than 60,000 acre feet
and not more than 100,000 acre feet) required to be disposed of

**EXHIBIT B: August 2013 WWD-USBR Contract Changes—Advanced BDCP-DHCCP
Pre-Construction Agreements**

MINUTES OF THE REGULAR MEETING OF THE
FINANCE & ADMINISTRATION COMMITTEE OF WESTLANDS WATER DISTRICT

August 20, 2013

A regular meeting of the Finance & Administration Committee of Westlands Water District was held at the District's Fresno Office, 3130 N. Fresno Street, Fresno, California 93703 at 10:00 a.m.

Directors present:

Larry Enos, Chairman
Jim Anderson
Sarah Woolf
Don Peracchi, ex officio

Staff present:

Tom Birmingham, General Manager
Dave Ciapponi, Secretary
Bobbie Ormonde, Director of Finance & Administration
Steve Farmer, Supervisor of Customer Accounting
Jose Gutierrez, Deputy General Manager - Resources
Gayle Holman, Public Affairs Representative
Karen Vierra, Supervisor of General Accounting

Others present:

None

MINUTES

There being no additions or corrections, the draft minutes of the Finance and Administration Committee meeting of July 16, 2013 were approved.

ACCOUNTS PAYABLE REPORTS

The Committee reviewed and discussed several items. The Committee approved for recommendation to the Board the Accounts Payable reports.

BOARD OF DIRECTORS' AUGUST 20, 2013 AGENDA ITEMS

No action was required or taken on the posted agenda matters.

REQUESTS FOR WAIVER OF RULES & REGULATIONS, TERMS AND CONDITIONS,
OR OTHER DISTRICT FINANCIAL PROVISIONS

No items were presented.

BUDGET TRANSFERS, AUGMENTATIONS AND OTHER MATTERS

a. 2013-2014 BUDGET AUGMENTATION FOR CHILLER COMPRESSOR REPLACEMENT. Ms. Ormonde presented the item and informed the Committee that this budget augmentation in the amount of \$16,000 was for the chiller compressor replacement at the Fresno location. Mr. Ciapponi informed the Committee that the compressor had

already been replaced. The facilities reserve was be the source of funds for the compressor replacement. Upon motion duly made and seconded, the Committee approved for recommendation to the Board a budget augmentation for the chiller compressor replacement in the amount of \$16,000.

AGREEMENT WITH THE UNITED STATES FOR THE ADVANCE PAYMENT OF OPERATION AND MAINTENTANCE COSTS AND RELATED ACTIONS

Ms. Ormonde presented this item and informed the Committee members that this item would also appear as Agenda Item 8.b. on the Board of Directors agenda. The current agreement with the United States Bureau of Reclamation (USBR) limits advance payments to two months in advance. Other participants in the program include Santa Clara Valley Water District, San Luis Water District and Panoche Water District. Mr. Birmingham informed the Committee that In order for the Bureau of Reclamation to alleviate appropriations to meet DHCCP transfers, the Bureau allows contractors to make advance payments of O & M, which the Bureau can spend on authorized programs. The District receives a credit per acre-foot as the water is delivered. The total available for advance payment by August 31, 2013 was \$8.4 million. The District's share was \$6.4 million. The credit is estimated at \$14 per acre-foot.

The District participated in advance payments in the past. Ms. Ormonde reviewed the schedule of District payments to date. The District has made \$26.3 million in advance payments from 2009 to date.

Upon motion duly made and seconded, the Committee unanimously voted to recommend to the Board approval of Resolution No. 117-13, Authorizing Execution of an Agreement with the United States for the Advance Payment of Operation and Maintenance Costs and Related Actions.

ALLOCATION OF SUPPLEMENTAL WATER

Ms. Ormonde informed the Committee that 8,393 acre-feet of Supplemental Water had been allocated on Friday, August 16, 2013. Mr. Gutierrez updated the Committee on North of Delta (NOD) water transfers included in the District's Supplemental Water program. All NOD water transfers were proceeding as scheduled. The Yuba and Placer County water transfers scheduled for July 2013 had not yet been allocated as of August 20, 2013. Discussion ensued on additional pre-allocation of NOD water transfers. Mr. Birmingham informed the Committee that the Bureau had given Placer County Water priority at the pumps.

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
Central Valley Project, California

AGREEMENT BETWEEN THE UNITED STATES
AND
WESTLANDS WATER DISTRICT
FOR THE ADVANCE PAYMENT OF OPERATION AND MAINTENANCE COSTS

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THIS AGREEMENT, entered into this _____ day of _____, 2013,
in pursuance generally of the Act of June 17, 1902 (32 Stat. 388), and all acts amendatory thereof
and supplementary thereto, including but not limited to the Act of January 12, 1927
(44 Stat. 957), the Act of August 26, 1937 (50 Stat. 844), as amended and supplemented, the Act
of August 4, 1939 (53 Stat. 1187), as amended and supplemented, and Title XXXIV of the Act
of October 30, 1992 (106 Stat. 4706), all collectively referred to as Federal Reclamation law,
between the UNITED STATES OF AMERICA, acting by and through the Department of the
Interior, Bureau of Reclamation, hereinafter referred to as Reclamation, and WESTLANDS
WATER DISTRICT, hereinafter referred to as the Contractor, a duly organized public entity of
the State of California, existing and acting pursuant to the laws thereof;

19

WITNESSETH, That:

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EXPLANATORY RECITALS

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WHEREAS, the United States has constructed and is operating the Central Valley
Project, California, for diversion, storage, carriage, distribution and beneficial use, for flood
control, irrigation, municipal, domestic, industrial, fish and wildlife mitigation, protection and
restoration, generation and distribution of electric energy, salinity control, navigation, and other
beneficial uses, of waters of the Sacramento River, the American River, the Trinity River, and
the San Joaquin River and their tributaries; and

27 WHEREAS, Reclamation and the Contractor entered into Contract
28 No. 14-06-200-495A-IR1, hereinafter referred to as the Water Service Contract, on
29 December 27, 2007, to provide for the continued water service from the Project to the Contractor
30 through February 28, 2010, upon expiration of Contract No. 14-06-200-495A; and

31 WHEREAS, Reclamation and the Contractor entered into subsequent contracts to
32 provide for the renewal of the Water Service Contract, the last of which is Contract
33 No. 14-06-200-495A-IR3, hereinafter referred to as the Existing Interim Renewal Water Service
34 Contract, providing for continued water service from the Project through February 28, 2014; and

35 WHEREAS, subarticle (c) of Article 7 of the Water Service Contract requires the
36 Contractor to make and maintain a two month advance payment of Operation and Maintenance
37 (O&M) and related costs that are paid by the Contractor through its water Rate; and

38 WHEREAS, the Act of January 12, 1927 allows Reclamation to direct advanced
39 O&M funds to the specific project and purpose for which advanced; and

40 WHEREAS, subarticle (i) of Article 7 of the Water Service Contract specifically
41 allows for the execution of separate agreements for the purpose of modifying the mechanisms,
42 policies and procedures used for establishing Rates and Charges and/or for making and
43 allocating payments pursuant to the Water Service Contract; and

44 WHEREAS, Reclamation and the Contractor entered into Agreement
45 No. 09-WC-20-3801, dated April 9, 2009, to provide for advance payments of O&M Activities
46 payable to Reclamation on a different schedule than provided under the Water Service
47 Contract; and

48 WHEREAS, the above referenced Agreement was replaced with Agreement
49 No. 12-WC-20-4350 dated September 6, 2012, which provided for the continued advance
50 payment of O&M Activities on a different schedule; and

51 WHEREAS, Reclamation and the Contractor desire to enter into this Agreement
52 to replace Agreement No. 12-WC-20-4350, to further provide for advance payments of O&M
53 Activities payable to Reclamation on a different schedule than provided under the Water Service
54 Contract; and

55 WHEREAS, Reclamation and the Contractor agree that the administration and
56 application of the terms and conditions of this Agreement shall not interfere or conflict with the
57 administration of the Water Service Contract; and

58 WHEREAS, it is Reclamation's intent to execute similar agreements with other
59 CVP contractors for the advance payment of O&M Activities under the same terms and
60 conditions set forth in this Agreement; and

61 WHEREAS, Reclamation has determined that the Contractor is in compliance
62 with all of its obligations under the Water Service Contract, and appropriate environmental
63 review has been completed for this Agreement; and

64 WHEREAS, Reclamation and the Contractor are willing to enter into this
65 Agreement pursuant to Federal Reclamation law on the terms and conditions set forth below;

66 NOW, THEREFORE, in consideration of the mutual and dependent covenants
67 herein contained, it is mutually agreed by the parties hereto as follows:

68 DEFINITIONS

69 1. When used herein unless otherwise distinctly expressed, or manifestly
70 incompatible with the intent of the parties as expressed in this Agreement, the term:

71 (a) "Advanced Funds" shall mean funds provided to Reclamation to pay the
72 costs for the O&M Activities;

73 (b) "Calendar Year" shall mean the period January 1 through December 31,
74 both dates inclusive;

75 (c) "Contracting Officer" shall mean the Secretary of the Interior's duly
76 authorized representative acting pursuant to this Agreement or applicable Federal Reclamation
77 law or regulation;

78 (d) "CVP Delta and Miscellaneous Project Divisions" shall mean those
79 Divisions of the CVP identified in the budget, and shall have the same meaning as those terms
80 are used in the budget process;

81 (e) "Fiscal Year" shall mean the period from and including October 1 of each
82 Calendar Year through the last day of September of the following Calendar Year;

83 (f) "Operation and Maintenance" or "O&M" shall mean normal and
84 reasonable care, control, operation, repair, replacement (other than capital replacement), and
85 maintenance of Project facilities;

86 (g) "O&M Activities" shall mean reimbursable administration and
87 compliance work performed by Reclamation under the CVP Delta and Miscellaneous Project
88 Division activities;

89 (h) "O&M Costs" shall mean all costs incurred by Reclamation for O&M of
90 CVP facilities;

91 (i) "O&M Component" shall mean that portion of the total Rate that is
92 allocated based on the total reimbursable O&M and related costs of the Project;

93 (j) "Project" or "CVP" shall mean the Central Valley Project owned by the
94 United States and managed by the Department of the Interior, Bureau of Reclamation;

95 (k) "Project Water" shall mean water that is developed, diverted, stored, or
96 delivered by the Secretary in accordance with the statutes authorizing the Project, and in
97 accordance with the terms and conditions of water rights acquired pursuant to California law;

98 (l) "Rate" shall mean the amounts to recover costs determined annually by
99 the Contracting Officer in accordance with the then-current applicable water ratesetting policies
100 for the Project that are charged by the Contracting Officer to recover the reimbursable costs of
101 the Project; and

102 (m) "Year" shall mean the period from and including March 1 of each
103 Calendar Year through the last day of February of the following Calendar Year.

104 TERM OF AGREEMENT

105 2. (a) This Agreement shall be effective on the date written above, after
106 execution by the Contracting Officer and the Contractor, and shall remain in effect through
107 September 30, 2014. If at any time during the term of this Agreement, the Contracting Officer
108 determines that the Contractor is not complying with any of the terms and conditions of this
109 Agreement, including non-compliance with payment due dates identified in Article 3(b), the
110 Contracting Officer may terminate this Agreement upon 30 days' written notice to the
111 Contractor. The Contractor may terminate this Agreement at any time while this Agreement is in
112 effect upon 30 days prior written notice to the Contracting Officer; *Provided*, That funds
113 advanced under this Agreement prior to the Contractor providing such written notice will not be
114 refunded to the Contractor but will continue to be credited consistent with Article 3(c) of this
115 Agreement.

116 (b) The parties acknowledge that the Existing Interim Renewal Water
117 Service Contract will expire prior to the expiration of this Agreement. The parties further
118 acknowledge that the Existing Interim Renewal Water Service Contract will be renewed pursuant
119 to Article I(a) thereof. Upon renewal, such contract will constitute the Existing Interim Renewal
120 Water Service Contract which will serve as the renewal of the Water Service Contract referred to
121 hereunder.

122 ADVANCEMENT OF O&M FUNDS BY THE CONTRACTOR

123 3. (a) Notwithstanding the requirements of subarticle (c) of Article 7 of the
124 Water Service Contract, the Contractor may make and maintain more than a two month advance
125 payment schedule for water scheduled to be delivered during the Year. This Agreement allows
126 the Contractor to make and maintain an advance payment schedule that is longer than two
127 months for O&M Activities that are payable to Reclamation pursuant to the existing Water
128 Service Contract.

129 (b) As of the date of this Agreement, Reclamation has advised the Contractor
130 of the amount of budgeted costs for O&M Activities as provided in the President's Fiscal Year
131 2014 Budget. On or before September 1, 2013 the Contractor will pay to Reclamation the
132 Contractor's desired amount of Advanced Funds which will be used to perform Reclamation
133 O&M Activities; *Provided*, That in no event shall the amount of Advanced Funds be less than
134 the amount payable under the Water Service Contract. If Advanced Funds are not received by
135 Reclamation by September 1, 2013 this Agreement shall be terminated, and payment for O&M
136 will be collected consistent with the Water Service Contract. Reclamation can only accept
137 Advanced Funds on or before September 1, 2013 pursuant to this Agreement. Advanced Funds

138 paid by the Contractor after September 1, 2013 or on any other payment schedule will not be
139 accepted under this Agreement.

140 (c) Reclamation will establish an advance account in the U.S. Treasury for
141 Advanced Funds paid by the Contractor under this Agreement. Contractor Advanced Funds
142 along with remaining funds appropriated for CVP O&M Activities will be utilized to fund CVP
143 O&M Activities for the Fiscal Year. As funds are expended from the advance account for O&M
144 Activities, these amounts will be tracked to be applied to the Contractor's allocable O&M Costs
145 for that Year during the preparation of the final accountings. Upon issuing water Rates
146 applicable for the Year pursuant to the Water Service Contract, the Contractor's O&M
147 Component rate will be modified to reflect projected O&M charges based on the amount of
148 Advanced Funds. If the amount advanced by the Contractor is insufficient to cover its projected
149 allocated O&M Costs for the Year, then an appropriate O&M Component will be added to the
150 Contractor's Rate for that Year. At the conclusion of the Year, if Advanced Funds are
151 insufficient to cover actual O&M Activities for the Year, the deficit will be carried forward to
152 the following Year pursuant to appropriate Reclamation ratesetting policy. If the amount
153 advanced by the Contractor and expended by Reclamation exceeds the total amount of the
154 Contractor's actual allocable O&M Costs, the excess will be carried forward into the subsequent
155 Year for application against that year's allocable O&M Costs.

156 (d) No refund will be made of any amounts advanced pursuant to this
157 Agreement.

158 (e) The provisions of subarticles (c) and (d) above shall survive termination of
159 this Agreement.

160

UNITED STATES NOT LIABLE

161 4. (a) Reclamation will assume no liability whatsoever under this Agreement for
162 any changes in Federal appropriations, law, or policy that in any way limits or eliminates any
163 appropriated funds being made available to fund O&M Activities in the future.

164 (b) Advanced Funds paid by the Contractor will remain in an advance account
165 and will continue to be available pursuant to the terms and conditions of this Agreement for
166 eligible O&M Activities until fully expended.

167 (c) The provisions of subarticle (b) above shall survive termination of this
168 Agreement.

169

PRESERVATION OF EXISTING WATER SERVICE CONTRACT

170 5. Except for the provisions that require the Contractor to pay its share of annual
171 Project O&M Costs two months in advance of the delivery of Project Water to the Contractor, all
172 other terms and conditions of the Water Service Contract and the Existing Interim Renewal
173 Water Service Contract will remain in full force and effect and will continue to be administered
174 in the same manner as was done prior to execution of this Agreement. If a dispute arises under
175 this Agreement, resolution of the dispute will be governed by the terms and conditions of the
176 Water Service Contract, as renewed.

177

REPORTS

178 6. Reclamation will provide a quarterly report to participating CVP contractors that
179 displays:

180 (a) The Advanced Funds provided to Reclamation by all participating CVP
181 contractors that executed agreements similar to this Agreement; and

182 (b) The amount of Advanced Funds expended to date; and

- 183 (c) Outstanding unliquidated obligations for O&M Activities; and
- 184 (d) Remaining balance in the Advance Fund.

185 The Contractor's execution of this Agreement authorizes Reclamation to share
 186 this information with all participating CVP contractors.

187 IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of
 188 the day and year first above written.

189 UNITED STATES OF AMERICA

190 By: _____
 191 Regional Director, Mid-Pacific Region
 192 Bureau of Reclamation

193 WESTLANDS WATER DISTRICT

194 By: _____
 195 President of the Board of Directors

196 Attest:

197 By: _____
 198 Secretary of the Board of Directors

WESTLANDS WATER DISTRICT BOARD OF DIRECTORS

MEETING OF JANUARY 21, 2014

ITEM 8a

SUBJECT:

Resolution No. 101-14, Approving the Execution and Delivery of An Activity Agreement Relating to the Delta Habitat Conservation and Conveyance Program (Pre-Construction Phase) and Certain Other Matters

DISCUSSION:

Resolution No. 101-14 has been prepared and is presented to the Board for consideration in order for the District to assist the San Luis & Delta-Mendota Water Authority in funding the Delta Habit Conservation and Conveyance Program's pre-construction phase. If approved, the resolution would authorize execution of an activity agreement obligating the District to pay up to approximately 95% of the Authority's share of the pre-construction activities of the DHCCP, including obligations to finance such activities; related documents; and actions.

Pursuant to an agreement with the California Department of Water Resources, in 2009 the San Luis & Delta-Mendota Water Authority, certain of its members and the Bureau of Reclamation committed to and has funded the initial development costs, including environmental analysis, planning and design of Delta Conservation Measures, including Delta Conveyance Options, otherwise referred to as the Delta Habitat Conservation and Conveyance Program. The Program has now advanced to the stage where, in order to maintain the implementation schedule while awaiting project approval and permanent funding, the Authority will undertake the interim funding of the pre-construction phase through the Activity Agreement included herein. It is estimated that water contractors will need to provide \$1.2 billion for this pre-construction phase, with one-half or \$600 million of this total being the Authority's share.

At present, Santa Clara Valley Water District, San Luis Water District and Westlands (including Broadview) have indicated an interest in executing the Activity Agreement. Further, if bonds are issued by the Authority to fund the obligations of the Activity Agreement, Westlands and Santa Clara will be obligated to pay the increased share caused by an Activity Agreement participant that fails to pay its share in a timely manner.

RECOMMENDATION:

Adopt Resolution No. 101-14, authorizing the execution of the Authority's DHCCP (Pre-Construction Phase) activity agreement, related documents and actions.

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RESOLUTION NO. 101-14

WESTLANDS WATER DISTRICT

**A RESOLUTION OF THE WESTLANDS WATER DISTRICT
BOARD OF DIRECTORS APPROVING THE EXECUTION AND DELIVERY
OF AN ACTIVITY AGREEMENT RELATING TO THE DELTA HABITAT
CONSERVATION AND CONVEYANCE PROGRAM (PRE-CONSTRUCTION PHASE)
AND CERTAIN OTHER MATTERS**

WHEREAS, certain members of the San Luis & Delta-Mendota Water Authority (the "Water Authority"), a joint exercise of powers authority duly organized and existing under and pursuant to the Constitution and laws of the State of California, together with the California Department of Water Resources, United States Bureau of Reclamation and various contractors of the federal Central Valley Project and the State Water Project, are undertaking the development of certain water conservation measures (the "Project"); and

WHEREAS, the Westlands Water District (the "District") and certain members of the Water Authority have requested that the Water Authority participate in certain pre-construction activities with respect to the Project; and

WHEREAS, to effect and fund such participation the Authority proposes to enter into the San Luis & Delta-Mendota Water Authority Delta Habitat Conservation and Conveyance Program (Pre-Construction Phase) Activity Agreement (the "Activity Agreement") with the District and such other members; and

WHEREAS, the Water Authority anticipates issuing revenue bonds (the "Bonds") to finance pre-construction and certain other costs of the Project which will be repaid by members of the Water Authority, including the District, pursuant to the terms of the Activity Agreement.

NOW, THEREFORE, the Board of Directors of the Westlands Water District hereby finds, determines, declares and resolves as follows:

1. The Activity Agreement, in substantially the form attached hereto as Exhibit A and, upon execution as authorized below, made a part hereof as though set forth in full herein, is hereby approved. The President of the Board or the General Manager of the District and the Secretary of the Board are hereby authorized and directed to execute and deliver the Activity Agreement with such changes, insertions and omissions as may be recommended by General Counsel or Stradling Yocca Carlson & Rauth, a Professional Corporation, and approved by the officer(s) executing the same, said execution being conclusive evidence of such approval. The General Manager is hereby directed to append a completed Exhibit A to the Activity Agreement reflecting final participation percentages and insert the final Pre-Construction Cost Report of the Hallmark Group as Exhibit B to Activity Agreement prior to its execution and delivery.

2. The Continuing Disclosure Certificate in substantially the form attached hereto as Exhibit B and, upon execution as authorized below, made a part hereof as though set forth in full herein, is hereby approved. The President of the Board or the General Manager of the District are hereby authorized and directed to execute and deliver a Continuing Disclosure Certificate in connection with each series of Authority bonds or notes issued pursuant to the Activity Agreement, with such changes, insertions and omissions as may be recommended by General Counsel or Stradling Yocca Carlson & Rauth, a Professional Corporation and approved by the officer executing the same, said execution being conclusive evidence of such approval.

3. The President of the Board and the General Manager of the District are hereby authorized and directed to approve, execute and deliver all other documents required to effect the execution and delivery of the Activity Agreement and the District's representative to the Steering Committee created under the Activity Agreement is hereby authorized to take such actions as may be necessary to implement the issuance by the Authority from time-to-time of bond, notes or other obligations in one or more series to finance or refinance Authorized Costs (as defined in the Activity Agreement).

4. This resolution shall take effect immediately.

Adopted at a regular meeting of the Board of Directors at Fresno, California, this 21st day of January, 2014.

AYES:

NOES:

ABSENT:

Don Peracchi, President

[SEAL]

Attest:

Dave Ciapponi, Secretary

EXHIBIT A

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SAN LUIS & DELTA-MENDOTA WATER AUTHORITY DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM (PRE-CONSTRUCTION PHASE) ACTIVITY AGREEMENT

This Activity Agreement is made and entered into by and among the San Luis & Delta-Mendota Water Authority (the "Authority"), a joint powers agency of the State of California, and certain of its member agencies who execute this Delta Habitat Conservation and Conveyance Program (Pre-Construction Phase) Activity Agreement (the "Activity Agreement").

RECITALS

A. The parties to this Activity Agreement, together with certain other local agencies, have entered into an Amended and Restated Joint Exercise of Powers Agreement San Luis & Delta-Mendota Water Authority, dated as of January 1, 1992 (the "JPA Agreement"), by and among the parties indicated therein, to exercise the common powers of the Authority member agencies, for the purpose, among others, of studying, planning for, developing, designing, financing, permitting, acquiring, and constructing facilities and other water system improvements for the beneficial use of water in cooperation with the Department of Water Resources of the State of California ("DWR"), the United States of America, and other state and local entities.

B. Among other activities, the Authority operates and maintains certain Central Valley Project facilities pursuant to contract with the Bureau of Reclamation through which water contracted by the member agencies of the Authority entering into this Activity Agreement received water from the Central Valley Project.

C. This Activity Agreement is entered into between the Authority and certain of its member agencies who execute the Activity Agreement as permitted by Section 21 of the JPA Agreement for purposes of undertaking certain activities on behalf of the Authority with respect to the Delta Habitat Conservation and Conveyance Program ("DHCCP"), and more particularly, to establish the mechanisms by which Activity Agreement Members agree to fund the Authority's financial obligations under the Agreement (as defined below) with DWR and to pay other pre-construction costs of the DHCCP as more particularly described below.

NOW, THEREFORE, the parties hereto agree as follows:

DEFINITIONS

"Activity Agreement Expenses" shall mean all direct expenses incurred pursuant to this Activity Agreement, together with Authority Administration Costs allocable to Activity Agreement Members in conjunction with this Activity Agreement, together with expenses incurred specifically for purposes of this Activity Agreement; for the avoidance of doubt, Activity Agreement Expenses shall not include Authority Debt Service.

"Activity Agreement Member(s)" shall mean the Authority Member(s) who execute this Activity Agreement.

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“Agreement” shall mean the Fourth Amendment to the Agreement for Funding Between the Department of Water Resources and the San Luis & Delta-Mendota Water Authority for the Costs of Environmental Analysis, Planning and Design of Delta Conservation Measures, Including Delta Conveyance Options, as such agreements may be amended or supplemented from time-to-time in accordance with the terms thereof.

“Authority” shall mean the San Luis & Delta-Mendota Water Authority, a joint powers agency separate from its members, and includes any successor or assign thereof.

“Authority Administration Costs” shall mean Authority general administrative expenses, a percentage of which may be allocated to this Activity Agreement by the Authority.

“Authority Bonds” shall mean bonds, notes, installment purchase agreements, leases or other obligations issued or entered into by the Authority in accordance with the Joint Exercise of Powers Act, being Chapter 5 of Division 7 of Title 1 of the Government Code (Section 6500 et seq) and any other statute supplemental thereto, to fund the financial obligations under the Agreement, to pay other pre-construction costs of the DHCCP, all as outlined in the Pre-Construction Cost Report, to refund or defease Authority Bonds or other obligation incurred to finance such costs and to pay other costs related to the DHCCP authorized herein.

“Authority Debt Service” shall mean (i) principal of, interest on and prepayment price, if any, of any Authority Bonds, and (ii) any costs related to the issuance, support or administration thereof not paid from the proceeds of the Authority Bonds, including but not limited to financial advisory, legal and other consulting fees, fees of paying agents or Bond Trustees, liquidity or credit enhancement fees, and in each case whether incurred upon the initial issuance of such Authority Bonds or payable from time-to-time while such Authority Bonds are outstanding.

“Authorized Costs” shall mean pre-construction activities of the DHCCP, including but not limited to costs for activities identified in the Pre-Construction Cost Report and other obligations incurred to finance such activities. For avoidance of doubt, costs of pre-construction activities included in the Pre-Construction Cost Report paid prior to the effective date of this Activity Agreement by one of the Activity Agreement Members shall constitute Authorized Costs and shall be reimbursed to any Activity Agreement Members which advanced payment thereof from the proceeds of Authority Bonds.

“Bond Trustee” shall mean the trustee appointed under indentures of trust or similar instruments pursuant to which Authority Bonds are issued.

“Defaulting Activity Agreement Member” shall have the meaning set forth in Section 5.1.1. hereof.

“Participation Percentage” shall have the meaning set forth in Section 2.1 hereof.

“Pre-Construction Cost Report” shall mean the report of Hallmark Group, dated ____, 2014, outlining DHCCP pre-construction costs, attached hereto as Exhibit B, as such report may be amended or supplemented from time-to-time, and which amendment or supplement has been approved by the Steering Committee.

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“Steering Committee” shall mean the Steering Committee created pursuant to Section 9.1 hereof.

Section 1. Agreement to Pay for Authorized Costs, Authority Debt Service and Activity Agreement Expenses. The Activity Agreement Members hereby agree to pay to the Authority their respective shares of Authorized Costs, and, in the event that Authority Bonds are issued, Authority Debt Service, allocated pursuant to Section 2.1 hereof. Activity Agreement Members further agree to pay their share of Activity Agreement Expenses allocated pursuant to Section 2.1 hereof. The Authority agrees to apply funds received from Activity Agreement Members solely to the payment of (i) Authorized Costs and, (ii) in the event that Authority Bonds are issued, Authority Debt Service, and (iii) Activity Agreement Expenses, as applicable.

Section 2. Participation Percentages.

2.1 General Participation. Each Activity Agreement Member agrees to pay or advance to the Authority, from its water or irrigation system revenues as an operations and maintenance expense of its water or irrigation system or, to the extent permitted by law, the proceeds of a tax levied by such Activity Agreement Member, its Participation Percentage of the Authorized Costs and, in the event that Authority Bonds are issued, Authority Debt Service, in accordance with the terms and conditions of the Authority Bonds, this Activity Agreement and budgets prepared in accordance with Section 9.2 hereof. The Participation Percentage of each Activity Agreement Member (as modified from time to time in accordance herewith), each a “Participation Percentage”, shall be the percentages set forth in Exhibit A hereto. Notwithstanding the foregoing, nothing in this Activity Agreement will be construed as prohibiting ~~(i)~~ each Activity Agreement Member (i) from using any other funds and revenues for purposes of satisfying any provisions of this Activity Agreement, including but not limited to the proceeds of any tax levied by such Activity Agreement Member and lawfully available therefor, or (ii) from incurring obligations payable on a parity with the obligations under this Activity Agreement so long as the Activity Agreement Member complies with Section 7 of this Activity Agreement.

2.2 Updating Participation Percentages. The anticipated Participation Percentages are described in the initial Exhibit A hereto. Exhibit A shall be revised to conform to the actual participation of the parties who execute this Activity Agreement. Additions to Activity Agreement Members and adjustments in Participation Percentages shall only be made by a written instrument approved by each Activity Agreement Member. Such updated Participation Percentages shall be documented by attaching to the Activity Agreement a revised Exhibit “A”, without such revision constituting an amendment of this Activity Agreement.

Section 3. Advance of Funds; Reimbursement from Subsequent Funding. In the event that any Activity Agreement Members advances funds to pay Authorized Costs prior to other sources of funding becoming available under this Activity Agreement, the Authority will fully repay such Activity Agreement Members for such advanced funds from the proceeds of Authority Bonds. For the avoidance of doubt, in the event that Authority Bonds are not issued, no Activity Agreement Member shall have any obligation to repay any such advance unless the Activity Agreement Member approved such advance.

Section 4. Authorization to Issue Authority Bonds. Subject to approval by the Board of Directors of the Authority and the Steering Committee established pursuant to Section 9 hereof, the Authority is hereby directed to use its best efforts to issue or cause to be issued Authority Bonds

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pursuant to Sections 6(e), 6(j), 6(k), and 24 of the JPA Agreement solely for the purposes set forth in this Activity Agreement. Such Authority Bonds shall be repayable from (i) payments to be made by Activity Agreement Members under Section 2.1 and Section 5.1.1 of the Activity Agreement and (ii) other sources identified in such Authority Bonds, including but not limited to amounts received from the United States of America, including but not limited to the Bureau of Reclamation, the State of California and any agency or political subdivision thereof, or from other Authority members or Central Valley Project contractors with respect to the DHCCP. While the issuance of Authority Bonds is currently estimated to be \$[600,000,000], Authority Bonds may be issued from time-to-time as necessary for the purposes set forth in this Activity Agreement with the unanimous consent of the members of the Steering Committee as constituted under Section 9 hereof, but not in excess of the amount necessary to fund Authorized Costs. Notwithstanding the foregoing, in the event that one or more members of the Steering Committee does not vote to approve the issuance of Authority Bonds, the remaining members of the Steering Committee may elect to approve the issuance of Authority Bonds provided that the Authority Bonds so issued do not obligate the Activity Agreement Members whose Steering Committee representative did not vote to approve such Authority Bonds to pay Authority Debt Service with respect to such Authority Bonds or Authorized Costs financed by such Authority Bonds.

Any debts, liabilities, obligations and indebtedness incurred by the Authority pursuant to the JPA Agreement and this Section 4 shall solely be these of the Authority and shall not be debts, liabilities, obligations or indebtedness of any member of the Authority. No member of the Authority shall be obligated for any such amount owed by the Authority, other than the Activity Agreement Members as set forth in its Activity Agreement. No Activity Agreement Member shall be obligated for amounts owed by another Activity Agreement Member on account of any debt, liability, obligations or indebtedness authorized by this Section 4, except as provided in Section 5 of this Activity Agreement.

Section 5. Terms Applicable to Certain Activity Agreement Members.

5.1 Terms Applicable to Step Up Participants.

5.1.1 Payment Obligation and Right to Reimbursement by Bond Trustee.

Notwithstanding their initial Participation Percentages and in order to secure attractive ratings on Authority Bonds which will benefit all Activity Agreement Members by lowering Authority Bond Debt Service, Westlands Water District and Santa Clara Valley Water District hereby agree that in the event any of the other Activity Agreement Member fails to pay its Participation Percentage of such Authority Debt Service or other amounts due hereunder (a "Defaulting Activity Agreement Member") in a timely manner, the Participation Percentages of Westlands Water District and Santa Clara Valley Water District shall be increased, pro-rata based on their initial Participation Percentages, to collect the amount of such unpaid Authority Debt Service or other amounts due hereunder (but in no event shall the resulting increased Participation Percentage exceed 25% of the initial Participation Percentages of Westlands Water District and Santa Clara Valley Water District.

5.1.2 Cooperation, Disclosure and Documents. Westlands Water District, and Santa Clara Valley Water District have agreed to cooperate with the Authority for the purpose of expediting the issuance of Authority Bonds to finance Authorized Costs by providing such information and disclosure as may be required for such purpose, and by delivering all closing documents required by the Authority or Authority bond counsel at the closing of the Authority Bonds.

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5.1.3 Additional Information. Westlands Water District and Santa Clara Valley Water District further agree to annually provide, on the schedule requested by the Authority, such information as the Authority requires therefrom in order to comply with the Authority's obligations under any continuing disclosure undertaking required in connection with Authority Bonds. The Authority shall not include any information with respect to an Activity Agreement Member in any filing required by any such continuing disclosure undertaking without the written approval of such Activity Agreement Member.

5.1.4 Additional Documents. Westlands Water District and Santa Clara Valley Water District hereby agree to execute such additional documents, including but not limited to, any necessary further assurances in relation to such Authority Bonds, as the Authority may reasonably request.

5.2 Irrevocable Assignment to Bond Trustee. The Activity Agreement Members acknowledge and agree that the Authority may assign to a Bond Trustee, without recourse, all or a portion of the Authority's rights, title and interest in payments made by the Activity Agreement Members pursuant to Sections 2.1 and 5.1.1 of the Activity Agreement, including all or a portion of the rights of the Authority as may be necessary to enforce compliance with said provisions (including enforcement of payment obligations and rate covenants, if any, contained in the Activity Agreement).

Section 6. Demand for Payment; Interest; Authority's Obligation to Apply Payments.

6.1 Demand for Payment. The Authority shall demand from each Activity Agreement Member payment of its respective Participant Percentage on the schedule required to meet Authority obligations to pay Authorized Costs, and, in the event that Authority Bonds are issued, Authority Debt Service.

6.2 Interest on Late Payment. Any part of such demand by the Authority which remains unpaid after its due date shall bear interest from such due date at an interest rate equal to the greater of (i) the rate or rates available from the Local Agency Investment Fund in effect from time-to-time during the period such amount remains unpaid plus two percent and (ii) the highest coupon rate on the Authority Bonds then outstanding, including any default rate if such late payment has resulted in the Authority paying interest at such default rate. Interest so earned shall not change any Participant Percentage and shall be added to Activity Agreement Expenses payable by such Activity Agreement Members.

6.3 Authority Responsibility re Collected Funds. The Authority shall apply the funds paid by the Activity Agreement Members to effect the purposes described in Section 1 hereof or otherwise in accordance with Section 5.2 hereof and as described in Section 6. The Authority agrees to keep amounts collected under this Activity Agreement in a designated account, promptly pay when due the amounts collected under the Activity Agreement, provide accounting and payment information to the Activity Agreement Members, and take such other reasonable actions as may be requested by the Activity Agreement Members and agreed to by the Authority; provided, that failure of the Authority or of an Activity Agreement Member to make payment required by this Activity Agreement shall not relieve Westlands Water District and Santa Clara Valley Water District of their obligation to pay Authority Debt Service in accordance with Section 5.1.1 hereof.

6.4 Records and Accounts. The Authority shall keep, or cause to be kept, accurate records and accounts of all funds received and contributed and costs incurred, all as

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provided in this Activity Agreement. The Authority shall establish and maintain such funds, accounts and subaccounts as are required by this Activity Agreement as the Authority may find necessary or convenient in connection with this Activity Agreement.

6.5 Right to Audit. All transactions of the Authority relating to this Activity Agreement shall be subject to audit by the Activity Agreement Members. No more frequently than once every calendar year, each Activity Agreement Member may, at its sole cost and expense, audit or cause to be audited the Authority books and records with respect to this Activity Agreement. Each such audit shall be conducted at a mutually agreed time and place. The Authority shall cooperate fully in any such audit.

Section 7. Rate Covenant. In order to meet payment obligations of this Activity Agreement in accordance with the JPA Agreement, each Activity Agreement Member agrees that it will, to the fullest extent permitted by law, fix rates, charges or assessments in connection with its water or irrigation system and/or levy a tax (to the extent such Activity Agreement Member is legally permitted to apply the proceeds of such tax to pay such costs) so that it will at all times have sufficient money to meet its obligations hereunder. Each Activity Agreement Member hereby confirms that there are no liens, charges or encumbrances thereon, or priority of payments with respect thereto, prior to the payment of amounts due hereunder. Each Activity Agreement Member hereby confirms that the Authority and other Activity Agreement Members (who are deemed third party beneficiaries of such Activity Agreement Member's payment obligation) may take such actions in law or in equity as may be desirable to enforce payments thereunder.

The obligation of each Activity Agreement Member to make payments hereunder with respect to Authority Bonds is absolute and unconditional, and until such time as all payment obligations hereunder with respect to Authority Bonds have been paid in full (or provisions for payment have been made) the Activity Agreement Members will not discontinue or suspend such payments, whether or not pre-construction activities with respect to the DHCCP are completed, construction of DHCCP facilities are commenced, completed or become or remain operative, subject to the limitations set forth in this Activity Agreement. Such payments shall not be subject to reduction by offset or otherwise and shall not be conditional upon the performance or non-performance by any party of an agreement for any cause whatsoever.

The obligation of each Activity Agreement Member to make any and all payments hereunder is a separate and special obligation of such Activity Agreement Member which it is obligated to make solely from the sources described in Section 2.1 hereof. The obligation of each Activity Agreement Member to make payments hereunder does not constitute a debt of such Activity Agreement Member within the meaning of any constitutional or statutory debt limitation or restriction, nor a pledge of the full faith and credit and taxing power of such Activity Agreement Member or any other entity. Nothing herein shall be construed as prohibiting any Activity Agreement Member, in its sole discretion, from using any legally available funds other than the sources described in Section 2.1 to make payments required under this Activity Agreement.

Section 8. Conditional Repayment to Activity Agreement Members. All advances of funds made pursuant to Section 3, excluding interest paid on delinquent payments, shall be repaid to each Activity Agreement Member (including an Activity Agreement Member which has withdrawn in accordance herewith) making such advances pursuant to this Activity Agreement out of the proceeds of Authority Bonds and collections. Such reimbursements shall be made within 30 days following the completion of each financing and shall include interest computed at the greater of (i)

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the rate or rates available from the Local Agency Investment Fund in effect from time-to-time during the period such advance was outstanding plus two percent (ii) the highest coupon rate on the Authority Bonds the proceeds of which are applied to the repayment of the advance and (iii) the rate of interest that such Activity Agreement Member would have earned on such funds if such funds had remained invested by such Activity Agreement Member. Any interest due under Section 6.2 of this Activity Agreement and unpaid shall be deducted from the repayment.

Section 9. Organization. The business of the Activity Agreement shall be conducted by the Steering Committee established and under the procedures set out in this Section 9.

9.1 Governing Body. The business of the Activity Agreement shall be conducted by a Steering Committee consisting of one member appointed by each Activity Agreement Member.

9.2 Powers and Limitations Thereon. The Steering Committee shall undertake all actions necessary for carrying out the Activity Agreement, including but not limited to setting policy with respect to the activities under the Activity Agreement; developing and approving budgets with respect to activities under this Activity Agreement; determining to issue Authority Bonds in accordance with the JPA Agreement and the Joint Exercise of Powers Act (Govt. Code Section 6500, et seq.); and such other actions as shall be reasonably necessary or convenient to carry out the purposes of this Activity Agreement. Except where the consent or approval of the Activity Agreement Members is expressly required by this Activity Agreement, Steering Committee Members are deemed to have authority to act for their respective entity or entities governing bodies. The Authority Board of Directors shall have final review and approval authority for all actions taken under the umbrella of the Authority, including the issuance of Authority Bonds as provided in Sections 6(e), 6(j), 6(k) and 24 of the JPA Agreement.

9.3 Meetings. The Steering Committee may, but shall not be required to, select a fixed date for Steering Committee meetings by action reflected in the minutes of the Steering Committee, which date may be changed by action of the Steering Committee from time to time. Such meetings may be adjourned by the Chair or for lack of a quorum or as otherwise authorized by the Ralph M. Brown Act (Government Code Sections 54950 et seq.) (the "Brown Act"). Either the Chair of the Steering Committee, a majority of a quorum of the Steering Committee or the Executive Director is authorized to call meetings as necessary and appropriate to conduct the business of the Activity Agreement. Attendance by a quorum of the Steering Committee is required for a meeting. All such meetings shall be open to the public and subject to notice and location requirements as set forth in the Brown Act. Telephonic meetings or teleconference meetings or participation in meetings may take place in accordance with the Brown Act. Informational sessions may be conducted by less than a quorum of the Steering Committee to the extent permitted by the Ralph M. Brown Act, but no actions may be taken at such sessions.

9.4 Quorum and Voting.

9.4.1 Quorum. A majority of the then-appointed members constitutes a quorum of the Steering Committee.

9.4.2 Voting Power. Each member on the Steering Committee shall have one (1) vote. In the absence of a Member or in the event a member is disqualified due to conflict of interest, the absent or disqualified member's alternate, if present, shall be counted toward establishing a quorum and has the right to vote in place of the absent or disqualified member. The

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Executive Director, Assistant Executive Director and other employees of the Authority shall not be designated as members of the Steering Committee and shall not be entitled to vote, nor shall they be counted towards a quorum.

9.4.3 Required Vote. Except as otherwise provided by law or as otherwise expressly provided in this Activity Agreement, all actions of the Steering Committee must be taken by majority vote of the quorum present at such Steering Committee meeting; provided, that if the Steering Committee fails to obtain a majority vote for purposes of refinancing any outstanding Authority Bonds to the extent they that have not been repaid (or provision for repayment made) 90 days prior to their maturity date, the Board of Directors of the Authority shall authorize such refinancing without action of the Steering Committee.

9.5 Vote or Consent of Activity Agreement Members. The vote, consent or approval of the Activity Agreement Members in any matter requiring such vote, consent or approval hereunder shall be evidenced either by a certified copy of the resolution of the governing boards of such Activity Agreement Members, or, if the action is taken by motion, then by a certified copy of its minutes.

9.6 Officers. The Steering Committee shall select from among its members a Chair, who shall act as presiding officer, and a Vice Chair, to serve in the absence of the Chair. There also shall be selected a Secretary, who may, but need not be, a member of the Steering Committee. All officers remain in office at the pleasure of a majority vote of the Steering Committee, except as follows: each officer is entitled to resign such office, by tendering a written resignation to the Authority; and no Chair or Vice Chair may continue to serve as such officer if no longer acting as a member of the Steering Committee.

9.7 Executive Director. The Executive Director of the Authority is authorized, consistent with the direction of the Steering Committee, to employ attorneys, engineers and other consultants, and otherwise authorize expenditure of Activity Agreement funds within the parameters of the budget developed by the Steering Committee and approved by the Authority.

Section 10. Term. This Activity Agreement shall take effect on the date it is executed by the Authority and at least one Activity Agreement Member. This Activity Agreement shall remain in full force and effect until such time as it is amended, rescinded or terminated by the Authority and the Activity Agreement Members by unanimous written consent in the same manner as required for amendment pursuant to Section 13 of this Activity Agreement; provided that in no event shall this Activity Agreement terminate prior to the repayment of all Authority Bonds.

Section 11. Admission of New Activity Agreement Members. New Activity Agreement Members may be admitted upon a unanimous vote of the Steering Committee and execution of all appropriate agreements; provided that no new Activity Agreement Members shall be admitted if such admission would cause the Authority to violate any obligation of the Authority under Authority Bonds.

Section 12. Withdrawal from Further Participation. Activity Agreement Members may withdraw from the Activity Agreement as provided in this Section 12. To withdraw, an Activity Agreement Member shall give the Authority and all other Activity Agreement Members written notice of such withdrawal not less than 30 days prior to the withdrawal date.

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12.1 Payment of Obligations. Withdrawal is conditioned upon the withdrawing Activity Agreement Member's payment or agreement to pay its share of all debts, liabilities, obligations and indebtedness of the Authority pursuant to this Activity Agreement and incurred prior to the effective date of such withdrawal, including Authority Debt Service and any debts, liabilities, and indebtedness obligations incurred under this Activity Agreement. A withdrawing party shall, within 30 days of the withdrawal date, pay all such Activity Agreement Member's financial obligations incurred prior to such withdrawal date pursuant to the terms of this Activity Agreement or enter into an agreement acceptable to the Authority providing for continuing payment of such obligations until fully paid.

12.2 Rights Following Withdrawal. As of the withdrawal date, all rights of participation in this Activity Agreement shall cease for the withdrawing Activity Agreement Member.

12.3 Obligations Following Withdrawal. Withdrawal shall not excuse the withdrawing Activity Agreement Member's performance of obligations imposed upon that party by any judgment which has been entered by a court of competent jurisdiction or regulation to which the Authority or the Activity Agreement Members are subject and that arise from or are related to activities of the Activity Agreement conducted during the period when the withdrawing Activity Agreement Member participated in this Activity Agreement. Furthermore, the indemnification obligations set forth in Section 14 regarding the rights to contribution described in Section 15 of this Activity Agreement shall survive a party's withdrawal from this Activity Agreement for activities under this Activity Agreement conducted during the period when the withdrawing Activity Agreement Member participated in this Activity Agreement.

Section 13. Amendment. This Activity Agreement may be amended upon written approval of any amendment by a unanimous vote of the Activity Agreement Members; provided, that the Authority or any Activity Agreement Member proposing an amendment shall provide notice to each other Activity Agreement Member and to the Authority. Such written notice may be provided by personal delivery; U.S. mail; facsimile transmittal with written confirmation; or electronic mail with written confirmation. Notices served by U.S. mail shall be deemed received 5 days following the mailing date; all other forms of notice shall be deemed received on the actual date received as confirmed by proof of service, facsimile confirmation or electronic mail confirmation. Upon service of written notice upon the President or Chair and General Manager or other Chief Executive Officer of any Activity Agreement Member that the failure to object or consent to an amendment will result in automatic consent to such amendment, any Activity Agreement Member that fails to consent or object within sixty (60) days after such consent is requested (or such alternate reasonable time as is set by the Steering Committee by action recorded in the minutes) shall lose its right to consent or object to the proposed amendment.

Section 14. Indemnification of Authority and its Member Agencies Who Are Not Activity Agreement Members. The Activity Agreement Members shall hold the Authority, and each Authority member agency who is not an Activity Agreement Member, free and harmless from and indemnify each of them against any and all costs, losses, damages, claims and liabilities arising from this Activity Agreement that are not the result of the negligence or willful misconduct of the party seeking indemnification. This indemnification obligation includes the obligation to defend the Authority, and all Authority member agencies which are not participants in this Activity Agreement, at the sole expense of the Activity Agreement Members in any action or proceeding brought against the Authority or any Authority member agencies not participating in this Activity Agreement to

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recover any such costs, losses, damages, claims or liabilities arising from this Activity Agreement. The costs of defense and indemnification shall be shared among the Activity Agreement Members in the same percentage as each such Activity Agreement Member Participation Percentage under the then-current schedule. For the avoidance of doubt, the indemnification of the Authority and Authority member agencies which are not participants in this Activity Agreement shall be limited to costs, losses, damages, claims and liabilities related solely to the participation by the Authority in the funding of the DHCCP and not more generally with respect to the implementation of the DHCCP.

Section 15. Right of Contribution. In the event a judgment is awarded against the Authority or against an Activity Agreement Member to any person or entity that is not an Activity Agreement Member, which judgment is subject to the duty to defend and indemnify specified in Section 14, the party against whom the judgment is awarded has the right to seek contribution from each remaining Activity Agreement Members in proportion to their respective Participation Percentages.

Section 16. Activity Agreement Constitutes a Project Agreement. This Activity Agreement shall constitute a "Project Agreement" for all purposes under the JPA Agreement.

Section 17. Applicability of Section 27 of the JPA Agreement. To the extent that the parties hereto determine it is necessary or appropriate for the maintenance of the tax exempt status of Authority Bonds or for any other reason, the Authority may take title to all or a portion of the land, equipment or other facilities (including interests therein) financed by proceeds of Authority Bonds or other obligations incurred to finance Authorized Costs and to enter into agreements with DWR, the United States of America and other state and local entities with respect to ownership, use and operation thereof. In accordance with Section 27 of the JPA Agreement, Facilities (as such term is defined in the JPA Agreement) constructed or acquired by the Authority through this Activity Agreement, if any, are not required to be held in the name of the Authority and shall be for the benefit of the Activity Agreement Members only.

Section 18. Agreement is Not a CEQA Project or Commitment to BDCP-Related CEQA Projects. This Activity Agreement is not a "project" as defined by the California Environmental Quality Act ("CEQA") because it merely establishes a framework for future financing of BDCP pre-construction activities. This Activity Agreement does not represent a commitment by the parties to issue any particular debt instruments in the future. It represents creation of government funding mechanisms or other government fiscal activities that do not involve any commitment to any specific project that may result in a potentially significant environmental effect; such activities are not considered CEQA projects (14 Cal. Code Regs. §15378(b)(4)).

Further, this Activity Agreement does not commit the parties to approving any of their own BDCP-related projects. Prior to approving such projects, the parties would first complete any required CEQA review, which may include using the BDCP EIR/EIS as Responsible Agencies. This Activity Agreement does not limit the parties' discretion as part of any required CEQA reviews to impose mitigation measures or adopt alternatives related to their authority, or to not approve their own BDCP-related projects.

Section 19. Assignment; Binding on Successors. Except as otherwise provided in this Activity Agreement, the rights and duties of the Activity Agreement Member may not be assigned or delegated without the written consent of the Authority. Any attempt to assign or delegate such rights or duties in contravention of this Activity Agreement shall be null and void. Any approved

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assignment or delegation shall be consistent with the terms of any contracts, resolutions, indemnities and other obligations of the Authority then in effect. This Activity Agreement shall inure to the benefit of, and be binding upon, the successors and assigns of the Authority and the Activity Agreement Members.

Section 20. Counterparts. This Activity Agreement may be executed by the Authority and the Activity Agreement Member in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument.

Section 21. Choice of Law. This Activity Agreement shall be governed by the laws of the State of California.

Section 22. Severability. If one or more clauses, sentences, paragraphs or provisions of this Activity Agreement shall be held to be unlawful, invalid or unenforceable, it is hereby agreed by the Activity Agreement Member and the Authority that the remainder of this Activity Agreement shall not be affected thereby.

Section 23. Headings. The titles of sections of this Activity Agreement are for convenience only and no presumption or implication of the intent of the parties as to the construction of this Activity Agreement shall be drawn therefrom.

SAN LUIS & DELTA-MENDOTA
WATER AUTHORITY

ACTIVITY AGREEMENT MEMBER

By: _____

By: _____

Dated: _____

Dated: _____

EXHIBIT A

**SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM
ACTIVITY AGREEMENT**

ANTICIPATED PARTICIPATION PERCENTAGES

<i>Activity Agreement Member</i>	<i>Participation Percentage</i>
Broadview Water District	%
San Luis Water District	
Santa Clara Valley Water District	
Westlands Water District	

[TO BE UPDATED]

EXHIBIT B

**PRE-CONSTRUCTION COST
REPORT OF HALLMARK GROUP**

[TO BE INSERTED]

EXHIBIT B

CONTINUING DISCLOSURE CERTIFICATE

This Continuing Disclosure Certificate (the "Disclosure Certificate") is executed and delivered by Westlands Water District (the "District") in connection with the issuance and sale by the San Luis & Delta-Mendota Water Authority of Bonds, as defined in, and issued under and pursuant to an Indenture of Trust, dated as of April 1, 2014 (the "Indenture"), by and between the San Luis & Delta-Mendota Water Authority and Union Bank, N.A., as trustee (the "Trustee"). The District covenants and agrees as follows:

1. Purpose of this Disclosure Certificate. This Disclosure Certificate is being executed and delivered by the District for the benefit of the Holders and Beneficial Owners of each series of Bonds (as such term is defined in the Indenture) and in order to assist the Participating Underwriter in complying with the Rule.

2. Definitions. In addition to the definitions set forth in the Indenture, which apply to any capitalized term used in this Disclosure Certificate unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

Annual Report. The term "Annual Report" means any Annual Report provided by the District pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.

Beneficial Owner. The term "Beneficial Owner" means any person which: (a) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries); or (b) is treated as the owner of any Bonds for federal income tax purposes.

EMMA. The term "EMMA" means the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System for municipal securities disclosures, maintained on the Internet at <http://emma.msrb.org/>.

Fiscal Year. The term "Fiscal Year" means the one-year period ending on the last day of February of each year.

Holder. The term "Holder" means a registered owner of the Bonds.

Listed Events. The term "Listed Events" means any of the events listed in Sections 5(a) and (b) of this Disclosure Certificate.

Official Statement. The term "Official Statement" means any Official Statement delivered in connection with the Bonds.

Participating Underwriter. The term "Participating Underwriter" means any of the original underwriters of the Bonds required to comply with the Rule in connection with offering of the Bonds.

Rule. The term "Rule" means Rule 15c2-12 adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

3. Provision of Annual Reports.

(a) The District shall provide not later than 270 days following the end of each Fiscal Year to EMMA an Annual Report relating to the immediately preceding Fiscal Year which is consistent with the requirements of Section 4 of this Disclosure Certificate, which Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in Section 4 of this Disclosure Certificate.

(b) If the District is unable to provide to EMMA an Annual Report by the date required in subsection (a), the District shall send to EMMA a notice in the manner prescribed by the Municipal Securities Rulemaking Board.

4. Content of Annual Reports. The Annual Report shall contain or incorporate by reference the following:

(a) The audited financial statements of the District for the prior Fiscal Year, prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board. If the District's audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available.

(b) Principal amount of the Bonds outstanding.

(c) An update of the information in the following tables in Appendix __ of the Official Statement entitled "Information Concerning Westlands Water District":

1. "CROP VALUES" on page __-__;
2. "HISTORIC WATER USAGE" on page __-__; and
3. "HISTORIC OPERATING RESULTS AND DEBT SERVICE COVERAGE" on page __-__.

Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the District or related public entities, which have been submitted to EMMA; provided, that if any document included by reference is a final official statement, it must be available from the Municipal Securities Rulemaking Board; and provided further, that the District shall clearly identify each such document so included by reference.

5. Reporting of Significant Events.

(a) Pursuant to the provisions of this Section 5, the District shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds, in a timely manner not more than ten (10) Business Days after the event:

- (i) principal and interest payment delinquencies;
- (ii) unscheduled draws on debt service reserves reflecting financial difficulties;
- (iii) unscheduled draws on credit enhancements reflecting financial difficulties;
- (iv) substitution of credit or liquidity providers, or their failure to perform;
- (v) adverse tax opinions or the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds;
- (vi) defeasances;
- (vii) tender offers;
- (viii) bankruptcy, insolvency, receivership or similar proceedings; and
- (ix) ratings changes.

(b) Pursuant to the provisions of this Section 5, the District shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds, if material:

- (i) mergers, consolidations, acquisitions, the sale of all or substantially all of the assets of the obligated persons or their termination, if material;
- (ii) appointment of a successor or additional trustee or the change of the name of a trustee;
- (iii) non-payment related defaults;
- (iv) modifications to the rights of Bondholders;
- (v) notices of redemption; and

(vi) release, substitution or sale of property securing repayment of the Bonds.

(c) Whenever the District obtains knowledge of the occurrence of a Listed Event described in subsection (b), the District shall as soon as possible determine if such event would be material under applicable federal securities laws.

(d) If the District determines that knowledge of the occurrence of a Listed Event under Section 5(b) would be material under applicable federal securities laws, the District shall file a notice of such occurrence with EMMA in a timely manner not more than ten (10) Business Days after the event.

6. Customarily Prepared and Public Information. Upon request, the District shall provide to any person financial information and operating data regarding the District which is customarily prepared by the District and is publicly available.

7. Termination of Obligation. The District's obligations under this Disclosure Certificate shall terminate upon the legal defeasance, redemption, or payment in full of all of the Bonds. If such termination occurs prior to the final maturity of the Bonds, the District shall give notice of such termination in the same manner as for a Listed Event under Section 5(c).

8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Certificate, the District may amend this Disclosure Certificate, and any provision of this Disclosure Certificate may be waived, provided that, in the opinion of nationally recognized bond counsel, such amendment or waiver is permitted by the Rule.

9. Additional Information. Nothing in this Disclosure Certificate shall be deemed to prevent the District from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate or any other means of communication, or including any other information in any notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Certificate. If the District chooses to include any information in any notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Certificate, the District shall not thereby have any obligation under this Disclosure Certificate to update such information or include it in any future notice of occurrence of a Listed Event.

10. Default. In the event of a failure of the District to comply with any provision of this Disclosure Certificate, any Holders or Beneficial Owners of at least 50% aggregate principal amount of the Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the District to comply with its obligations under this Disclosure Certificate. A default under this Disclosure Certificate shall not be deemed an Event of Default under the Indenture or the Activity Agreement, and the sole remedy under this Disclosure Certificate in the event of any failure of the District to comply with this Disclosure Certificate shall be an action to compel performance.

11. Beneficiaries. This Disclosure Certificate shall inure solely to the benefit of the District, the Participating Underwriter and Holders and Beneficial Owners from time to time of the Bonds, and shall create no rights in any other person or entity.

Dated: _____, 2014

WESTLANDS WATER DISTRICT

By: _____
Its: President

ENDNOTES:

¹ http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=15981 The Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) Number EA-13-023 and FONSI-13-023 *Central Valley Project Interim Renewal Contracts for Westlands Water District, Santa Clara Valley Water District, and Pajaro Valley Water Management Agency 2014 – 2016*

1. Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District Distribution District # 1(3-way assignment from Mercy Springs Water District) 14-06-200-3365A-IR13-B 6
2. Westlands Water District 14-06-200-495A-IR3
3. Westlands Water District Distribution District #1 (full assignment from Broadview Water District) 14-06-200-8092-IR13
4. Westlands Water District Distribution District #1 (full assignment from Centinella Water District) 14-06-200-W0055-IR13-B 2
5. Westlands Water District Distribution District #2 (partial assignment from Mercy Springs Water District) 14-06-200-3365A-IR13-C 4
6. Westlands Water District Distribution District #1 (full assignment from Widren Water District) 14-06-200-8018-IR13-B 2

² Section 3403 (e) the term "Central Valley Project service area" means that area of the Central Valley and San Francisco Bay Area where water service has been expressly authorized pursuant to the various feasibility studies and consequent congressional authorizations for the Central Valley Project.

³ PL 86-468 and the Report of the Department of Interior, entitled "San Luis Unit, Central Valley Project." Dated December 17, 1956.

<http://cdm15911.contentdm.oclc.org/cdm/ref/collection/p15911coll10/id/2106>

⁴ 1956 Feasibility Report at page 300 of the PDF

<http://cdm15911.contentdm.oclc.org/cdm/ref/collection/p15911coll10/id/2106>

⁵ 1956 Feasibility Report <http://cdm15911.contentdm.oclc.org/cdm/ref/collection/p15911coll10/id/2106>

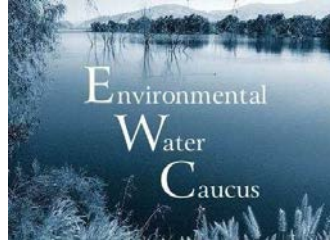
⁶ SLDFR PFR Addendum Executive Summary E-3-4 San Luis Drainage Feature Re-evaluation Land Retirement Program Area CVPIA Land Retirement Program 7,000 acres; Britz Settlement 3,000 acres; Sumner Peck Settlement 34,100 ; Westlands Settlement (Sagouspe) 65,000 (these lands are proposed to return to irrigation after drainage is installed.] SLDFR proposed up to 263,900 acres for the San Luis Unit In-Valley Land Retirement Alternative. The estimates of land retirement acreage for all of the alternatives range from 44,106 to 308,000 acres for the seven action alternatives and up to 109,106 acres for the No Action Alternative. Further USBR contracting requirements and departmental manual typically requires the water to be appurtenant to the land. No explanation is provided as to why these excessive water supply contract amounts are legally required. Section 2 of the Reclamation Act of June 17, 1902, requires the Secretary to comply with state laws relating to the control, appropriation, use or distribution of water used in irrigation or vested rights acquired there under. It concludes: "Provided: That the right to the use of water acquired under the provisions of this act shall be appurtenant to the land irrigated and beneficial use shall be the basis, the measure, and the limit of the right." See also USBR Departmental Manual Regulations: http://www.blm.gov/wo/st/en/prog/planning/nepa/webguide/departmental_manual/516_dm_chapter_14_print.html

⁷ U.S. Dep't of the Interior, Bureau of Reclamation, Mid-Pacific Region, Report on Refuge Water Supply Investigations, Central Valley Hydraulic Basin, California (1989).

⁸ http://www.lloydgcarter.com/content/140130650_westlands-water-district-2009-bond-rating at page 2
“There is concentration among the WWD’s water purchasers. ...In addition, the WWD potentially has the ability to sell and transfer water rights outside the district should agriculture cease to be economic, as the demand for water in Southern California and the San Francisco Bay area by users with connectivity to the CVP is very high.

⁹ See CVPIA, Refuge Water Supply 3406 (b) (3) and Conveyance 'Wheeling' 3406 (d) (1) (2) & (5) Programs.
<http://www.fws.gov/cno/fisheries/cvpia/RefugeWaterSupply1.cfm>

¹⁰ http://www.usbr.gov/mp/cvpia/3406d/env_docs/draft/rws_san_joaquin_11-2000_dft.pdf



CA Save Our Streams Council



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180

September 26, 2013

Rain Healer
South Central California Area Office
U.S. Bureau of Reclamation
1243 N St
Fresno, CA 93721

RE: Comments on Draft Environmental Assessment Cross-Valley Contractors Interim Renewal Contracts EA-12-048 and Draft Finding of No Significant Impact Cross-Valley Contractors Interim Renewal Contracts FONSI-12-048

Dear Ms Healer,

The undersigned respectfully submit the following comments regarding the above referenced Draft Environmental Assessment and Draft Finding of No Significant Impact for the renewal of the Cross-Valley Contractors water service contract. We urge a full environmental impact analysis be conducted. We include by reference the documents previously submitted disclosing the environmental impacts associated with this type of serial “temporary” interim contract renewal included in Exhibit A and adopted here by reference.

Broad Impacts from both CVP and SWP Project Water Deliveries Renewed Under the Proposed Project Have Not Been Disclosed.

Over two decades of interim contract renewals, USBR has used consecutive cookie cutter Environmental Assessments to thwart the Congressional intent and letter of the law, which requires tiered pricing for this taxpayer subsidized water and disclosure in a clear, complete, and straightforward manner for decision makers and the public of the full environmental impacts of this federal water delivery under Central Valley Water Project Contracts.¹ Using two major federal and state water projects—both the State Water Project and Federal Central Valley Project—along with local water delivery projects and five counties—Fresno, Tulare, Kern, Kings, Benito—with source water impacts from Trinity, Sacramento, Placer, San Joaquin, Merced, and Stanislaus counties, just to name a few, this “new” FONSI and DEA proclaims that renewal of up to 128,300 acre feet of exports from the Delta will not have impacts to the environment.² Without analysis or data, the DEA proclaims that these eight interim renewal contracts and proposed Article 5 exchanges will not have an impact on endangered species. Thus, it is claimed, there is no need for consultation with either the United States Fish and Wildlife Service or the National Marine and Fishery Service. We understand, according the DEA, that “*Environmental documents for long-term contract renewal with the Cross Valley Contractors have not been completed, as ESA consultation for the CVP/SWP Coordinated Operations is ongoing.*” [DEA @pg 7], but this is simply not adequate. Further the proposed water deliveries and diversions will impact critical habitat. The proposed actions will cause direct adverse modification to critical habitat, which will be compounded by the interrelated export of substitute water from the Delta to the Exchange Contractors.³

Finally, the DEA brushes aside impacts to the areas from where the water is taken, where it is delivered, land fallowing, and contract assignments as not needing analysis to reach an informed decision regarding environmental impacts. [DEA @ pg 9] No analysis or data

¹ A contract that binds the United States to renewal of interim contracts is contrary to Section 3404 (c) of the CVPIA. See also previous NEPA documents that along with this document fail utterly to allow the reader to follow the water to the specific place of use and specific user and to understand specific impacts of the delivered water.

² “Up to 128,300 acre-feet (AF) per year (AF/y) of the CV contractors’ contractual CVP water supply from the Delta would be allowed to be exchanged for Friant Division CVP supplies and other sources (other sources of water include rivers, streams, creeks, groundwater, and SWP water). The CV contractors and potential exchange partners (other CVP contractors and non-CVP contractors) are all located within Fresno, Tulare, Kings, and Kern counties. This EA covers the broadest flexibility for Article 5 exchange arrangements known at this time.” [DEA @pdf pg12] The CV contractors are currently in their fourteenth IRC and the proposed renewal would be the fifteenth. [DEA @pdf 17] In addition, Reclamation proposes to approve the CV contractors’ exchange arrangements with individually proposed exchange partners for the 2014 and 2015 contract years (March 1, 2014 through February 29, 2016) for up to the full CV contractors’ CVP contract supply of 128,300 AF/y. The Proposed Action would also include the continued historical exchanges between the CV contractors and AEWS.

³ NRDC v. Rodgers, No. S-88-1658 LKK, Order at 19-20 (May 31, 1995).

regarding impacts to air quality, visual resources, recreation resources, and global climate change are provided, and all are deemed by fiat to not be significant or necessary to analyze.

Failure to Consider a Full Range of Alternatives

Failing to consider a full range of alternatives, the DEA compares the project to itself. The only alternative considered, the no action alternative, briefly discusses the existing 14 serial “interim” contract renewals spanning over a decade and with only one modification requiring tiered water pricing. [DEA @ pdf pg 16] The alternative is dismissed out of hand.⁴ The DEA incorrectly claims that the Bureau is bound by law to renew the contracts without adequate environmental impact analysis or considerations. [DEA pdf @ pg 16]. Reduction of contract water quantities due to delivery constraints on the CVP system was considered in certain cases, but eliminated from the analysis of the eight IRCs, basically claiming federal law requires contracts of the full amount of water even if delivery of that amount of water is not feasible or would harm the environment. [DEA pg 14] This interpretation of the law is incorrect. Section 3404 (c) of the CVPIA which reads in pertinent part as follows: (c) Renewal of Existing Long-Term Contracts.—Notwithstanding the provisions of the Act of July 2, 1956 (70 Stat. 483), *the Secretary shall, upon request, renew any existing long term repayment or water service contract for the delivery of water from the Central Valley Project for a period of 25 years and may renew such contracts for successive periods of up to 25 years each.*

*(1) No such renewal shall be authorized until appropriate environmental review, including the preparation of the environmental impact statement required in section 3409 of this title, has been completed. Contracts which expire prior to the **completion of the environmental impact statement required by section 3409** may be renewed for an **interim period not to exceed three years in length, and for successive interim periods of not more than two years in length**, until the environmental impact statement required by section 3409 has been finally completed, at which time such interim renewal contracts shall be eligible for long-term renewal as provided above [Emphasis added.]*

The contract improperly asserts and assumes that Reclamation *will approve renewal of the interim contracts*. This is contrary to section 3404 (c) of the CVPIA which expressly authorizes Reclamation to decline to execute an interim contract. Thus the contract provision asserting Reclamation *will* renew is contrary to Congressional intent and the law’s plain language.

Additionally, proposed contract renewals suggest that there are no environmental impacts from issuing water contracts that cannot be delivered or that there are no impacts from delivering these unsustainable supplies in wetter years. The DEA asserts:

⁴ *Many of the contractors’ service areas are planted in permanent crops, and in very dry years they have shown a willingness to pay rates above what would be expected in a tiered pricing structure, to preserve their crop planting investment. Therefore it is not expected that switching to a tiered pricing structure would prompt CV contractors to change water use patterns.* [DEA @ pdf @ pg 24]

“Further, CVP operations and contract implementation, including determination of water available for delivery, is subject to the requirements of BOs issued under the federal ESA for those purposes. If contractual shortages result because of such requirements, the Contracting Officer has imposed them without liability under the contracts. Fourth, retaining the full historic water quantities under contract provides the contractors with assurance the water will be made available in wetter years and is necessary to support investments for local storage, water conservation improvements and capital repairs. Therefore, an alternative reducing contract quantities would not be consistent with Reclamation law or the PEIS ROD, would be unnecessary to achieve the balancing requirements of CVPIA or to implement actions or measure that benefit fish and wildlife, and could impede efficient water use planning in those years when full contract quantities can be delivered.”[DEA @pg 14-15]

And yet recent data suggest otherwise. Water quality standards are not being met, temperatures are being exceeded, pulse flows are not being provided and species are in fact facing deteriorating habitat and extirpation. [See exhibit C] The DEA fails to recognize and consider that the CVC water from Friant can be conveyed down the San Joaquin River and recirculated to a Cross Valley contractor or an exchange via the Mendota Pool or the Delta, and analyze the potential environmental benefits of this alternative. Further Reclamation’s absurdly limited range of alternatives in the DEA are also defective because the approach to the “needs analysis” fails to adequately address alternative needs for the water including environmental needs such as restoration of the Delta and the San Joaquin River.

Failure to Comply with the Endangered Species Act (16 U.S.C. § 1531 et seq.)

Unfortunately, the existing Biological Opinions cited in the DEA have not been deemed adequate and species remain threatened with extirpation. The Bureau’s reliance on the USFWS opinion, in this circumstance, does not discharge its section 7(a)(2) procedural obligation to consult with the USFWS or its substantive obligation to ensure that its action would not jeopardize, or cause adverse modification to the critical habitat of, threatened or endangered species.

During the course of its consultation on CVP contract renewals, USFWS was required to “[e]valuate the effects of the [contract renewals] on the listed species.” 50 C.F.R. § 402.14(g)(3). The biological opinion that USFWS produced after consultation was similarly required to include “[t]he Service’s opinion on whether the action is likely to jeopardize the continued existence of a listed species.” Id. at § 402.14(h)(3). The DEA relies on the USFWS Friant Biological Opinion which did not do so.

The Opinion lists 42 species that were ostensibly considered, and then concludes that the long-term renewal of contracts is not likely to jeopardize 36 of these species. See USFWS Friant Biological Opinion at 1-5 to 1-7, 5-1. The biological opinion states no specific conclusion as to the effect of the contract renewals on the remaining six species, however. See id. These six other species include two, the Mountain Yellow-legged Frog and the Yosemite Toad, that were at that

time candidate species; subsequently, the Mountain Yellow-legged Frog was listed as endangered. 67 Fed. Reg. 44382 (July 2, 2002). The other four species as to which FWS reached no conclusion are: the riparian brush rabbit; the riparian woodrat, the Little Kern golden trout; and the longhorn fairy shrimp. USFWS Friant Biological Opinion at 1-6, 3-30 to 3-31, 3-57 The Biological Opinion includes discussion of possible negative effects on each of these species. Yet the Opinion simply omits these species from its list of species as to which the contract renewals purportedly pose no jeopardy. The Opinion also contains no analysis demonstrating that the contract renewals will not cause jeopardy to these species or result in adverse modification of their critical habitat. Reliance on this Biological Opinion to renew these proposed contracts does not meet the requirements of the law. The Bureau has failed to consult and conclude consultation with the USFWS on several listed species. In fact there is no evidence from the documents listed in the DEA that the Bureau has consulted on these operations and impacts from the contract renewals and exchanges.⁵

Typical operation and maintenance operations impacting endangered species are not mentioned or considered. Nor are these activities considered in the cited Biological Opinions. Among the maintenance activities not considered by the USFWS and NMFS in the Friant Biological Opinions are periodic applications of toxic aquatic pesticides to channels, gates, weirs, levees, and other water delivery facilities. See generally *Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526, 528-29 (9th Cir. 2001). These pollutants may, in some circumstances, reach stretches of the San Joaquin River and/or the San Francisco Bay-Delta that provide habitat for winter-run Chinook salmon, spring-run Chinook salmon, Central Valley steelhead, Delta smelt, and Sacramento splittail. See generally USFWS & NMFS Biological Opinion for the California Toxics Rule (March 24, 2000) (file no. 1-1-98-F-21). The referenced USFWS issued a BO (1-1-04-F-0368), dated February 17, 2005, for routine operations and maintenance (O&M) activities on SCCAO lands in San Joaquin, Stanislaus, Merced, Madera, Fresno, Santa Clara, San Benito and Contra Costa counties (USFWS, 2005) referenced DEA @ pg 36 is insufficient and much of the information and monitoring required by that Opinion has never been provided and certainly is not provided in this DEA.⁶ Specifically Reclamation is required to provide:

- An update of the SCCAO O&M Plan every two to five years. Additionally *“Reclamation and the Service will meet every five years to review the effectiveness of avoidance and minimization measures,and reinitiate consultation as appropriate on*

⁵ “However, transfers and/or exchanges involving Friant Division or CV contractors were not addressed by the LTCR Opinion. In addition, the LTCR Opinion did not address some of the species and critical habitats covered in this EA, because their listings/designations occurred after the BO was issued. These species and critical habitats are: the vernal pool fairy shrimp, the vernal pool tadpole shrimp, all critical habitats for vernal pool species, and critical habitat for the California tiger salamander.” See http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8831

newly listed species and designated critical habitat.” [BO @ pg.7] No such plan is provided in the DEA nor has one been developed to the best of the signees knowledge.

- Within 2 years of the issuance of the BO, Reclamation “shall develop a final Integrated Pest Management Plan.” (BO @ pg 98) No such plan is provided in the DEA nor has one been developed to the best of the signees knowledge.
- Annually “*Reclamation must provide the Service with reports to describe the progress of implementation of all the commitments in the Conservation Measures and Terms and Conditions sections of this biological and conference opinion. The first report is due January 31, the first year after the issuance of this biological and conference opinion, and bi-annually thereafter.*” [BO @pg 99] No such report information is provided in the DEA nor has one been developed to the best of the signees knowledge.

Another set of routine maintenance operations not considered by the DEA or in previous USFWS’s biological opinions is the discharge of selenium-contaminated water from check drains and sumps along the Delta Mendota Canal (“DMC”). The check drains and sumps are necessitated by DMC operations which, in turn, result in large part from the Bureau’s decision to deliver water to the CV contractors from the Delta, so that the Bureau can continue to divert San Joaquin River water to the Friant and CV contractors. See generally NRDC v. Rodgers, No. S-88-1658 LKK, Order at 19-20 (May 31, 1995) (holding that the Friant Dam diversions affect the entire Bay-Delta system and have “required the export of Delta water through the Delta-Mendota Canal”).

Still another impact not addressed in the DEA and serial contract renewals are the cumulative impacts from Delta exports to the Westside of the San Joaquin Valley from the Delta Mendota Canal, San Luis Unit and Cross Valley Contractors. For example exchanges, transfers [water sales] and diversions impact DMC receiving waters, into which the check drains and sumps discharge, ultimately flow into habitat for a variety of listed species, including the Mendota Wildlife Area and, in some circumstances, through the Mendota Pool, down the San Joaquin River, and ultimately to the San Francisco Bay-Delta – each of which waterways is impaired by selenium. Monitoring data on these discharges indicates that the drains and sumps discharge mass loadings and concentrations of selenium that could reasonably be expected to contribute to the jeopardy of numerous listed species (including the giant garter snake, Sacramento winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, Delta smelt, and Sacramento splittail). These discharges also contaminate, and adversely modify, critical habitat for several of these species.⁷ The Bureau has not consulted on

⁷ Not considered in the DEA are impacts from CV renewal contracts to Critical Habitat designated since the Friant Biological Opinion and not considered in this DEA: Vernal Pools http://www.fws.gov/sacramento/es/critical-habitat/Vernal-Pool/es_critical-habitat-maps_vernal-pool.htm CA Tiger Salamander in 2005 <http://www.gpo.gov/fdsys/pkg/FR-2005-08-23/pdf/05-16234.pdf> http://www.fws.gov/sacramento/es/critical-habitat/CA-Tiger-Salamander/es_critical-habitat-maps_ca-tiger-salamander.htm Along with other critical habitat

these operations impacted by the proposed contracts, exchanges, exports and water deliveries. Further the Bureau unlawfully failed to complete consultations on these activities prior to executing the Friant contracts and issuing the Biological Opinion. See generally 50 C.F.R. §§ 402.02, 402.12(a), & 402.14(c)(4), (d) & (g)(4).

Excess water exports from the Delta have led to over 52 species being listed as threatened or endangered. The evidence before the Bureau and the Services demonstrates that these diversions from the Delta to the Cross Valley contractors may appreciably reduce the likelihood of survival and recovery of at least three listed species under NMFS jurisdiction (Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead) and at least two listed species of fish under USFWS jurisdiction (the Delta smelt and Sacramento splittail). The evidence also demonstrates that these Delta diversions do adversely modify the critical habitat for these species. The specific cumulative impacts of these serial contract renewals and the specific impacts from the proposed Cross Valley Contract renewals have not been analyzed, nor have the required monitoring data and mapping required under existing biological opinions. The Bureau has failed to consult or complete consultation on numerous actions specifically authorized by the contracts, renewals, exchanges and transfers [sales]. Further the Bureau has failed to complete consultation with the USFWS on the contract water quantities that the Bureau actually authorized in the serial contract renewals and in the proposed contract renewals.

USFWS Biological Opinion on US Bureau of Reclamation Long Term Contract renewal of Friant and Cross Valley Unit Contracts January 19, 2001 File Number 1-1-01-F-0027. See pages 2-31-32:

*“Monitoring will be used to assess the condition and impacts of Reclamation actions on listed species. Reclamation and the Service are actively developing a monitoring strategy based on the comprehensive mapping program. **The land cover database for year 2000, described in Phase III above, will be revisited every 5 years for monitoring purposes.**” ... “Additionally, Reclamation and the Service **commit to revisit and update the land cover database for year 2000 every 5 years for monitoring and trends analysis purposes.**” [emphasis added.]*

“The Land Use Monitoring and Reporting Program will be implemented immediately to test and track, for the purpose of validating over the life of the project, the assumptions made in this biological opinion that the baselines of the species on Table 1.1 are stable or increasing.

*Monitoring will be used to assess the condition and impacts of Reclamation actions on listed species. Reclamation and the Service are actively developing a monitoring strategy based on the comprehensive mapping program. **The land cover database for year 2000, described in Phase III above, will be revisited every 5 years for monitoring purposes.***”
[emphasis added]

The DEA fails except in a generalized listing to disclose the size and complexity of the proposed interim contracts and exchanges on vast tracks of lands and then brushes aside any analysis of endangered species: “*Due to the size of the Proposed Action’s Action Area, the list of endangered, threatened and sensitive species includes species that may occur within the Counties of Fresno, Kings, Tulare and Kern (San Joaquin Valley portion). The BOs described in Chapter 1.2 contain more detailed descriptions of biological resources in the contractors’ service areas and boundaries.* [DEA pdf @ pg 28] And yet as noted above, USBR and the contractors do not appear to be in compliance with the provision of these Biological Opinions.

None of the required monitoring or mapping is provided in this DEA. [See Exhibit B for Cross Valley acreage included in the BO] It is critically important to understand and evaluate the effectiveness and effects of the 20 years of water diversions that have occurred. In February 2013 USFWS determined in a consultation within a similar service area that the Bureau and interim contractors had failed to abide by monitoring and mapping required and concluded changes were necessary to the water contracts to test assumptions and impacts from previous diversions and deliveries.⁸:

“In the CVPIA Programmatic biological opinion, dated November 2000 (Service File No. 98-F-0124), Reclamation and the Service committed to develop a Comprehensive Mapping Program to identify remaining natural habitats and cropping patterns within CVP Service Areas, and identify any changes within those habitats that have occurred from 1993 to 1999, and then every 5 years thereafter (pages 2-62 and 2-63). Reclamation completed a mapping assessment of habitat changes from 1993 to 1999 and 2005. The Service is unaware of any recent habitat/crop mapping efforts for CVP Service Areas completed by Reclamation since 2005. The Service therefore requests that prior to the next IRC or Long Term Contract Renewal, this comprehensive mapping effort be updated with current imagery and compared with the previous mapping efforts to update the environmental baseline and to verify assumptions by Reclamation that the IRCs do not result in land use changes that would affect federally listed species. Water Supply Deliveries and Sources and Off-Site Conjunctive Use of CVP Water As part of the baseline information provided by Reclamation, the Service asks that Reclamation provide recent data on the following:

⁸ USFWS Correspondence FR: Thomas Leeman to USBR, David Hyatt Re: Consultation on the Interim Renewal of Water Service Contracts for the Cities of Avenal, Coalinga, Huron and California Department of Fish and Game 2013-2015. February 7, 2013.

- *Summary of recent water deliveries and sources under Reclamation’s purview (e.g., CVP, water transfers, exchanges, etc.) for the contractors under consideration.*
- *Summary of off-site conjunctive use projects used to store CVP water supply (e.g., the amount of water stored, location and information on where the water was stored, used etc.).”*

Reclamation goes on to determine in the DEA without analysis or information that the “Proposed Action would not affect any Federally listed or proposed species or any critical habitat beyond what has already been addressed in other consultations. For species under NMFS responsibility Reclamation discussed the Proposed Action and it was determined that federally listed salmonids would not require consultation/conferencing for this interim renewal. Therefore, further consultation under the Endangered Species Act is not required.” [DEA pdf @pg36]

Further claiming, “All of these species and habitats were addressed however by the BOs on coordinated long-term operations of the CVP and SWP and associated documents. Listed salmonids are not expected to return to the upper San Joaquin during this interim renewal period and so don’t require consultation/conferencing.” [DEA pdf @pg 29] This claim is not supported by fact. The Biological Opinions identified in the document have been deemed insufficient and further, the specific impacts of the tiered actions have not been disclosed or analyzed. Nor have the impacts from operational changes, “The exchanges when added to the Article 55 provision in the SWP contracts could result in more frequency of DWR pumping and conveying the 128,300 af/y of water.”⁹ This fails to consider recent violations of temperature, salinity and flow requirements of D-1641.¹⁰[Also see Exhibit C]

Cumulative Impacts Are Not Disclosed or Analyzed from Over a Decade of “Interim” Contract Renewals.

The list of EA’s from 1994 to 2012, which do not include adequate environmental or biological review, document how USBR has thwarted the law and Congressional intent to disclose the impacts from these discretionary water deliveries and diversions from the Delta, surrounding watersheds and site specific impacts. This failure to disclose environmental impacts has been further compounded by the litany of EA’s from 2005 to 2012 for exchanges and transfers [water sales] that are related, but have been put forward in a segmented, piece-meal fashion that precludes analysis of impacts of the project as a whole. For the first time in 2012,

⁹ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=2575 February 2007 - Renewal of Interim Water Service Contracts

¹⁰ Sacramento River Chinook salmon spawning this year [2013] are threatened by the relaxation of water temperature standards on the upper Sacramento River combined with the violations of water quality standards in the Delta, the result of the over-allocation of scarce water supplies and diverting too much water in a dry year. http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/decision_1641/conserves/docs/05292013swrcb.pdf
http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/decision_1641/conserves/docs/05242013swrcb.pdf

Article 5 Exchanges were incorporated into the EA for the IRCs rather than as a separate EA. This change was made because the two elements are interrelated and it was determined that a combined EA presents a clearer explanation of the overall project. [DEA pdf @ pg 11] This change, while an improvement in disclosing the impacts, still is deficient and documents the piece-meal analysis that historically has occurred. As presented in the environmental assessment, the exchanges and transfers [water sales] and associated biological and environmental impacts provide insufficient data and information to support the conclusion that there are no impacts. Further the failure disclose in a straightforward manner specifically where the water has been used and how much was used and which of those transfers [sales of water] or exchanges will continue does not provide sufficient information on the necessary site-specific review that NEPA requires.¹¹

Thank you for the opportunity to comment.



Jonas Minton
Senior Policy Advisor
Planning and Conservation League
jminton@pcl.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net

¹¹ In 2012 a federal budget rider relaxed water transfer [sales] rules allowing the sale of water outside of the CVP service area to areas for example such as Kern Water Bank and other non CVP contractors. See: The Consolidated Appropriations Act, 2012, Division B, Energy and Water Development Appropriations Act, Section 207(c) and deemed the water transfer [sale] also “ meet the conditions described in subparagraphs (a) and (i) of §3405(a)(1) of CVPIA.” The impacts of this expanded water use and delivery are not disclosed.

http://www.usbr.gov/mp/PA/water/docs/CVP_Water_Transfer_Program_Fact_Sheet.pdf

Further the impacts and ultimate use of the water is not disclosed. As noted in previous NEPA documents, “*The CVP water supplies for ARVIN-EDISON WATER STORAGE DISTRICT [AEWSD] are variable and regulates this water by use of the groundwater reservoir underlying AEWSD. In addition, AEWSD engages in Article 5 exchanges of CVP water with the CV Contractors. Up to 128,300 af/y of CV Contractor’s CVP water is delivered to AEWSD. This water is diverted from the Delta through the Aqueduct and to the CVC.In 1997, AEWSD entered into a 25-year agreement with the Metropolitan Water District of Southern California (MWD), in which AEWSD agreed to bank approximately 250,000 af/y of MWD State Water Project Supply for later extraction in drought years. AEWSD has completed construction of an Intertie pipeline connecting the terminus of its canal to the California Aqueduct to enhance the water banking and exchange program. The Intertie pipeline does not create new or additional contractual supplies.*” http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=6086



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@gmail.com



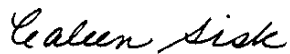
Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Caleen Sisk
Chief of the
Winnemem Wintu Tribe
caleenwintu@gmail.com



Barbara Vlamis
Executive Director
AquaAlliance
barbarav@aqualliance.net



Larry Collins
President
Crab Boat Owners Asso.
lcollins@sfcrabboat.com

John McManus
Executive Director
Golden Gate Salmon Asso.
john@goldengatesalmon.org

Exhibit A: Documented Public Interest & Comments Incorporated by Reference [All Documents can be found in the record of earlier contract renewals, earlier NEPA processes and in some cases on the BOR website.]

- 1. 1-29-10 “ Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts” To Rain Healer from Joseph Membrino for Hoopa Valley Tribe.**
- 2. 1-29-10 “Comments of The Bay Institute and NRDC on Draft Environmental Assessment (EA) and Draft Findings of No Significant Impact (FONSI) for the San Luis Unit interim renewal contracts (Central Valley Project, California)” To Rain Healer from Hamilton Candee**
- 3. 2-18-2010 “Comments Re Two Year Interim Renewal Central Valley Project Water Service Contracts: Westlands Water District [WWD] Contracts 14-06-200-8237A-IR13; 14-06-200-8238A-IR13; WWD DD1-Broadview 14-06-200-8092-IR12; WWD DD1 Centinella 7-07-20-W0055-IR12-B; WWD1 Widren 14-06-200-8018-IR12-B; WWD DD2 Mercy Springs 14-06-200-3365A-IR12-C. To Karen Hall, USBR, from 11 Conservation, Fishery and Community Organizations.**
- 4. 3-2-2010 “Final Scoping Comments for Westlands Water District [Westlands] Proposed “Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct”. The project proposes to discharge up to 100,000 acre feet of groundwater into the State Water Project California Aqueduct, a Drinking Water Supply for Approximately 20 Million People”. To Russ Freeman from 14 Conservation, Fishery and Community Organizations.**
- 5. 5-19-10 Letter to Donald Glaser, USBR From David Ortmann, Pacific Coast Management Council**
- 6. 7-30-2010 “San Joaquin River Central Valley Selenium Basin Plan Waiver, 303 (d) Delisting of San Joaquin River for Selenium and the California Toxics Rule” To Jared Blumenfeld, EPA from 16 Conservation, Fishery and Community Organizations.**
- 7. 9-22-2010 USFWS “Comment Letter – San Joaquin River Selenium Control Plan Basin Plan Amendment” To: Ms. Jeanine Townsend, Clerk to the Board from Susan K. Moore.**
- 8. 11-16-2010 “Letter to Senator Feinstein on Long Term Solution to Westlands Drainage Problem” To Commissioner Connor from Environmental Working Group.**
- 9. 12-13-2010 Comments on the Draft Finding of No Significant Impact [FONSI] San Luis Water District’s [SLD] and Panoche Water District’s [PWD] Water Service**

Interim Renewal Contracts 2011-2013 FONSI-10-070. To Rain Healer, USBR, From 8 Conservation, Fishery and Community Organizations.

- 10. 2-28-2011 “Scoping Comments Proposed Ten Year North to South Water Transfer of CVP and Non CVP Water Using State Water Project (SWP) and Central Valley Water Project (CVP) Facilities” To Brad Hubbard, USBR et. al from 10 Conservation, Fishery and Community Organizations.**
- 11. 5-5-11 “Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities” To Deputy Interior Secretary Hayes from 16 Conservation, Fishery and Community Organizations.**
- 12. 8-11-2011 “Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project.” To Michael C. S. Eacock (Chris), Donald R. Glaser, USBR and Ren Lohofener USFWS et. al from 7 Conservation, Fishery and Community Organizations.**
- 13. 10-17-2011 “Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District’s San Joaquin River Improvement Project (SJRIP) FONSI-10-030” To Rain Healer, USBR from 8 Conservation, Fishery and Community Organizations.**
- 14. 11-15-2011 “Full Environmental Impact Statement Needed for San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District [FONSI-10-030]” To Donald Glaser from 13 Conservation, Fishery and Community Organizations.**
- 15. 11-16-2011 Notice Inviting Public Comment on BDCP MOA to Hon. Kenneth Salazar, Secretary John Laird, Secretary from 190 Conservation, Fishery and Community Organizations.**
- 16. 1-5-2012 “Comments on Draft EA/FONSI for Three Delta Division and Five San Luis Unit Water Service interim Renewal Contracts 2012-2014” To Rain Healer from Stephen Volker on behalf of 4 Tribal, Conservation, Fishery and Community Groups.**
- 17. 1-18-2012 “Comments on Draft EA/FONSI for Oro Loma Water District Partial Assignment of Central Valley Project Water to Westlands Water District FONSI-11-092” To Rain Healer, USBR from 12 Conservation, Fishery and Community Organizations.**
- 18. 1-20-2012 “Delta Division, San Luis Unite and Cross Valley CVP Interim renewal contracts—Comments of the Hoopa Valley Tribe on draft EA-11-049 and EA-11-011 and FONSI 11-049 and FONSI 11-011” To Rain Healer, USBR from Leonard E. Masten Jr. Chariman.**

19. 3-26-2012 “Comments on CVP Interim Renewal Contracts for three Delta Division and five San Luis Unit interim water service renewal contracts for: Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District (five contracts) 2012 to 2014 and Environmental Documents.” To Hon. David J. Hayes, Donald R. Glaser, Michael L. Connor, Hilary Tompkins and Michael Jackson from PCFFA et. al [13 Conservation, Fishery and Community Organizations.]

Exhibit B: Cross Valley Acreage considered in the Friant Biological Opinion. 01-F-0027 Table 4.1 of Friant Biop-Land Use By District.

Table 4.1 Acreage of Land Uses, by District, in Friant and Cross-Valley Divisions

District (Cross-Valley in Italics)	LOWER HABITAT VALUE/CONVERTED AREAS											VARIABLE VALUE-SUBSTANTIAL TO LOW							MODERATE TO HIGH HABITAT VALUE							District Total
	Residential	Commercial	Industrial	Urban/Mixed	Other Built	Landscaped	Crop/Pasture	Feedlot	F.O.W.s	Urb. vacant	Orchard/Vineyard	New ag	Mixed, Pfls/Transitional	Fallow	Rangeland	Deciduous Forest	Evergreen Forest	Forested Wetland	Nonforested Wetland	Sandy Areas	Water					
	11	12	13	15	17	18	21	23	14	19	22	25	26	27	28	29	31	32	33	34						
ALPAUGH I.D.	0	0	0	38	0	0	7,129	16	84	0	0	0	0	0	91	3,447	0	0	0	36	0	936	11,778			
Alpaugh + Abweil Island	0	0	0	0	0	0	7	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	34			
ARVIN-EDISON W.S.D.	540	289	1,349	2,617	874	296	60,254	249	770	0	0	0	0	0	2,052	6,190	0	0	0	0	0	1,234	132,496			
ATWELL ISLAND W.D.	0	0	0	0	0	0	4,489	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	204			
CHOWCHILLA W.D.	868	364	273	772	60	51	44,729	1,232	423	0	0	0	0	0	0	2,695	0	0	0	13	0	36	7,214			
CITY OF LINDSAY W.S.A. (both Divisions)	0	222	96	458	0	0	0	0	0	0	0	0	0	0	4,289	4,844	68	0	0	82	0	230	85,570			
City of Lindsay + Lindmore	0	3	0	203	22	0	0	0	0	0	0	0	0	0	28	0	0	0	0	0	0	0	204			
City of Lindsay + Lindmore + Lindsay-Strathmore	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	410			
City of Lindsay + Lindmore + Lindsay-Strathmore	0	24	37	128	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2			
CITY OF ORANGE COVE	0	143	21	546	46	0	30	0	0	0	0	0	0	0	19	0	0	0	0	0	0	0	307			
City of Orange Cove + Orange Cove I.D.	0	0	0	9	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	9			
CITY OF VISALIA	0	2,509	0	8,750	653	539	2,781	2	202	0	0	0	0	0	0	3	0	0	0	0	0	0	43			
City of Visalia + Tulare	0	16	0	37	4	0	0	0	0	0	0	0	0	0	59	694	0	0	0	45	0	0	17,235			
DELANO-EARLMART I.D.	0	54	196	999	45	0	15,248	96	422	0	0	0	0	0	38,463	0	0	0	0	0	0	0	59			
EXETER I.D.	0	128	23	1,200	37	0	463	23	32	0	0	0	0	0	12,736	0	0	0	0	0	0	0	625			
Exeter + Lewis Creek W.D.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0	0	0	0	0	15			
FRESNO CO WATERWORKS #18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30			
FRESNO CO WATERWORKS #34	0	0	0	223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	232			
FRESNO I.D.	7,354	9,887	2,310	41,878	6,083	889	47,178	1,317	1,088	36	0	0	0	0	0	982	296	0	0	0	0	0	1,501			
GARFIELD W.D.	174	0	0	0	0	0	253	0	0	0	0	0	0	0	1,141	10,873	93	0	0	72	0	1,108	247,009			
GRAVELLY FORD W.D.	2	0	1	11	0	0	1,358	0	0	0	0	0	0	0	0	242	0	0	0	0	0	0	1,610			
HIDDEN LAKES ESTATES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128	500	0	0	0	0	0	0	8,425			
HILLS VALLEY I.D.	0	0	0	0	0	0	204	39	0	0	0	0	0	0	0	154	0	0	0	0	0	0	154			
INTERNATIONAL W.D.	0.4	0	0	0	0	0	17	0	0	0	0	0	0	0	658	0	0	0	0	0	0	0	4,549			
IVANHOE I.D.	0	0	4	41	0	0	98	0	0	0	0	0	0	0	10,581	0	0	0	0	0	0	0	47			
KERN-TULARE W.D.	0	0	1	2	0	0	4,752	0	87	0	0	0	0	0	13,643	3,054	0	0	0	0	0	0	15			
LEWIS CREEK W.D.	0	0	0	55	0	0	339	0	0	0	0	0	0	0	810	0	0	0	0	0	0	0	43			
Lewis Creek + Lindmore	0	0	0	1	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	5			
Lewis Creek + Lindsay-Strathmore	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
LINDMORE I.D.	0	22	0	341	1	0	7,282	66	53	0	0	0	0	0	18,665	0	0	0	0	0	0	0	12			
Lindmore + Lindsay-Strathmore	0	0	0	9	0	0	0	0	0	0	0	0	0	0	125	0	0	0	0	0	0	0	31			
Lindmore + Lower Tule River	0	0	0	0	0	0	13	0.5	0	0	0	0	0	0	24	0	0	0	0	0	0	0	144			
LINDSAY-STRATHMORE I.D.	0	8	7	801	28	29	79,807	3,866	559	0	0	0	0	0	12,697	0	0	0	0	0	18	0	38			
LOWER TULE RIVER I.D. (both Divisions)	0	136	0	828	202	0	79,807	3,866	559	0	0	0	0	0	9,382	0	0	0	0	0	0	0	168			
Lower Tule River + Pixley	0	0	0	0	0	0	380	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15,094			
Lower Tule River + Porterville	0	1	0	3	0	0	30	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
MADERA I.D.	584	659	894	5,041	1,033	416	16,255	490	766	0	0	0	0	0	92,912	0	0	0	0	0	0	0	34			
ORANGE COVE I.D.	0	32	0	117	2	0	1,282	15	0	0	0	0	0	0	26,010	0	0	0	0	0	0	0	20			
PIXLEY I.D.	281	0	0	245	141	35	48,989	803	467	0	0	0	0	0	6,902	0	0	0	0	0	0	0	296			
Pixley + Saucelito	0	0	0	0	0	0	78	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	84			
PORTERVILLE I.D.	0	26	0	1,155	22	0	8,107	129	0	0	0	0	0	0	6,582	0	0	0	0	0	0	0	0			
RAG GULCH W.D.	0	0	0	28	0	0	875	0	7	0	0	0	0	0	4,911	0	0	0	0	0	0	0	13			
Rag Gulch + Delano-Earlmart	0	0	0	0	0	0	5	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	16,978			
Rag Gulch + Kern-Tulare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14			
SAUCELITO I.D. (both Divisions)	0	0	14	82	0	0	10,295	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	2			
SHAFTER-WASCO I.D.	213	338	473	1,785	495	232	18,538	29	270	0	0	0	0	0	8,111	0	0	0	0	0	0	0	45			
SMALLWOOD VINEYARDS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16,150	0	0	0	0	0	0	0	38,918			
SOUTHERN SAN JACUIN MUD	155	673	1,103	2,428	610	216	14,376	245	663	0	0	0	0	0	140	0	0	0	0	0	0	0	195			
Southern San Joaquin + Delano-Earlmart	0	0	0	0	0	0	6	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	2			
STONE CORRAL I.D. (both Divisions)	0	0	0	10	0	0	1,291	0	9	0	0	0	0	0	4,964	0	0	0	0	0	0	0	18			
STRATHMORE P.U.D.	0	67	0	110	0	0	7	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	16			
STRYK-TEK INC. + Delano-Earlmart	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	91			
TEA POT DOME W.D.	0	0	0	33	0	0	415	0	10	0	0	0	0	0	3,069	0	0	0	0	0	0	0	8,988			
TERRA BELLA I.D.	33	43	55	1,098	0	2	1,020	29	9	0	0	0	0	0	10,314	0	0	0	0	115	0	12				
TRI-VALLEY W.D.	0	0	0	0	0	0	105	46	0	0	0	0	0	0	1,071	0	0	0	0	0	0	0	13,879			
TULARE I.D.	0	723	16	3,643	128	203	59,078	2,045	168	0	0	0	0	0	5,958	0	0	0	0	145	0	744				
TOTAL	10,206	16,578	6,874	75,792	10,394	2,899	457,464	10,692	6,074	36	550,438	34	105	14,796	71,896	1,309	0	46	2,593	51	8,794	1,248,947				

* Full LULCODE names: 10-Urban or Built-up Land; 11-Residential; 12-Commercial and Services; 13-Industrial; 14-Transportation, Communications and Utilities; 15-Industrial and Commercial Complexes; 16-Mixed Urban or Built-up Land; 17-Other Built-up Land; 18-Urban landscaped areas; 19-Urban vacant, unimproved; 20-Water; 21-Cropland and Pasture; 22-Orchards, Groves, Vineyards, Nurseries and Ornamental Horticultural areas; 23-Confining Feedlot Operations; 25-Low Rangeland; 26-New lands being prepared for crop production; 30-Rangeland; 31-Herbaceous Rangeland; 32-Shrub and Brush Rangeland; 41-Deciduous Forest; 42-Evergreen Forest; 43-Nonforested Wetland; 44-Forsted Wetland; 45-Sandy Areas other than Beaches; 75-Strip Mine, Quarries, and Gravel Pits; 76-Barren/Transitional

Exhibit C:

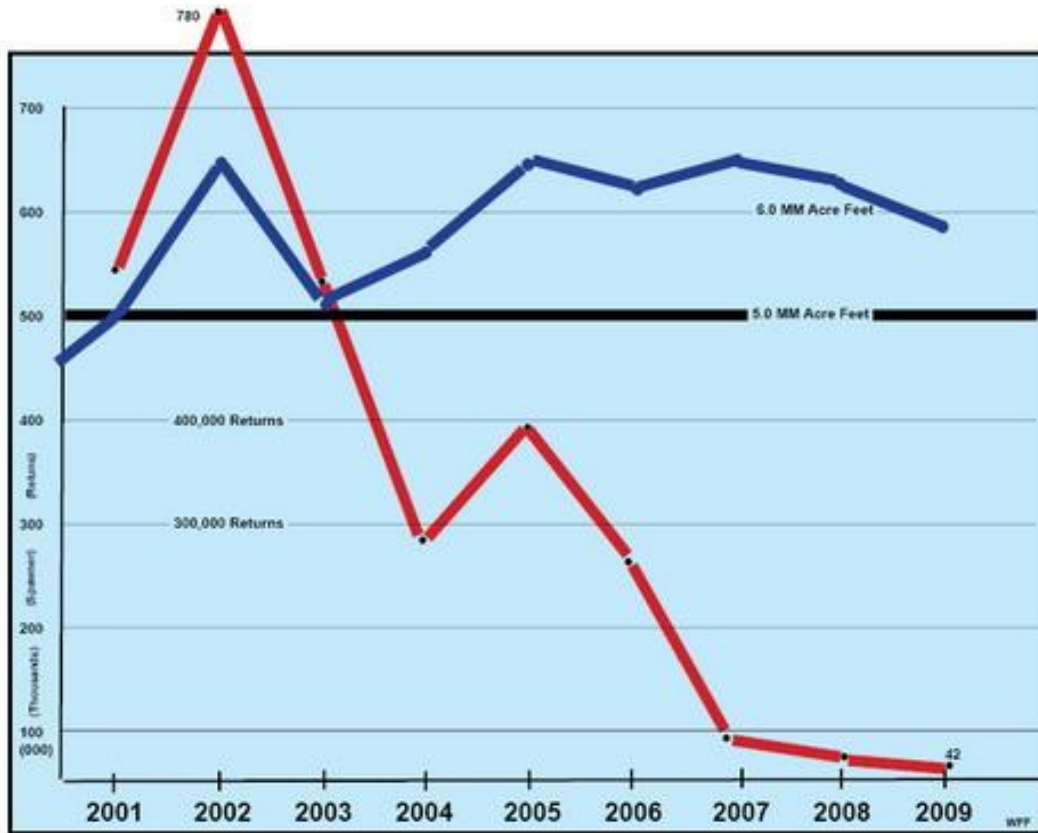


Figure 1. *Pumping increased and salmon crashed* <http://water4fish.org/>

<http://www.counterpunch.org/2012/05/07/carnage-in-the-pumps/>

Report Documents Record Delta Water Exports and Massive Fish Kills

Carnage in the Pumps

by DAN BACHER

A report written by Geir Aasen of the California Department of Fish and Game documents the massive numbers of fish salvaged at the federal Central Valley Project's Tracy Fish Collection Facility (TFCF) and the State Water Projects' Skinner Delta Fish Protective Facility (SDFPF) during the 2011 water year, as well as the record amounts of water exported to corporate agribusiness and southern California by the state and federal projects.

The report appeared in the [Interagency Ecological Program for the San Francisco Estuary Newsletter](#), Fall/Winter 2012 edition.

The State Water Project reported record high water exports, 4.90 billion cubic meters of water, the highest export rate recorded since 1981, the report stated. The federal Central Valley Project exported 3.13 billion cubic meters of water, an increase from exports in 2008-2011, but comparable to exports from 2002 to 2007.

Translated into acre feet, the annual export total via the state and federal Delta pumps was 6,520,000 acre-feet in 2011 – 217,000 acre-feet more than the previous record of 6,303,000 acre-feet set in 2005.

“Annual fish salvage (all species combined) at the TFCF (federal) was high (8,724,498), but well below the record high salvage of 37,659,835 in 2006,” according to the report. “Annual salvage at the SDFPF (state) was 3,0092,553, an increase from 2007 to 2010 which ranged from 646,290 to 2,484,282.”

When you combine the fish “salvaged” in the state and federal facilities, the total count is 11,817,051 fish of all species.

“Splittail were the most salvaged species at both facilities,” the report said. “Threadfin shad (591,111) and American shad (100,233) were the 2nd and 3rd most salvaged fish at TFCF. American shad (558,731) and striped bass (507,619) were the 2nd and 3rd most-salvaged fish at SDFPF. Relatively few Chinook salmon, steelhead, delta smelt and longfin smelt were salvaged at the SDFPF ($=0.7\%$ of total annual salvage combined) and the TFCF (<math><0.3\%</math> of total annual salvage.)”

The total splittail salvage was 7,660,024 in the federal facilities and 1,326,065 in the state facilities, a total of 8,986,089 fish, nearly 9 million splittail and a new salvage record for the species. The fish, formerly listed as “threatened” under the Endangered Species Act (ESA), is no longer listed.

Conservation organizations first petitioned for federal ESA protection for splittail in 1992 and the species was listed as threatened in 1999. After litigation by water agencies challenging the listing, the Bush administration improperly removed the splittail from the threatened list, despite strong consensus by agency scientists and fisheries experts that it should retain protected status.

The Center for Biological Diversity sued, and the Fish and Wildlife Service agreed to revisit the tainted Bush-era decision. The critically endangered splittail was again denied Endangered Species Protection by the Obama administration in October 2010, in spite of an analysis of splittail population trends by the Bay Institute showing that there

has been a significant decline in the abundance of splittail during the past several decades.

The total chinook salmon salvage in the state facilities was 18,830 and the federal facilities was 18,135, a total of 36,965 fish. While the report says that is “relatively few” salmon, fish advocates note that this is still a lot of wild spring run and fall run salmon.

The report says record low numbers of Delta smelt, 51, were salvaged at the federal facilities, while no Delta smelt were salvaged at the state facilities for the first time recorded for 1981 to 2011. Salvage was also low in 2010 (22).

The report breaks down the total amount of fish salvaged by species in a number of charts and graphs.

CWIN, Winnemem Wintu Tribe and GGSA respond to report

After reading the report, Carolee Krieger, president of the California Water Impact Network, commented, “It’s outrageous that the greed of a few growers, who are irrigating poisoned land south of the Delta on the west side of the San Joaquin Valley, is causing this unnecessary fish kill. At the same time, these growers have the most junior water rights in the state of California.”

Caleen Sisk, Chief and Spiritual Leader of the Winnemem Wintu Tribe, emphasized that the “salvaged” salmon mentioned in the report are only a fraction of the total number of salmon that die in the state and federal pumping facilities.

“It seems to me that when a DFG report claims that they only counted 36,965 salmon, which they claim represents ‘relatively few,’ there still remains the gross ‘uncounted and uncountable’ and ‘underestimated’ numbers of salmon that die in the pumps yearly that is not addressed,” Sisk said. “This should be a major concern in the report when the overall return of all wild salmon are on a steady, clear decline. Where is the report that evaluates the health of the estuary from these huge unnecessary fish kills?”

“There seems to be enough studies that verifies the Delta pumps are killing the fish by the millions and they are the reason our water to ocean system is dying,” she stated. “An estuary is like a beaver pond, it is a sacred pool that brings life! We call a beaver pond “k’Od Bisus” (giver of life). Man cannot make an “estuary,” – after such damage, all water systems will respond and change. This is a major concern of the Winnemem Wintu Tribe who sing and dance for the return of salmon to the McCloud River.”

“The salmon are the indicators of how healthy the water systems are from the high mountain waters to the oceans and back again. There should be better safeguard for

such an irreplaceable 'public trust' asset that provides water for all. This is not about 'money' or 'who gets the water' - it is about how an estuary and salmon surviving corporate greed," concluded Sisk.

"The pumps continue to kill our salmon at alarming rates," responded Victor Gonella, President of the Golden Gate Salmon Association (GGSA). "Thanks to the hard work of many, we do have the biological opinions in place to reduce pumping slightly in critical times of migration. We must all remain steadfast to insure the biops are adhered to and push for further pumping reductions in the future."

Bay Institute report documents carnage in the pumps

In March, the Bay Institute released a ground breaking report titled "Collateral Damage" revealing the enormous numbers of fish that are "salvaged" by the state and federal pumps on the South Delta every year.

The report revealed that the record number of any fish salvaged in one year, 13,541,203, was set by striped bass. The annual "salvage" numbers for striped bass from 1993 to 2011 averaged a horrendous 1,773,079 fish.

The report said the average salvage total for all species is 9,237,444 fish, including striped bass, splittail and threadfin shad, as well as ESA listed Sacramento River chinook salmon, Central Valley steelhead, Delta smelt, green sturgeon, and longfin smelt. Over 42 species have been recorded in the state and federal pumping facilities.

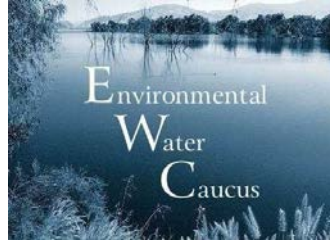
However, salvage numbers are only the "tip of the iceberg" of the total fish lost in the pumping facilities. "Salvage numbers drastically underestimate the actual impact," according to the Bay Institute. "Although the exact numbers are uncertain, it is clear that tens of millions of fish are killed each year, and only a small fraction of this is reflected in the salvage numbers that are reported."

A conservative estimate (Kimmerer, 2008) is that, for juvenile salmon that have been pulled towards the pumps, only 1 in 5 will survive long enough to be counted in salvage (the rest are lost to predators or other factors), resulting in an overall loss of up to 10% of the migrating fish (Castillo, 2010). Another study of "pre-screen loss" estimated that as many as 19 of every 20 fish perished before being counted (Castillo, 2010).

"The fact is, the salvage numbers look really bad but the real impact of export-related mortality is probably far worse," the report added.

You can download the Bay Institute's report, Collateral Damage, by going to: <http://bay.org/publications/collateral-damage>).

While this massive carnage takes place in the Delta pumps every year, the Brown administration is fast-tracking the construction of the peripheral canal or tunnel through the Bay Delta Conservation Plan (BDCP). The canal is likely to lead to the extinction of Central Valley steelhead, Sacramento River chinook salmon, Delta smelt, longfin smelt, green sturgeon, Sacramento splittail and other species.



NORTH
COAST
RIVERS
ALLIANCE



South Delta Water Agency

CA Save Our Streams Council



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180



Corrected Version

January 14, 2014

Rain Emerson
Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Subject: The Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water.¹

Dear Ms. Emerson:

On behalf of the undersigned groups and the hundreds of thousands of members they represent we respectfully request these comments be included in the record regarding the Reclamation's six interim contract renewals for delivery of water of 1,192,948 million acre feet from the Central Valley Project referenced above. The EA is inadequate and a full Environmental Impact Statement is required by law.

As explained below and as reflected in the attached materials, the proposed interim renewal contracts are a threat to California's environment and constitute misguided federal policy. Furthermore, the contracts and their supporting environmental documents have numerous legal deficiencies. Specifically, the proposed interim contracts and their supporting Environmental Assessments and other environmental documents violate the Administrative Procedure Act (APA), the Central Valley Project Improvement Act (CVPIA), the Reclamation Reform Act (RRA), the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), the Coordinated Operations Act of 1986, the California Environmental Quality Act (CEQA), and the California Endangered Species Act. Accordingly, we urge the Bureau to withdraw the proposed renewal contract and reinstate negotiations after adequate environmental review and consultation have been completed.

Below, we have summarized our primary concerns with the Environmental Assessment, Finding of No Significant Impact [FONSI], and the related contract renewals. These comments supplement our previous comments provided to the Bureau in 2010 and 2012, which we submit by reference. [See Exhibit A].

1. Violation of Federal Law: Reclamation's Claim that They Must Renew Interim Water Supply Contracts, and Thus Cannot Weigh Alternatives.

The most fundamental deficiency of the EA is the utter lack of alternatives considered, which once again, as it did in previous renewals, continues the failure to comply with NEPA. The EA contains only two alternatives, the Proposed Action and the No Action Alternative. The No Action Alternative, however, is the *same project* as the Proposed Action with only one small pricing difference.

The interim contract renewals violate Reclamation's duties to comply with NEPA.² Reclamation's commitment to renew the contracts before environmental review takes place renders that review a meaningless charade. Pre-deciding an action precludes meaningful analysis and weighing of project alternatives. [EA@pg 6] Moreover, compliance with other environmental laws such as the ESA, CESA, CEQA, MBTA and the Fish and Wildlife Coordination Act is likewise rendered meaningless because approval of the action is preordained. Some of the undersigned have already commented on the failure of the EA to sufficiently analyze the full range of alternatives. We reiterate those comments, which are attached, and incorporate them by reference. [See Exhibit A]

In its responses to previous comments, the Bureau continues to ignore its duty to prepare an EIS for the present contract renewals. First, the Bureau attempts to argue that it has no discretion to modify or refuse entry into the interim contracts, citing the Reclamation Project Acts of 1956 and 1963. Nothing in these acts, however, addresses serial renewal of interim contracts or otherwise negates the CVPIA's explicit grant of discretion to the Bureau to reduce the contract amounts or refuse to enter into the contracts altogether, as discussed above. Indeed, the CVPIA, as the most recent and specific statutory directive, is given much more weight than the Reclamation Project Acts cited by the Bureau. *Simpson v. United States*, 435 U.S. 6, 15 (1978) (later statutes receive precedence over earlier statutes); *Busic v. United States*, 446 U.S. 398 (1980) (specific statutes receive precedence over general statutes); *Kidd v. United States Dept. of Interior*, 756 F.2d 1410 (9th Cir.1985) (same). The use of the term "may" in Section 3404(c) of the CVPIA demonstrates that Congress intended to make entry into interim contracts a completely discretionary action. The Bureau ignores this statutory language. Moreover, the Bureau's preparation of the EA in the first place is an admission of its discretion to modify or refuse to enter into the contracts – because NEPA only applies to discretionary acts.

Reclamation also fails to address section 3404(c)(1) of the CVPIA, which provides that "interim renewal contracts *shall be modified to comply with existing law*, including provisions of this title." *Id.*, emphasis added. This provision directs the Bureau to determine the environmental protection required by all the existing laws that apply to these contracts and their impacts, including, *inter alia*, ESA, NEPA, CWA, and MBTA, and then to *modify* the contracts – including the quantities of water delivered thereunder -- to bring them into compliance with those laws. Thus, section 3404(c)(1) not only invests the Bureau with the very the discretion it claims it lacks, but also *requires* the Bureau to *exercise* that discretion to bring the contracts into compliance with existing laws.

Further Reclamation has a duty to enforce and administer the provisions of the CVPIA. There is no discretion. And yet, Reclamation fails to address the requirements of 3404(c) (2) of the CVPIA, which provides "*The Secretary shall also **administer** all existing, new, and renewed contracts in conformance with the requirements and goals of this title.*" [Emphasis added] In accordance with the provisions of the CVPIA, the Interior Secretary has a mandate not only to make the contract amendments to conform to the CVPIA, but additionally to administer and enforce the provisions. Reclamation proposes to execute these six interim contracts for 1,192,948 acre feet, listing new provisions of the CVPIA without documentation as to how the execution and administration of these contract renewals will comply with and enforce the provisions of the CVPIA. [EA @ pg 2] It is a matter of simple arithmetic. As of November 2013, according to WWD [See Exhibit F] there are 568,003 acres of irrigated land. Clearly under the proposed contracts more than the allotted 2 acre feet per acre or in some cases 1.3 acre feet per acre provided are being applied. Impacts of this increased water application are not provided.

Reclamation relies on the "short term nature" of these interim contracts. However, as discussed above, the auto-renewal clauses in the present contracts raise the specter of

many more years of interim contract renewals with no further progress on completion of the Final EIS for the long-term, renewal contracts. The CVPIA did not contemplate 20-30 years of unstudied water diversions and use by the contractors, particularly in the context of the accelerating decline in the ecosystem health of the San Francisco Bay-Sacramento – San Joaquin Delta estuary and impending extinction of imperiled species including the Delta Smelt, Spring-run Chinook, and Winter-run Chinook. Thus, the Bureau cannot claim that the impacts of these contracts are *de minimis*, or otherwise inconsequential, because of the so-called short term nature of these contracts.

Finally, Reclamation invokes the concept of tiering and attempts to rely on the CVPIA Programmatic Environmental Impact Statement (“PEIS”), prepared over 13 years ago. However, many important changes to the CVP, its operations, and the affected environment have occurred since the preparation of the CVPIA PEIS. Further, “tiering does not eliminate the EIS requirement when a proposed project significantly affects the environment.” *Western Watersheds Project v. Bureau of Land Management*, 774 F.Supp.2d 1089, 1095 (D.Nev. 2011), *citing* 40 C.F.R. §§ 1502.20, 1508.28. Here, as discussed in previous comments, Reclamation’s entry into the interim contracts causes direct harm to endangered fish species and degrades the water quality in many water bodies throughout much of the state. Thus, Reclamation’s attempt to rely on tiering to obsolete and superseded documents is unavailing.

2. Violation of Federal Law: Failure to Adhere to Conservation Measures and Consult USFWS Regarding Endangered Species.

The EA fails to comply with the Endangered Species Act and fails to enforce existing conservation measures required under biological opinions. No Biological Assessment, or the required consultation, is provided in the EA. No evidence is contained in the EA to indicate that the mapping, monitoring and data gathering required by the USFWS has been accomplished. There is no evidence of compliance with reasonable and prudent management requirements. [See Exhibit E]

In the 2012 water supply interim contract renewals, “the Biological Assessment [BA] made the determination that the proposed action will adversely affect all the federally-listed species considered in this BO.”³ Now in 2014, the EA fails to provide needed analysis and evidence of compliance with reasonable and prudent measures, which in and of itself warrants a full environmental review rather than the continued piecemeal, segmented interim contract project renewals with various baselines for some twenty years. Without analysis or data, the FONSI and EA contend there are no significant impacts. This is an unsupported conclusion.

Furthermore, the EA contends incorrectly [EA@pg4] that renewal of these contracts is not a “major action” and that the execution of the contracts is “in essence a continuation of the “status quo.” And, it contends that there are merely “financial and administrative changes to the contracts”This EA, therefore, is focused on the “effects resulting to proposed changes to the contract as compared to the No Action alternative.” The

undersigned and the USFWS do not agree that the proposed action does not need to be evaluated in its entirety, nor that impacts are limited. In 2012, USFWS stated clearly that, despite USBR's current contentions to the contrary, the CVPIA BO is insufficient evaluation for the site specific impacts of interim contract renewals, "*Because the CVPIA BO is a programmatic document, subsequent site-specific evaluations are being prepared to analyze the effects of implementing specific actions of the CVPIA on listed species, and the Interim water service contract renewals are an action requiring site-specific evaluation.*"⁴

In addition, the baseline in the various documents is different, which renders the analysis of impacts incomplete. Actions taken under this EA that are not consistent with the project description in the various ESA consultations could render the analysis of impacts on the survival and recovery of proposed and listed species invalid for the proposed action. For example, the baseline used for the consultations is different than the baseline under the proposed project. The public is denied the opportunity to fully evaluate the impacts to endangered species because no consultation has occurred for this action and no updated biological assessments have been completed, nor have existing Biological Opinions been enforced. Specific to this project, required mapping of habitat has not been done. Further any lands fallowed more than 3 years requires consultation before water is delivered and soil disturbance commences. There is no documentation or information provided to indicate compliance.

3. Violation of Federal Law: Impacts to Water Sources of the Water Supply Contracts, including impacts to Areas of Origin & Sacramento, American and Trinity Rivers, and Groundwater Pollution Are Ignored.

A. Impacts to Areas of Origin are Not Analyzed.

Selection of a narrow study area precluded analysis and information needed to assess the impacts of the proposed action on other CVP contractors, surrounding agricultural lands, impacts to the sources of water such as the Delta, the Sacramento, Trinity and American rivers, and Indian Water Rights. [See Exhibit A] These interim contracts perpetuate these impacts without sufficient analysis and mitigation of the impacts to the areas being dewatered—the American, Trinity, and Sacramento rivers, and the Delta. Under the latest EA, water transfers from other watersheds, third party impacts, and impacts within contracting districts are once again not analyzed along with the impacts of diversions from the San Joaquin River. Nor are the impacts assessed of transfers of CVP water outside of existing CVP service areas.⁵ Limiting the study area and analysis to the lands receiving the water deliveries precludes meaningful analysis of the impacts to the watersheds where the water is being diverted and extracted. Reclamation's decision to enter into a contract to deliver water *by taking it from these watersheds and water sources* has significant impacts on fish and wildlife and third parties. These cumulative impacts will be compounded by this "forever renewing", "interim" contract for water diversion and delivery. Reclamation's deficient review and failure to disclose its "will renew" commitment to the public most impacted by the water diversions renders Reclamation's proposal to execute these flawed contracts to be illegal.

The defects in the quantity terms of the interim contract renewals are part of a larger problem in that the contracts fail to make adequate provision for environmental protection and mitigation required to restore fish and wildlife impacted by these water diversions and extractions. The diversions and extractions have left source areas with lethal temperatures, poor water quality, and insufficient water to serve area of origin and public trust needs. This defect is compounded by the adoption of contract language that states the federal government “will” renew the contracts for these exaggerated quantities of water, which are simply not deliverable without devastating impacts. The interim contracts fail to ensure that existing standards under the ESA, CVPIA, Clean Water Act, and State water law will be met and implemented as part of these new contract commitments. Specifically the export contracts have not considered the potential impacts to the Delta, the San Joaquin River, Sacramento River, American River and Trinity River. *Reclamation’s failure to provide for adequate environmental protection in the contracts or even to adequately consider and evaluate the environmental impacts of the proposed contracts, means that Reclamation cannot legally execute the proposed contracts.*

A mechanical rollover of all pre-existing and, in the case of Westlands Water District, ever expanding amounts does not meet the state and federal requirements of reasonable and beneficial use. The cursory “water needs” added to the final EA (without public review) suggests that the analysis is little more than a rubber stamp to justify a predetermined decision to commit the identical inflated quantity for virtually all these contracts indefinitely.

B. Irrigation of Toxic Soils and Resulting Pollution Impacts Are Ignored.

There is little or no information provided on the direct, indirect and cumulative impacts of the proposed actions, including subsurface drainage pollution and down-slope movement from the irrigation of upslope lands. Subsurface agricultural drainage can contain extremely elevated levels of selenium, salt, boron and other toxic constituents that can migrate and/or adversely affect surrounding domestic wells, downslope agricultural farmlands, and surface waters and associated wetlands receiving drainage inputs, ultimately including the San Joaquin River and Delta. [See Exhibits B-D] Selenium is a potent reproductive toxicant to vertebrate species and can readily bio-accumulate to toxic concentrations in the food chain. We are particularly concerned with adverse selenium impacts to salmonids. No monitoring data of existing evaporation ponds, the standing water in the San Luis Drainage Ditch, or of migrating polluted ground water is provided to support the FONSI and EA conclusions that the environment, fish, wildlife and water quality are not being harmed by the continued importation of water to irrigate these toxic soils—particularly in amounts that have in some cases more than doubled since the last interim contract renewals. While the EA contends, “ *Under the No Action and Proposed Action alternatives, renewal of interim contracts obligate the delivery of the same contractual amount of water to the same lands without the need for additional facility modifications or construction. Thus, the renewal of interim contracts under either alternative, together with reasonably foreseeable future actions, would not incrementally contribute to any additional*

physical impacts to biological resources within the contractors' service areas. The only impacts are those associated with the interrelated Delta pumping and routine O&M, and these actions have been previously addressed." EA @ pg 33. This statement is not supported by facts and utterly fails to address the *increased application of water within Westlands Water District and impacts to down-slope areas*. Specifically, the amounts of water to irrigate permanent crops have doubled to support the shift from cotton crops to almonds.⁶ This in turn causes further pollution impacts to down-slope farms and groundwater supplies.

C. Costs are Ignored of Irrigating Toxic Soils and Impacts to Down-slope Farmers, Groundwater and the San Joaquin River.

"This EA acknowledges ongoing trends associated with the continued application of irrigation water and production of drainage related to that water. It does not analyze the effects of Reclamation's providing agricultural drainage service to the San Luis Unit. The provision of drainage service is a separate federal action that has been considered in a separate environmental document, the *San Luis Drainage Feature Re-Evaluation Final Environmental Impact Statement [SLDFR FEIS]* (Reclamation2005h)." EA @ pg 8. The EA's Reliance on a decade old analysis, where the biological opinion assumes no discharge of selenium and other contaminants from the project into the San Joaquin River, is insufficient especially given new delays and information.

On October 8, 2013 Westlands filed several court documents, including a "Notice of Motion and Motion for Order Temporarily Suspending Federal Defendants' Drainage Activities within Westlands Water District" (Motion). Westlands' Motion was granted to suspend Reclamation's drainage activities within Westlands for six months. Westlands suggests that "Temporarily suspending drainage activities within Westlands would facilitate settlement negotiations between Federal Defendants and Westlands relating to the provision of drainage service within Westlands." EA @pg 9

The impacts of this suspension of drainage activities are potentially significant. As noted in the EA, in 2005, Reclamation Record of Decision (ROD) considered several different solutions. One solution, which could cost \$2.6 billion, called for retiring 140,894 salted up acres of Westlands acreage and another 14,467 acres in the federal water districts north of Westlands, an area known as the Grasslands. Economic losses of this proposal were estimated at \$10.2 million a year. A second option, bitterly opposed by Westlands, called for retiring all 253,894 selenium-tainted acres in Westlands and construction of drainage and treatment facilities for 66,533 acres of impaired land in the Grasslands area. [See Exhibits B-D] The economic gain would be \$3.6 million a year. Down-slope water districts and adjacent farmers have protested the unmanaged pollution caused by Westlands application of water to these toxic soils. Impacts to adjacent landowners from the buildup of toxic pollutants due to importing water, and now doubling the amounts applied to acreage within Westlands, has significant impacts that need to be evaluated. Recent 2013 proposed reductions in monitoring this toxic selenium pollution by Reclamation and Westside irrigators hides the impacts and pollution it does not mitigate the impacts.⁷

Water districts to the north have opposed the delays sought by Westlands and the move of drainage treatment farther away from the polluted groundwater that is contaminating their lands:

“As Paul Minasian, attorney for the federal districts to the north of Westlands argued in his written opposition, the Bureau of Reclamation had committed to eliminating drainage discharges “to the San Joaquin River as soon as practicable” and switching the starting point for the drainage facilities’ construction would further degrade his districts’ farmlands and allow drainage degradation of the lower river to continue.

Minasian also argued that “[w]hether the lands within the northern subunit of Westlands are currently irrigated or were irrigated in the past and have been retired, the subsurface aquifers are saturated and poor quality water and pressure are moving down-slope in the shallow aquifers and contributing to the drainage loads in the San Joaquin River.”

Minasian added “the Northerly area down-slope of portions of the northern subunit of Westlands receives this subsurface water from higher elevation lands within the northern subunit of Westlands. These combined drainage waters pass through the Grassland Bypass system into the San Joaquin River. Abandoning the drainage efforts in the northern subunit of Westlands will eviscerate the Bureau’s stated goal to eliminate discharges to the San Joaquin River as soon as practicable.”

Minasian pointed out the Bureau’s regional director had stated “the principle reason we chose to initiate construction in the northern subunit of Westlands is because our existing feasibility design provides a fully-functional drainage system within the cost ceiling limitations, which enables us to proceed with the final design and construction with minor modifications to the existing feasibility design. However, the existing feasibility design for a fully functional drain system in another subunit of Westlands covers a much larger service area, includes significantly more facilities and exceeds the existing cost ceiling limitations.”⁸

4. Renewal of Interim Contracts Fails to Address Inspector General’s Report of Ballooning Costs to Taxpayers and Power Users from Westlands’ Unpaid Bills, and the Predicted Failure to Comply with the Coordinated Operations Act of 1986.

Merely brushing aside “financial” impacts of the interim contract renewals without evaluation raises serious questions as to the adequacy of the contracts and the substantial financial impacts to power contractors and taxpayers. As noted in March 2013 by the Department of Interior’s Inspector General’s report;

“When actual water deliveries exceed projected deliveries, however, existing contract provisions stipulate that excess revenues collected by USBR must be refunded to the contractors. As a result, USBR has not demonstrated steady progress toward recovery of Federal investments in the CVP. With 18 years left to fulfill Congress’ repayment

mandate of 2030, USBR has an opportunity to address its current ratesetting policies that are dependent on annual water deliveries.....

In addition, USBR compounds the uncertainty of the water rate-setting process by using more than one method to estimate the coming year's water deliveries....The differences in these estimates are significant. For example, in developing the 2012 rate for irrigation water delivered to the Westlands Water District via the San Luis Canal, USBR used estimated water deliveries of 594,233 acre-feet to calculate the O&M component and 776,389 acre-feet to calculate the capital repayment component. Had USBR used the 5-year average to calculate Westlands' capital component, that rate would have been \$7.44 per acre-foot higher (30 percent) than the rate actually charged, which was \$24.25....

According to USBR, this negotiated contract language was included in all of the long-term CVP renewal contracts that USBR executed in 2005, as well as interim contracts that were negotiated with Westlands Water District USBR officials believe that, absent the contract language in Article 10, the CVP rate-setting methodology would be sufficient to recover CVP construction costs because overpayments in high water years would offset underpayments in low water years. These officials acknowledged that the refund language of Article 10 defeats the design of the CVP rate-setting methodology and adversely impacts repayment of CVP construction costs.”⁹

These are not abstract impacts. The EA and interim contracts ignore compliance payment deadlines mandated by the Coordinated Operations Act of 1986. The IG, states clearly, “*Current CVP water service contracts include a provision that prevents USBR from using excess annual revenues to repay the Federal investment.*” The IG goes on to indicate that water and power rate surcharges would have significant impacts and “*Allowing continued repayment uncertainty—or worse, missing the repayment deadline set by Congress—would mean that USBR has failed to effectively implement the Coordinated Operations Act of 1986 and fulfill its responsibility to obtain required, complete project repayment by 2030.*” [IG 2013 @pg 9].

The financial implications stemming from the perpetual renewal of the interim renewal contracts is not addressed in the EA. These are significant and warrant a full analysis so decision makers can understand the impacts from repeating these financial mistakes will result in a failure to comply with federal laws.

Thus, as they are currently written, the contracts will perpetuate the large financial burden the Central Valley Project has placed on taxpayers, and make it virtually impossible for the approximately 350 Westlands' beneficiaries¹⁰ of the project to repay the outstanding debt still owed the government before the 2030 deadline mandated by the Coordinated Operations Act of 1986.

Reclamation's decision to set water prices at the lowest possible level and to perpetuate federal taxpayer subsidies for the maximum possible time flies in the face of

federal reclamation law and applicable court decisions. Under Reclamation policy, repayment requirements must be met even in the face of inflated contract totals and drainage repayment contracts. By policy and law the Secretary must establish the rates to ensure prompt and adequate repayment, full cost recovery, and encouragement of additional conservation.

7. Contracts for Paper Water Create ‘Liar Loans’ Backed By Non-Existent Water Supplies.

The analysis of the impacts from the exaggerated contract quantities promised for delivery do not accurately reflect the delivery capability of the CVP, especially after regulatory actions under the Clean Water Act, the CVPIA, and Endangered Species Act are considered. This unrealistic “over commitment” of CVP supplies has adverse impacts that are not fully disclosed.¹¹

The EA @ pg 7 suggests, “*The Bay Delta Conservation Plan is a long-term conservation strategy that addresses species, habitat and water resources that drain to the Delta.*” Federal scientists from both USFWS and NMFS have raised red flags regarding the impacts of continued excessive CVP diversions from the Sacramento-San Joaquin Delta Estuary and San Francisco Bay. And yet Westlands to fund the peripheral tunnels conveyance facility to obtain take permits to export more water has pledged ‘these exaggerated quantities’ of CVP water supplies as collateral in municipal loan documents.¹² Recent WWD documents show the expected costs of these new conveyance facilities are likely to be \$51-\$67 billion.¹³ Federal law requires financial assurances and measures to ensure recovery of species before such take permits can be issued. Inflating water supplies and thus water sales as a basis to issue more debt using this paper water as collateral can have serious financial impacts. Impacts that need to be disclosed and evaluated.

Reclamation relies on the outdated and unrealistic quantity terms of the old 1940’s and 1950’s CVP contracts that exaggerate water supplies and fail to consider the environmental impacts of continuing to irrigate toxic soils that poison lands and waters downstream, while deforming migratory birds and other wildlife. Reducing these inflated quantities to reflect these factors is clearly required by the reasonable and beneficial use requirements of federal and state law. Therefore, Reclamation’s decision to roll over all previous maximum water quantity terms, regardless of Reclamation’s ability to provide such water quantities, and then by contract to obligate the federal government to such renewals, is a fundamental policy mistake and an illegal agency action.

The amounts still owed to federal taxpayers by Westlands and the San Luis Unit of the CVP after some 50 years are estimated to be more than \$500 million.¹⁴ Thus, with no federally authorized ‘BDCP’ or Delta Habitat Conservation and Conveyance Project (DHCCP), it is unclear why operation and maintenance fees are being credited back to Westlands under the DHCCP program. This diversion of federal funds to Westlands appears to circumvent Congressional appropriations and Reclamation appropriation policy.¹⁵

Conclusion

In short, the duty to study the effects of these interim contracts is critically important because of the auto-renewal nature of the 2014-2016 interim contracts, seems to set the stage whereby Reclamation decision makers may in the future to forego NEPA review altogether when faced with the next round of interim renewals. Indeed, it seems that Reclamation's continuing efforts to evade its duties under the CVPIA to analyze the impacts of the contracts have produced 15 years of meaningless paperwork and no solutions to the ever-mounting environmental destruction are directly attributable to the contracts and diversions of excessive amounts of water from these imperiled watersheds.

For all of these reasons we urge Reclamation to fully comply with the National Environmental Policy Act, the Endangered Species Act and existing Biological Opinions, and the Clean Water Act, and to rescind these interim contracts. This is what needs to be done to meet the requirements of federal and State law. A full Environmental Impact Statement is required to address the impacts of these renewals.

Thank you for your consideration.



Jonas Minton
Senior Policy Advisor
Planning and Conservation League
jminton@pcl.org



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@gmail.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



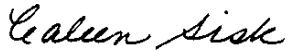
Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



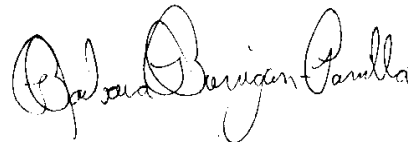
Caleen Sisk
Chief of the
Winnemem Wintu Tribe
caleenwintu@gmail.com



Barbara Vlamis
Executive Director
AquaAlliance
barbarav@aqualliance.net



Larry Collins
President
Crab Boat Owners Asso.
lcollins@sfcrapboat.com



Barbara Barrigan-Parrilla
President
Restore the Delta
Barbara@restorethedelta.org

John Herrick, Esq.
South Delta Water Agency
4255 Pacific Avenue, Suite 2
Stockton, CA 95207
Jherrlaw@aol.com

Frank Egger, President
North Coast Rivers Alliance
fegger@pacbell.net

John McManus
Executive Director
Golden Gate Salmon Asso.
john@goldengatesalmon.org

Stephen Green
Vice President
Save the American River Association
gsg444@sbcglobal.net



Lowell Ashbaugh
Vice President
NoCACouncil FederationFlyFishers
ashbaugh.lowell@gmail.com



Dr. Mark Rockwell
California Coordinator
Endangered Species Coalition
mrockwell@endangered.org

Adam Scow, California Campaign Coordinator, Food and Water Watch ascow@fww.org

Exhibit A: Documented Public Interest & Comments Incorporated by Reference

- 1. 1-29-10 “ Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts” To Rain Healer from Joseph Membrino for Hoopa Valley Tribe.**
- 2. 1-29-10 “Comments on Draft EA/FONSI on San Luis Interim Contract Renewal” To Rain Healer From PLC, Friends of the River & Sierra Club**
- 3. 1-29-10 “Comments on Draft EA/FONSI on San Luis Interim Contract Renewal” To Rain Healer From CWIN and CSPA**
- 4. 1-29-10 “Comments of The Bay Institute and NRDC on Draft Environmental Assessment (EA) and Draft Findings of No Significant Impact (FONSI) for the San Luis Unit interim renewal contracts (Central Valley Project, California)” To Rain Healer from Hamilton Candee**
- 5. 2-18-2010 “Comments Re Two Year Interim Renewal Central Valley Project Water Service Contracts: Westlands Water District [WWD] Contracts 14-06-200-8237A-IR13; 14-06-200-8238A-IR13; WWD DD1-Broadview 14-06-200-8092-IR12; WWD DD1 Centinella 7-07-20-W0055-IR12-B; WWD1 Widren 14-06-200-8018-IR12-B; WWD DD2 Mercy Springs 14-06-200-3365A-IR12-C. To Karen Hall, USBR, from 11 Conservation, Fishery and Community Organizations.**
- 6. 3-2-2010 “Final Scoping Comments for Westlands Water District [Westlands] Proposed “Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct”. The project proposes to discharge up to 100,000 acre feet of groundwater into the State Water Project California Aqueduct, a Drinking Water Supply for Approximately 20 Million People”. To Russ Freeman from 14 Conservation, Fishery and Community Organizations.**
- 7. 5-19-10 Letter to Donald Glaser, USBR From David Ortmann, Pacific Coast Management Council**
- 8. 7-3-10 Letter to Brad Hubbard Bureau of Reclamation, “Comments on Draft DEIS/EIR for proposed new transfer program that would provide for the transfer and/or exchange of up to 150,000 acre-feet of water from the San Joaquin River Exchange Contractors Water Authority [SJEC]1 to several potential users— Westlands Water District, SWP Contractors, Kern Water Bank and other users for over 25 years—2014-2038.” Adam Lazar Center for Biological Diversity et. al. and 11 Conservation, Fishery and Community Organizations.**
- 9. 7-16-10 Letter to Tom Glover, Westlands Deputy District Manager, Re RE: Opposition to Negative Declaration for the Westlands Water District and San Luis Water District Transfers and Related Exchanges Project. Eastside to Westside**

57,500 acre feet.[Updated] From Zeke Grader et.al. From 13 Conservation, Fishery and Community Organizations.

- 10. 7-30-2010 “San Joaquin River Central Valley Selenium Basin Plan Waiver, 303 (d) Delisting of San Joaquin River for Selenium and the California Toxics Rule” To Jared Blumenfeld, EPA from 16 Conservation, Fishery and Community Organizations.**
- 11. 9-22-2010 USFWS “Comment Letter – San Joaquin River Selenium Control Plan Basin Plan Amendment” To: Ms. Jeanine Townsend, Clerk to the Board from Susan K. Moore.**
- 12. 11-16-2010 “Letter to Senator Feinstein on Long Term Solution to Westlands Drainage Problem” To Commissioner Connor from Environmental Working Group.**
- 13. 12-13-2010 Comments on the Draft Finding of No Significant Impact [FONSI] San Luis Water District’s [SLD] and Panoche Water District’s [PWD] Water Service Interim Renewal Contracts 2011-2013 FONSI-10-070. To Rain Healer, USBR, From 8 Conservation, Fishery and Community Organizations.**
- 14. 2-28-2011 “Scoping Comments Proposed Ten Year North to South Water Transfer of CVP and Non CVP Water Using State Water Project (SWP) and Central Valley Water Project (CVP) Facilities” To Brad Hubbard, USBR et. al from 10 Conservation, Fishery and Community Organizations.**
- 15. 5-5-11 “Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities” To Deputy Interior Secretary Hayes from 16 Conservation, Fishery and Community Organizations.**
- 16. 8-11-2011 “Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project.” To Michael C. S. Eacock (Chris), Donald R. Glaser, USBR and Ren Lohofener USFWS et. al from 7 Conservation, Fishery and Community Organizations.**
- 17. 10-17-2011 “Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District’s San Joaquin River Improvement Project (SJRIP) FONSI-10-030” To Rain Healer, USBR from 8 Conservation, Fishery and Community Organizations.**
- 18. 11-15-2011 “Full Environmental Impact Statement Needed for San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District [FONSI-10-030]” To Donald Glaser from 13 Conservation, Fishery and Community Organizations.**

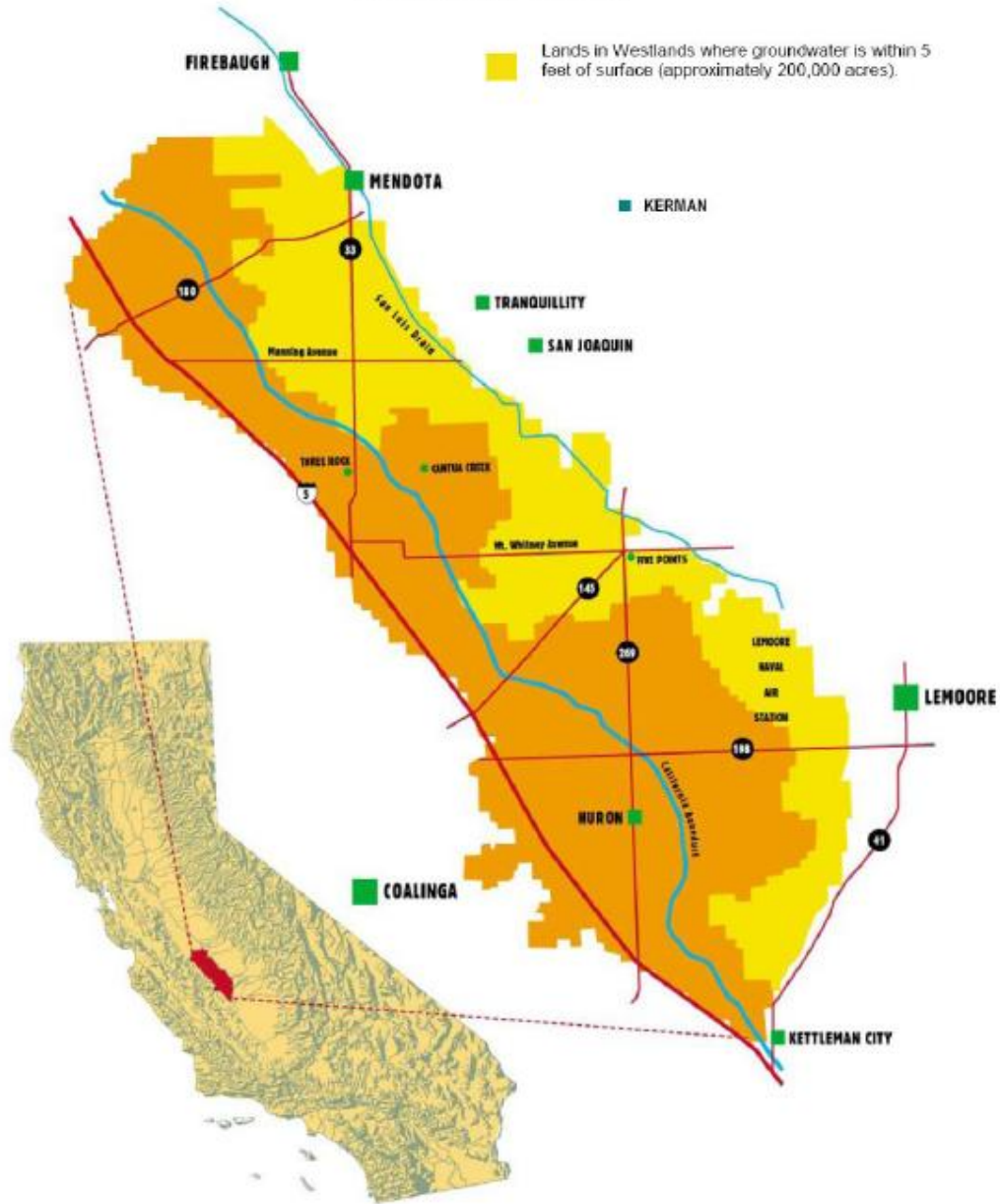
19. **11-16-2011 Notice Inviting Public Comment on BDCP MOA to Hon. Kenneth Salazar, Secretary John Laird, Secretary from 190 Conservation, Fishery and Community Organizations.**
20. **1-5-2012 “Comments on Draft EA/FONSI for Three Delta Division and Five San Luis Unit Water Service interim Renewal Contracts 2012-2014” To Rain Healer from Stephan Volker on behalf of 4 Tribal, Conservation, Fishery and Community Groups.**
21. **1-18-2012 “Comments on Draft EA/FONSI for Oro Loma Water District Partial Assignment of Central Valley Project Water to Westlands Water District FONSI-11-092” To Rain Healer, USBR from 12 Conservation, Fishery and Community Organizations.**
22. **1-20-2012 “Delta Division, San Luis Unite and Cross Valley CVP Interim renewal contracts—Comments of the Hoopa Valley Tribe on draft EA-11-049 and EA-11-011 and FONSI 11-049 and FONSI 11-011” To Rain Healer, USBR from Leonard E. Masten Jr. Chariman.**
23. **2-13-2012 “Comments on FONSI-070-103 Long-term Warren Act Contract and License for Delta Lands Reclamation District No. 770 EA-07-103.” To Rain Healer, USBR, From 11 Conservation, Fishery and Community Organizations.**
24. **3-26-2012 “Comments on CVP Interim Renewal Contracts for three Delta Division and five San Luis Unit interim water service renewal contracts for: Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District (five contracts) 2012 to 2014 and Environmental Documents.” To Hon. David J. Hayes, Donald R. Glaser, Michael L. Connor, Hilary Tompkins and Michael Jackson from PCFFA et. al [13 Conservation, Fishery and Community Organizations.]**
25. **11-26-13 “Grasslands Bypass Project -- Violations of the Endangered Species Act and Reduced Monitoring Threaten Endangered Species and Public Health” To Secretary of Interior Sally Jewell, Rod McInnis Regional Administrator, National Marine and Fisheries Service; Jared Blumenfeld Regional IX Administrator, EPA. [From CWIN et. al. and 15 Conservation, Fishery and Community Organizations.]**
26. **12-21-13 “Comments On the Draft Environmental Assessment (DEA 13-026) for the 10 year 100,000 Acre Feet of Proposed Water Transfer/Exchange Program from the Arvin-Edison Water Storage District (AEWSD) to Metropolitan Water District (MWD) & Draft Finding of No Significant Impact (FONSI 13-026)” To Chuck Siek, Bureau of Reclamation From PCL et. al. [13 Conservation, Fishery and Community Organizations.]**

Other Historical Documents adopted by reference:

- A. 12-7-2000: NRDC, Hamilton Candee, Comments to Mr. Al Candlish, USBR, Comments on the Draft EA on long-term renewal of Central Valley Project water service contracts prepared by the Bureau of Reclamation.**
- B. 1-9-2001: NRDC, Hamilton Candee, Comments on Proposed CVP long Term Renewal Contracts for Friant, Hidden Buchanan, Cross-Valley, Feather River and Delta-Mendota Canal Units. To David Hayes, Deputy Secretary of Interior et. al.**
- C. 8-4-2005 NRDC, Hamilton Candee to Richard Stevenson, USBR “Comments on Proposed CVP Long Term Water Service Renewal Contract for Westlands Water District.”**
- D. 9-14-2005: NRDC, Hamilton Candee to Richard Stevenson, USBR “Additional Comments on Draft Renewal Contract for Westlands Water District.”**
- E. 4-17-2006 NRDC, Hamilton Candee to Richard Stevenson, USBR: “Final NRDC-TBI Comments on Long-Term Water Service Renewal Contract for Westlands Water District.**
- F. 9-7-2007: California Water Information Network to Ms. Sheryl Carter, USBR “San Luis Unit Interim Renewal Contracts”**

EXHIBIT B

Figure 2.1
Westlands Water District



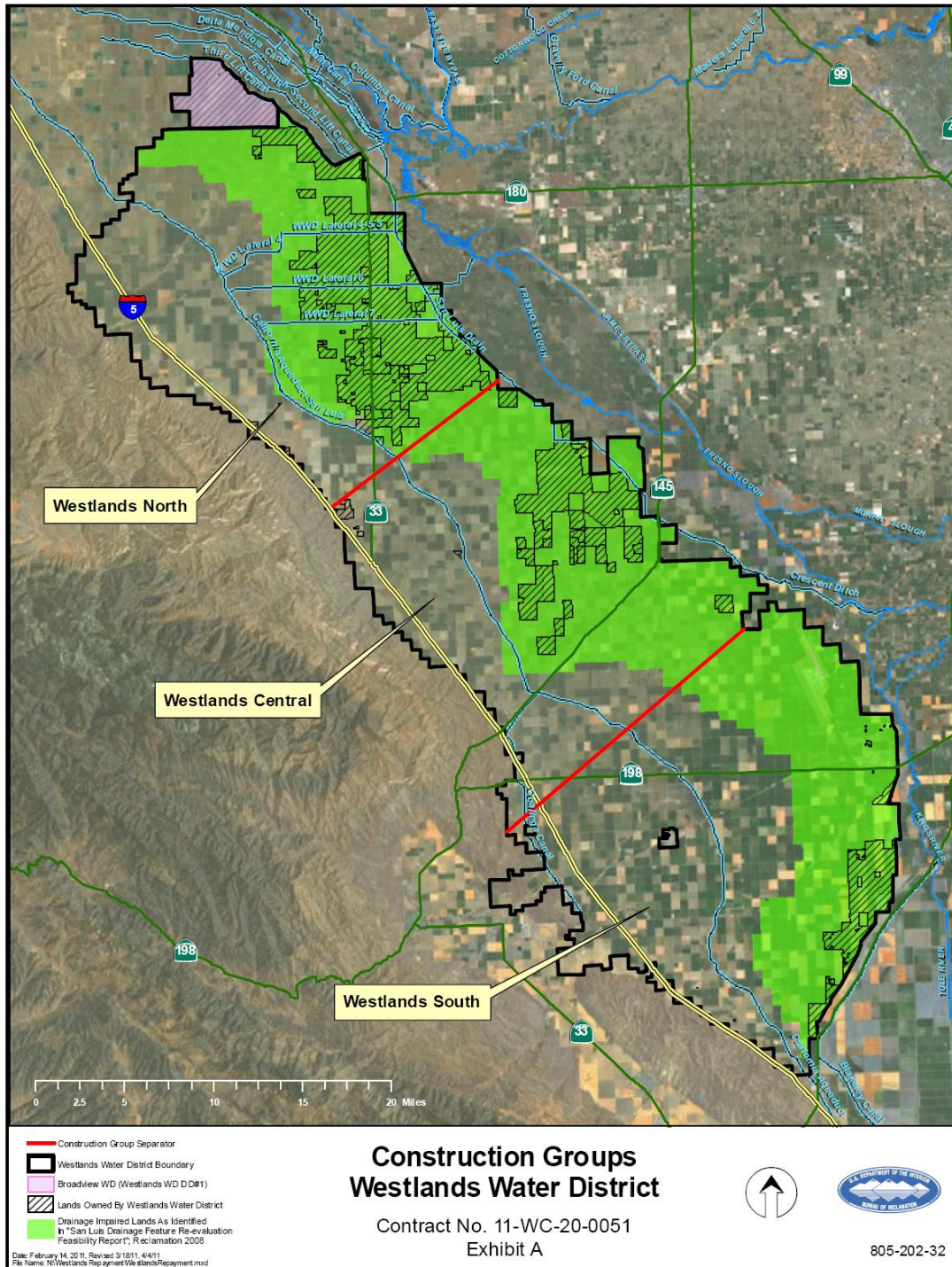
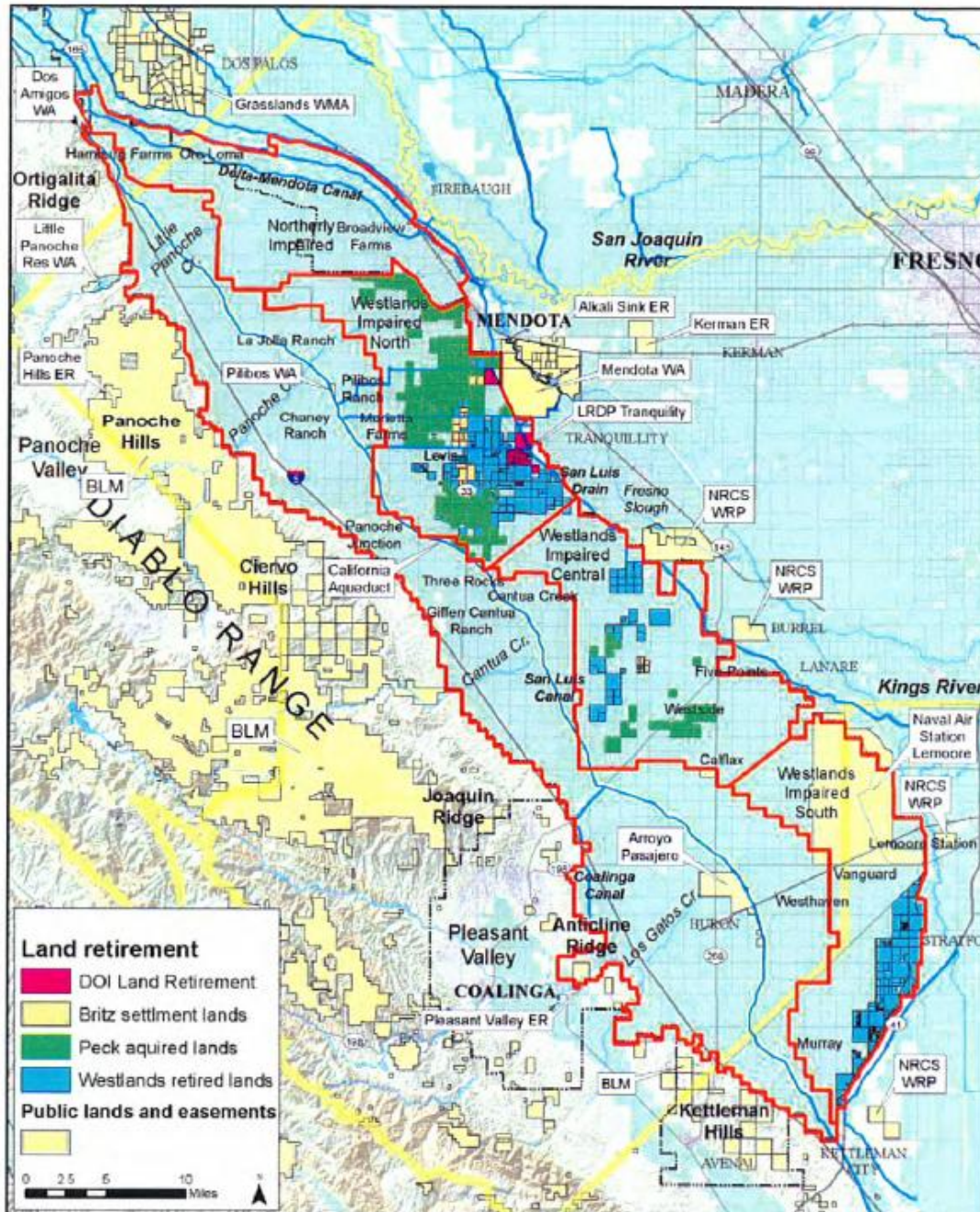


EXHIBIT C—WWD Toxic Lands & Retired Acreage—April 2011 Court Exhibit

Exhibit D



2006 Map of 77,130 acres of retired land in Westlands Water District (WWD), including 33, 864 acres from the Sumner Peck settlement, 3,100 acres from the Britz settlement, 38022 acres acquired by Westlands as part of the Sagoupe settlement, and 2,144 acres retired through the CVPIA land retirement program. Map of retired lands in Westlands Water District. The numbers do not include Broadview Water District Source: Westside Resource Conservation District Source: Phillip, S.E. 2006 Draft Environmental Baseline of the San Luis Unit. Source: Unpublished Report to USBR. California State University Stanislaus, Endangered Species Recovery Program Fresno CA.

Exhibit E: USFWS Conservation Measures for the San Luis Unit 2010 & 2012

See Appendix F San Luis Unit Interim Contract Biological Opinions February 2010 and continued Consultation for San Luis Unit Water Service Interim renewal Contracts 2012-2014

“The Service has reviewed and considered the conservation measures that Reclamation has proposed and implemented to minimize adverse effects of continued water delivery under the IRCs, including the assurance that Reclamation will monitor land use changes and ongoing activities to ensure project water is not used in a manner that adversely affects listed, proposed or candidate species (see Conservation Measures from Previous IRC Consultations). The Service considers the scope of this conservation measure to include the assurance that project water will not be used in whole or in part to facilitate the conversion of existing natural habitat to agricultural or other purposes.” Ibid USFWS 2012@pg2

“Conservation Measures from Previous IRC Consultations

As described in previous IRC consultations, Reclamation developed and implemented a short term conservation program for IRC Service Areas. The proposed action includes a commitment to develop and implement a long-term program to address the overall effects of the continued operation of the CVP on listed, proposed, and candidate species, and a short-term program to minimize the adverse effects on these species in any areas affected by CVP water deliveries, other than those effects addressed here.

The short-term program to minimize adverse effects of continued water delivery to the IRC water districts included the following measures:

1(b) Develop information on distribution and habitat of listed, proposed and candidate species (Ongoing);

1(c) Map and distribute information in 1(b) above (Ongoing);

1(d) Monitor land use changes and ongoing activities to ensure project water is not used in a manner that adversely affects listed, proposed or candidate species. Coordinate with the Service on any activities adversely affecting these sensitive species (Ongoing);

3(a) Identify lands critical to listed and proposed species (Ongoing);

3(b) Identify land and water use activities critically impacting listed and proposed species (Ongoing);

3(c) Develop and implement critical need plan (Ongoing);

4 Develop a long-term program to address overall effects of the CVP and Implementation of the CVPIA (Ongoing).

New Conservation Measure

Reclamation commits to seeking from the cities of Avenal, Coalinga, and Huron, and from Westlands WD, a letter from the City/District to Reclamation, confirming that CVP water will not be used to develop or convert habitat without confirmation from the Service that compliance with the ESA has occurred with respect to the subject land either through Section 7 or Section 10 of the Act. Reclamation will seek these letters by September 1, 2010, and will provide copies to Service upon receipt (Kinsey in litt., 2.22.2010).”

EXHIBIT F—WWD General Manager’s Report 11-19-2013--Irrigated Lands are 568,003 Acres & Approximately 131,048 Lands Retired Are Listed As Followed.

BOARD MEETING of November 19, 2013

11/12/13

ITEM: 2.a. GENERAL MANAGER’S REPORT

SUBJECT: Water Use and Supply - - 2013/14 Water Year

DISCUSSION: Available Supply and Total Estimated Use Through October 2013

AVAILABLE SUPPLY	CURRENT MONTH (AF)	2013-14 V-T-D (AF)	2013-14 TOTAL SUPPLY (AF)	2013-14 FORECAST (AF)	2012-13 Totals (AF)	2009-2013 Averages (AF)
WATER YEAR ALLOCATION		20%	20%	20%	40%	56%
INTERIM CONTRACT - AG [1]	0	30,182	228,773	228,773	458,516	644,000
RESCHEDULED CONTRACT 2012	0	139,290	139,290	139,290	99,954	136,665
REASSIGNMENT: DDM1 / DDM2 /MERCY SPRINGS/ ORO LOMA / BROADVIEW	0	0	8,151	8,151	16,284	
RESCHEDULE 2012 REASSIGNMENT	0	4,247	4,247	4,247	2,750	
CONTRACT - INCIDENTAL NON - AG M & I [2]	272	1,920	2,600	2,600	2,446	
ARTICLE 225 SURPLUS WATER	0	0	0	0	0	
TOTAL CONTRACT		184,639	381,961	383,061	549,950	780,665
TRANSFERS / EXCHANGES IN/(OUT)	20,759	221,543	236,369	249,500	231,977	
DISTRICT PUMPED GROUNDWATER CREDIT (DIP)	262	3,328	3,328	5,000	1,530	
WATER USER PUMPED GROUNDWATER CREDIT (GWMP)	13,128	175,855	175,855	220,000	163,049	
USER MP RECAPTURE (SUPPLEMENTAL)	0	1,731	1,731	7,500	2,813	
TOTAL SUPPLY	34,421	587,096	800,944	865,061	949,315	1,010,708
CONTRACT CUSHION						
OTHER CUSHION						
TOTAL AVAILABLE SUPPLY	34,421	587,096	800,944	865,061	949,315	1,004,973
WATER USE						
AGRICULTURAL	17,846	413,303	413,303	657,461	647,373	
WATER USER PUMPED GROUNDWATER CREDIT (GWMP)	13,128	175,855	175,855	220,000	163,049	
DISTRICT PUMPED GROUNDWATER CREDIT (DIP)	262	3,328	3,328	5,000	1,530	
NON-AG M&I	272	1,920	1,920	2,600	2,446	
TOTAL USE [3]	31,508	587,096	587,096		805,782	695,701
SYSTEM LOSS/(GAIN) (calculated estimate)				(7,679)		
TOTAL REMAINING SUPPLY			213,848			315,944

NOTES:

Total net cropped acreage in Westlands 2013/14 568,003
 Fallowed acreage 2013/14 131,848

[1] 20% CVP supply.

[2] Includes Widren and Centinella M&I replacement supplies.

[3] Total Supply column includes close-adjustment with system gain together for complete actual use.

ENDNOTES

¹ http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=15981

The Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) Number EA-13-023 and FONSI-13-023 *Central Valley Project Interim Renewal Contracts for Westlands Water District, Santa Clara Valley Water District, and Pajaro Valley Water Management Agency 2014 – 2016*

1. Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District Distribution District # 1(3-way assignment from Mercy Springs Water District) 14-06-200-3365A-IR13-B 6
2. Westlands Water District 14-06-200-495A-IR3
3. Westlands Water District Distribution District #1 (full assignment from Broadview Water District) 14-06-200-8092-IR13
4. Westlands Water District Distribution District #1 (full assignment from Centinella Water District) 14-06-200-W0055-IR13-B 2
5. Westlands Water District Distribution District #2 (partial assignment from Mercy Springs Water District) 14-06-200-3365A-IR13-C 4
6. Westlands Water District Distribution District #1 (full assignment from Widren Water District) 14-06-200-8018-IR13-B 2

² When entering new, renewed, supplemented, or amended contracts, appropriate environmental compliance will be performed. See Reclamation Manual Policy ENV P03 (NEPA) and ENV P04 (ESA); Departmental Manual 516 DM 14; and see Pub. L. 91-190; 42 U.S.C. § 4321, et seq. (NEPA); Pub. L. 93-205; 16 U.S.C. § 1531, et seq. (ESA). See Reclamation Manual Directive and Standard WTR 02-01. Pgs 3-4

³ USFWS, February 2, 2012, Correspondence to USBR Chief Resource Management Division from the Field Supervisor, Sacramento Fish and Wildlife Office RE: Consultation on One Delta and Five San Luis nit Water Service Interim Renewal Contracts 2012 - 2014 (EA-11-049) for a Two-Year Period from March 1,2012 through February 28, 2014. Pg 2.

⁴ Ibid. USFWS February 2012 and Exhibit E.

⁵ U.S. Bureau of Reclamation, Final Environmental Assessment, Westlands Water District, San Luis Water District and the Metropolitan Water District 2010-2011 Water Exchange and Transfer Program, November 2010. EA 10-71 http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=6717
http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=6716 Westlands Water District reported 80,692 acre feet transferred to MWD as of the beginning of January, 2011. Westlands Water District notice, Jan 20, 2011. <http://www.westlandswater.org/short%5C201102%5Cnotice325.pdf>

⁶http://www.waterboards.ca.gov/waterrights/water_issues/programs/applications/transfers_tu_notices/2008/17512_pet.pdf In the transfer of water from the Tulare Lake Basin to Westlands, Newton Farms and Hansen Ranches/Vista Verde Farms argues the need for the transfer is due the conversion of acreage from cotton to almonds and that almonds require a water application rate of “at least 4 acre feet per acre” thus increasing the demand for water. Pg 4.

⁷ <http://calsport.org/news/wp-content/uploads/2013/12/Coalition-Letter-on-GBP-ESA-Violations-Monitoring-Reductions-LTR.Corrected-.pdf>

⁸ http://www.lloydgcarter.com/content/110704496_westlands-drainage-delay-no-389

⁹ See Office of Inspector General Report March 2013 <http://www.doi.gov/oig/reports/upload/WR-EV-BOR-0003-2012Public.pdf> See also Office of Inspector General, U.S. Department of the Interior, No. W-IN-BOR-0016-2004, "Central Valley Project Contract Renewal Process," (August 2004).

¹⁰ Nicholas Brozovic et. al. "Trading Activity In An Informal Agricultural Water Market: An Example From California," Department Of Agricultural and Resource Economics University of California 2001.

¹¹ May 2011 Letter to Hayes from Sixteen Community, Environmental and Fishing Groups Subject: Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities. http://www.c-win.org/webfm_send/163

¹²http://www.lloydgcarter.com/files_lgc/LTR%20to%20Garamendi%20Seeking%20SEC%20Investigation%20Final.pdf

¹³ http://www.mercurynews.com/politics-government/ci_24795356/delta-tunnels-plans-true-price-tag-much-67 & [Bay Delta Westlands BDCP DWR Workshop 11-20-13 Powerpoint](#)

¹⁴"New government audit finds that the bulk of an interest-free loan from the 1960s is still unpaid by irrigation water contractors according to 2008 GAO Report <http://georgemiller.house.gov/press-release/ca-private-water-contractors-owe-taxpayers-500> & <http://www.doi.gov/oig/reports/upload/WR-EV-BOR-0003-2012Public.pdf>

¹⁵ San Luis Delta Mendota Water Authority Minutes, 9-26- 08 & Memo 1-8-09 See http://www.cwin.org/webfm_send/148 and http://c-win.org/webfm_send/149



NORTH
COAST
RIVERS
ALLIANCE



February 13, 2012

Ms. Rain Healer
South Central California Area Office
U.S. Bureau of Reclamation
1243 N. St.
Fresno, CA 93721

Re: Comments on FONSI-070-103 Long-term Warren Act Contract and License for Delta Lands
Reclamation District No. 770 EA-07-103

Dear Ms. Healer:

The undersigned groups respectfully submit the following comments on the Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the J.G. Boswell Kings River operation [Delta Lands Reclamation District No. 770] proposal to deliver up to 250,000 acre feet of water to Friant Kern Canal and Kern River along with up to another 50,000 acre feet via the San Luis Canal to Westlands [Westlands Water District FONSI-11-002]¹ and other identified non-CVP contractors. The EA and FONSI are deficient and an Environmental Impact Statement (EIS) must be prepared, as required by the National Environmental Policy Act (NEPA).

This is a water supply project masquerading as a flood control project. Under this 25 year contract up to 300,000 acre feet of additional water supply in some years all will be given to agriculture and municipal water users. Posing as an “emergency flood control” project it proposes to pump into the Friant Kern Canal and Kern River up to 250,000 acre feet of water and another 50,000 AF to Westlands via the San Luis Canal. Without data and analysis the public is told the project will have no environmental impact and that the pristine water of the Kern River and other navigable waters of the state and nation are protected due to a yet to be defined monitoring program.

Specific Comments

1. **Stated Purpose and Need** is based on “emergency flood control.” This project and the additional 50,000 acre feet to dedicated to Westlands² is claimed not be “a major Federal action that will significantly affect the quality of the human environment and an Environmental Impact Statement is not required.” This amount of water is not small. The development of up to 250,000 acre feet of additional water supply in some years for Friant farmers, Kern County bankers, and Southern California water importers, makes this a major water supply project. The 25 year impacts of this project along with the additional 50,000 acre feet to be supplied to the toxic soils of Westlands for five years needs to be analyzed and needed water for fish and wildlife purposes identified to offset these flow diversions and water quality impacts.

2. **Failure to Consider Other Project Alternatives:** The draft EA fails to consider any other alternatives except for the diversion of these flows to CVP and non-CVP contractors. Other alternatives including releasing water to meet downstream water quality objectives and specified deliveries to wildlife refuges are not considered. Such alternatives would assist in meeting the Bureau’s current refuge water obligations, water quality, fish doubling requirements and mitigation for damage to threatened and endangered species.

3. **Failure to Address Water Rights and Permits:** The draft EA describes the diversion and export of up to 250,000 acre feet to the Friant Kern Canal and Kern Rivers. This amount of water diverted for new uses and in places as far away as southern California along with the

¹ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8806

² Ibid.

50,000 acre feet of water diverted from these three rivers and to Westlands via the San Luis Canal are significant changes in these water rights. And yet the EA is virtually silent on these changes assuring the public that ‘uses of this water will be limited to lands that have previously been developed and/or cultivated ...’ Despite the lofty promises on use, there is little or no analysis to support these conclusions or to ensure water banked will not later be re-characterized and sold for different or new ‘development’ purposes. The FONSI and DEA merely declare: “Introduction of this Non-CVP water into the FKC will not alter water rights held by the United States to pump water from the San Joaquin River nor will it alter the water rights of water right holders on the Kings, St. John’s (Kaweah), or Tule rivers as water diverted will only be done during flood flows and under the permission of the respective Watermasters.”³

4. Failure to Address Water Quality Impacts and Compliance with the Clean Water Act:

Admittedly the previous operation of ‘temporary diversions’ have resulted in water quality impacts. Relying on approximately 100 pages of quality assurance boiler plate language and a water monitoring program where sites and frequencies are yet to be announced, the public is suppose to accept the project will have no water quality impacts. In fact the Bureau asserts: “The Proposed Action will not impact water quality in the Kings, St. John’s and Tule rivers as water quality is not affected by diversion of a portion of the river’s flow.”⁴ This cannot be scientifically justified. Diverting flows indeed does change water quality by altering its composition, flow and temperature. Without detailed analysis or monitoring data, the DEA admits that in 2006, “Previous RD770 introductions of Non-CVP water into the FKC resulted in water quality impacts due to slight increases in concentrations of turbidity, total dissolved solids, alkalinity, bicarbonate conductivity and coliform.”⁵ The project suggests relies on a yet to be determined water quality monitoring program to protect water quality. Further the project relies on maximum contaminant levels as the compliance action point instead of aquatic life standards or objectives. Except for a handful of out of date pesticides, there are no MCL’s for most of the pesticides in use and fish and wildlife impacts will occur long before most MCL’s are reached. According to the Draft EA RD770 is required to comply with the water quality monitoring program either described in or incorporated by reference within the Warren Act contract (see Appendix A for the water quality monitoring requirements and sampling locations) .”⁶ The problem is there are virtually no monitoring requirements listed in Appendix A⁷:

³ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8923 pg 4

⁴ Ibid. pg 4

⁵ Ibid. pg 4: Data is only provided for 2006 not the previous discharge years of the project. So the public is left in the dark regarding the water quality impacts.

⁶ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8923 pg 2

⁷ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8923 pg 136 of the pdf

**2011 Policy to Accept Non-Project Water
 Friant Division
 Water Quality Monitoring Program
 Quality Assurance Project Plan**

Table 1. Sampling Locations

Friant-Kern Canal	
Mile Post	Location
(1)	Below Friant Dam
TBD	Upstream sampling site
TBD	Non-project water discharge pipe
TBD	Downstream sampling site
~152.0	near Terminus

(1) San Joaquin River below Friant Dam (Lost Lake Park)

TBD - To be determined by the Contracting Officer

**2011 Policy to Accept Non-Project Water
 Friant Division
 Water Quality Monitoring Program
 Quality Assurance Project Plan**

Table 2. Water Quality Sampling Schedule

Friant-Kern Canal Mile Post	Location	Complete Laboratory Analyses (2)	Bacterial	Field Measurements
(1)	Below Friant Dam	Monthly	Monthly	Monthly
TBD	Upstream sampling site			TBD
TBD	Non-project water discharge pipe	Annual	Annual	
TBD	Downstream sampling site			TBD
~152.0	near terminus at Kern River	Quarterly	Quarterly	None

Notes:

(1) San Joaquin River below Friant Dam (Lost Lake Park)

(2) Title 22 - California Code of Regulations, Domestic Water Quality Standards

(3) Bacterial - Cryptosporidium, Fecal Coliform, Giardia, Total Coliform

TBD - To be determined by the Contracting Officer

Revised: 4/8/2011

Diversions and “pump in” of polluted water into the “pristine Kern River” and other waters of the state and nation need to comply with the Clean Water Act and obtain necessary NPDES permits. The Draft EA ignores this federal and state law requirement. Both federal and state law

require adherence to a non-degradation standard. This standard includes fish and wildlife beneficial uses. Relying on drinking water standards is not sufficient to ensure beneficial uses of these state and national water ways will not be degraded. Monitoring frequencies of once a year or even once a month may miss pollution spikes that can impact aquatic life, fish and wildlife. Aquatic life standards should be monitored and enforced to ensure beneficial uses are protected.

5. Failure to Address Endangered Species: Without analysis or review or data from the previous operations of these “temporary Warren Contracts since 1978”, the Bureau surmises there will be no impact on fish and wildlife, migratory birds or endangered species. In fact all of this analysis is left for the next decade: *“Reclamation will prepare a report evaluating the effects to listed species and designated critical habitat protected under the Endangered Species Act (16 U.S. Code §1531 et. seq.) which result from the Proposed Action. The report will utilize data from monthly and annual water delivery reporting requirements required as part of the Proposed Action, as well as any other information appropriate for this purpose, and will be provided to the U.S. Fish and Wildlife Service (Service) by the 1st of May at least every 10 years, and also at the end of the period of the Proposed Action, or the termination of the Warren Act contract covering the Proposed Action, whichever is earlier.”*⁸ Further the document suggests that reference to the Bureau’s existing “ESA compliance strategy” will somehow ensure that this 25 year project will not cause jeopardy to any endangered or threatened species. The existing Bureau biological opinions for the CVP contract renewals are fatally flawed and have been challenged in court. In the last FONSI and EA, Reclamation noted the presence of endangered species at several of the pump in locations.⁹ And yet no surveys, information or analysis of monitoring impacts are provided in the Draft EA to support the FONSI and biological impact conclusions. Additionally no information is provided regarding impacts to critical habitat from the diversion despite previous analysis indicating potential impacts.¹⁰

⁸ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8923 pg 3

⁹ The CNDDDB query revealed records for California tiger salamander in the vicinity of the Kings and St. John’s River pumping facilities; for VELB and Greene’s orcutt grass in the vicinity of the St. Johns River pumping facilities; records for the San Joaquin kit fox in the vicinity of the St. John’s and Tule River pumping facilities; records for the vernal pool fairy shrimp and the San Joaquin adobe sunburst in the vicinity of the Kings, St. John’s, and Tule River pumping facilities; records for the Tipton kangaroo rat in the vicinity of the St. John’s and Tule River pumping facilities; and records for the California jewel flower in the vicinity of the Tule River pumping facilities (Table 3-8 and 3-9 in EA-09-177). http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=7603

¹⁰ *“Critical habitat for the vernal pool fairy shrimp and the vernal pool tadpole shrimp within the Cross Creek Unit are connected to flows in the St. John’s River; however, the majority of the critical habitat is upstream of the confluence of Cottonwood Creek and the St. John’s River. Critical habitat upstream of this confluence would not be directly affected by changes in flood flows within the St. John’s River. Critical habitat for Hoover’s spurge and San Joaquin Orcutt grass occurs upstream of the confluence of Cottonwood Creek and the St. John’s River, and would not be directly impacted by Non-CVP floodwater introduced into the FKC. Any backwater flooding would be minimal and not be expected to meaningfully affect the extent or duration of inundation. Critical habitat for vernal pool fairy shrimp*

6. Failure to Address Integration of Army Corps of Engineers and Bureau Operations: The analysis fails to address and evaluate the implications of this arrangement upon Boswell's and the ACOE source water supplies previously controlled by the ACOE now utilizing Reclamation facilities under Reclamation Law, including the mandates of the Reclamation Reform Act and the Central Valley Project Improvement Act (CVPIA). Under the proposed water transfer pump in project and delivery contract, water conservation requirements are waived. Water and Conveyance rates are set at \$12.06.¹¹ Delta Lands Reclamation District No. 770, which is owned by the J G Boswell Co. They received taxpayer crop subsidies totaling \$10,914,605 from 1995 through 2010.¹² J.G. Boswell Co. receives water through the Pine Flat Dam, a federal storage project, but has circumvented the excess lands provisions of Reclamation law. The Delta Lands Reclamation District is 26,800 acres.¹³

7. Failure to Accurately Describe the Existing Environmental Setting and Properly Evaluate Impacts. The Draft EA describes the environmental setting under the only other alternative considered—the No Action Alternative as consisting primarily of farmlands in RD 770 and the Tulare Lake Basin and potential impacts to levees. However, the flood flows at issue regularly spill into the James Bypass/Fresno Slough and from there into the San Joaquin River at Mendota Pool, where they continue downstream, in some instances actually reaching the lower San Joaquin River and the Delta. These flood flows are typically of better water quality than water discharged into Mendota Pool by the Bureau by way of the Delta Mendota Canal. Further, these flood flows provide floodplain and riparian habitat value in Fresno Slough and continuing downstream to the Delta in some instances. The EA merely asserts that diverting 250,000 acre feet will have no impact. The existing environmental setting is not clearly defined and thus, considered in the Draft EA, FONSI or project. The Contracting Officer is required to review this contract for consistency with the project description within the EA and all applicable permits, laws and regulations. This project is not temporary. It will last for 25 years. The environmental baseline and impacts have not been reviewed as required by NEPA. This project envisions permanent assignment of this water to non CVP contractors and bankers along with the assignment for up to five years to Westlands Water District. The associated impacts of

within the Pixley Unit occurs in two subunits: one southeast of Corcoran within the floodplain of the Tule River and another subunit that includes portions of the Pixley National Wildlife Refuge. The northern subunit could experience a minor level of flood protection. Portions of the critical habitat for the California tiger salamander within the final Cross Creek Unit are connected to flows in the St. John's River. Critical habitat in the basin upstream of the confluence with the St. John's River would not be directly affected by changes in flood flows within the St. John's River."

http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=7603

¹¹ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=5598 pg 28 of 80 pdf

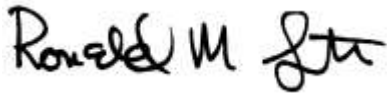
¹² <http://farm.ewg.org/persondetail.php?custnumber=009439118>

¹³ http://www.countyofkings.com/planning/genplan/community%20plans/CompleteDoc_KCMJMHMP.pdf

irrigating toxic soils have not been analyzed nor the long term cumulative effects of these combined projects analyzed, as required by NEPA.

8. Failure to Detail How Diversions are to be used: Despite the ‘temporary’ operation of portions of the project since 1978, the Draft EA is silent on past uses or proposed uses of the diverted water. For example will it be included in surface deliveries, banked to offset groundwater overdraft, and/or reduce diversions from the Delta? How much water has been used to offset surface water sales to southern California? What cumulative impacts will occur from the additional 50,000 acre foot diversion to Westlands and the resulting toxic pollution caused by irrigating selenium and other contaminated soils on the Westside? The Contracting Officer is required to review this contract for consistency with the project description within the EA and all applicable permits, laws and regulations. This project is not temporary. It will last for 25 years. The environmental baseline and impacts have not been reviewed as required by NEPA. The virtual permanent assignment of this water to non CVP contractors and the additional 50,000 acre feet diverted to Westlands for up to five years along with the associated impacts of irrigating toxic soils has not been analyzed nor the long term cumulative effects as required by NEPA.¹⁴ These projects have been treated under separate FONSIs and separate EAs and yet, the source water and supplies in the past have been considered under the same NEPA documents leading to the conclusion that the projects are being artificially split and piece mealed.¹⁵

Thank you for the opportunity to comment.



Ronald Stork
Senior Policy Advocate
Friends of the River



Adam Lazar
Staff Attorney
Center for Biological Diversity



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman’s



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League

¹⁴ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8806

¹⁵ <http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=547> March 2004 Draft Environmental Assessment Available For Emergency Flood Control Operations Contract For Delta Lands Reclamation District 770 Pump-In Project. “Up to 300,000 acre-feet of floodwaters may be collectively diverted from these rivers within a single water year. RD 770 has pumped varying amounts of floodwater on eight occasions under separate Warren Act Contracts. Future diversions would likely occur, on average, every three to four years based on historical frequency.”

Federation Association Inc.



Carolee Krieger
Board President and Executive Director
California Water Impact Network



Bruce Tokars
Salmon Water Now

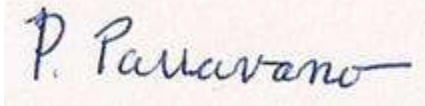


Jim Metropulos
Senior Advocate
Northern California Council
Federation of Fly Fishers

Frank Egger, President
North Coast Rivers Alliance



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance



Pietro Paravano
Chairman of the Board
Institute for Fishery Resources



Conner Everts
Executive Director
Desal Response Group
Southern California Watershed Alliance



January 18, 2012

Ms. Rain Healer
 South Central California Area Office
 U.S. Bureau of Reclamation
 1243 N. St.
 Fresno, CA 93721

Re: Comments on Draft EA/FONSI for Oro Loma Water District Partial Assignment of Central Valley Project Water to Westlands Water District FONSI-11-092

Dear Ms. Healer:

The undersigned groups respectfully submit the following comments on the Draft environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the Oro Loma Water District's Partial Assignment of Central Valley Project Water to Westland Water

District. The EA and FONSI are deficient and an Environmental Impact Statement (EIS) must be prepared, as required by the National Environmental Policy Act (NEPA).

The Bureau of Reclamation (USBR) based its EA and FONSI on the false premise that the previous temporary transfer of Oro Loma's CVP water supply (up to 100 percent) to Westlands Water District over the last ten years is the "environmental baseline of delivery of this water to Westlands as it has been occurring historically" and therefore, based on no monitoring or environmental data USBR incorrectly concluded without analysis to support such a finding the project "will not impact implementation of the SOD AWTP."¹ The South of the Delta Accelerated Water Transfer Program also relied on a FONSI and also stated the baseline would not change and the proposed transfers are **temporary** and therefore there are no biological impacts nor could the transfers be relied upon for a reliable source of water.² The Contracting Officer is required to review this transfer for consistency with the project description within the EA and all applicable permits, laws and regulations. This project is not temporary. The environmental baseline and impacts have not been reviewed as required by NEPA. The permanent assignment of this water contract to Westlands Water District and the associated impacts of irrigating toxic soils has not been analyzed nor the long term cumulative effects as required by NEPA. The full range of alternatives is not considered.

1. **Impact Analysis:** The EA claims there would be no impact because ... "Since 2005, between 87 and 100 percent of Oro Loma's CVP water supply has been transferred solely to Westlands....The assignment of 4,000 AF of Oro Loma's supply would not change the environmental baseline of delivery of this water to Westlands as it has been occurring historically. ...As Oro Loma cannot beneficially use their entire contract supply, the assignment would help to balance out deficiencies within Westlands and make the most beneficial use of available CVP supplies." (EA at page 12) No data or analysis is provided to support this conclusion. The analysis is little more than akin to starting a race at the finish line and simply stating there is no place to go. Other beneficial uses such as salmon populations have crashed since 2005 largely due to increased exports from the Delta.
2. **Compliance with other laws:** The EA states the proposed action would deliver water through existing facilities to existing irrigated agricultural lands which already receive delivered water and therefore the proposed action "would have no effect on birds protected by the Migratory Bird Treaty Act (MBTA).³ The status-quo premise of this non-analysis, as with the EA's excuse for its lack any impact analysis, strips away all substance leaving only a comparison of two actions that are *exactly the same*. This premise is flat wrong. The CVPIA does not mandate water transfers. To the contrary, it expressly confers discretion on USBR to provide this flexibility after environmental impacts and weighing of fish and wildlife impacts and water needed for those beneficial uses has taken place.

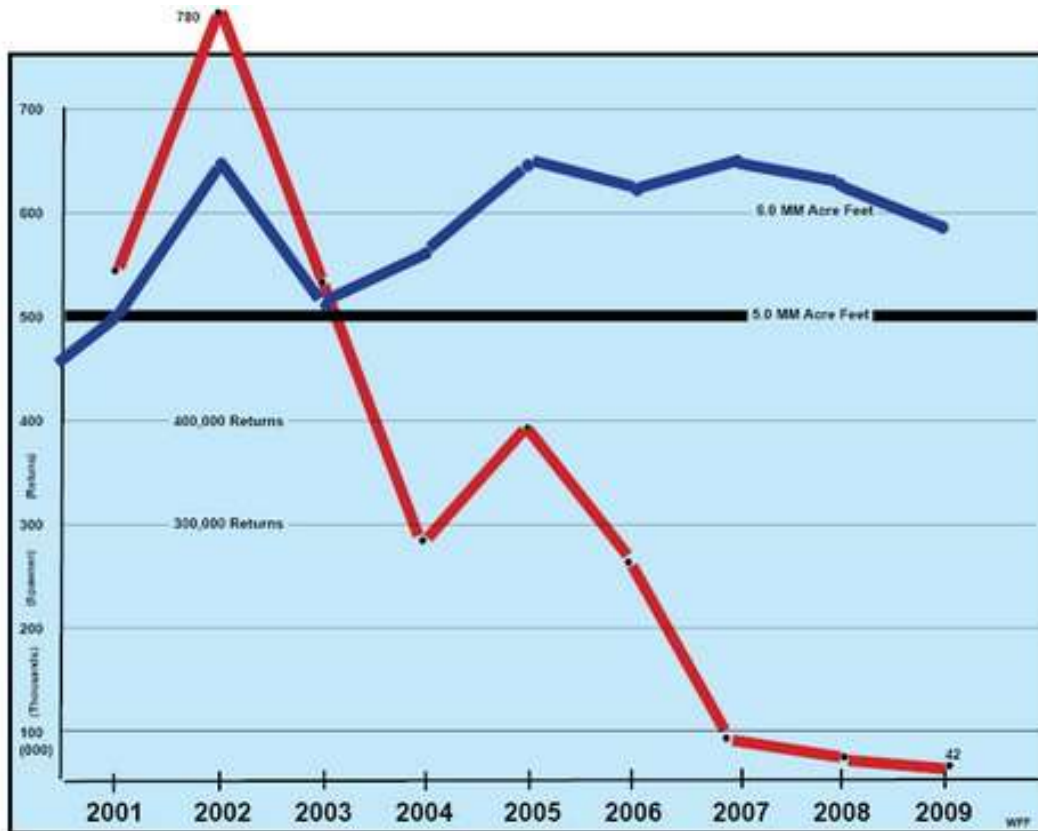


Figure 1. Pumping increased and salmon crashed⁴

Thus, regarding the MBTA example, USBR must compare the effects on migratory birds of continued water diversion and deliveries to Westlands' toxic soils as shown in Figure 2, and providing this transferred water to other beneficial uses or no diversions and delivery of that water. Westlands Water District has a massive pollution problem that violates federal and state anti-degradation policies. Putting water on these toxic soils, increases pollution and harms other beneficial uses. The same comparative analysis is required in place of the EA's non-analysis of the project's compliance with the Fish and Wildlife Coordination Act, the Endangered Species Act, the National Historic Preservation Act and the Clean Water Act. USBR's failure to undertake a substantive analysis of this project along with numerous other transfer projects identified in the EA and their compliance with all these other environmental laws perpetuates a pattern and practice that violates NEPA.

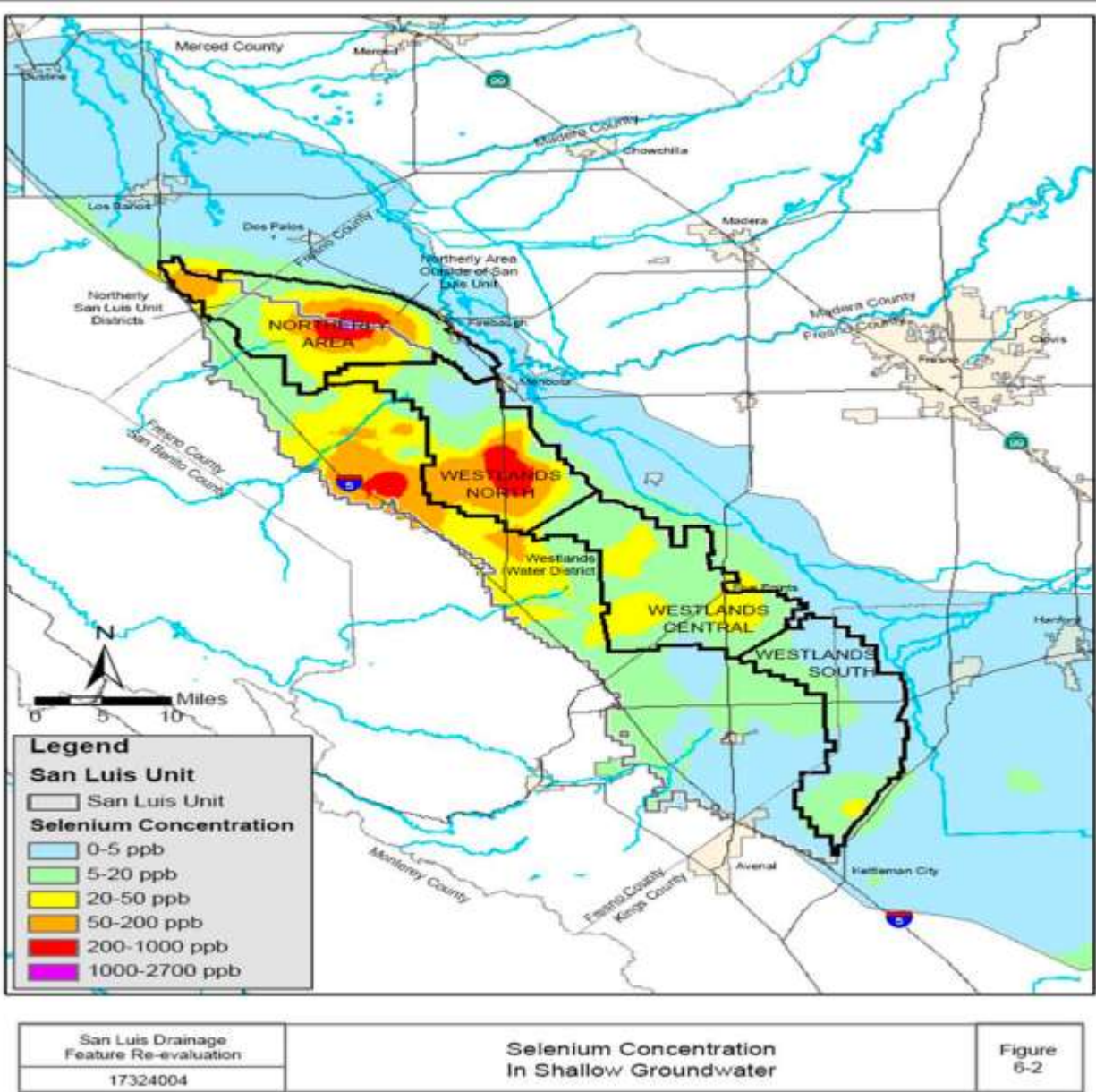


Figure 2—WWD Toxic Soils & Groundwater Pollution—5 ppb Safe EPA Aquatic Life Criteria

- The EA ignores most of the Project’s impacts by limiting the Study Area to the lands receiving the water deliveries and fails update the water needs assessment for Westlands Water District to reflect the reduced irrigated acreage within the district, and provide an up to date water needs assessment for this project and the district.**

The EA ignores the fact that each water delivery requires a water diversion, and that each water diversion has an environmental impact on its water sources. The EA accomplishes this biased analysis by limiting its consideration of the environmental impacts to the service areas of the two contractors, where WWD the district to receive the deliveries naturally insists that the

deliveries are beneficial. [FONSI pg 2 and EA pg. 12] In fact the EA suggests this transfer will result in reduced diversions, “The use of this water in Westlands would reduce the need for transfers of alternate sources of surface water.” [EA at pg 12]. There is little evidence that such a conclusion is warranted given the continued expansion of Westlands Water District and how many water districts Westlands has gobbled up since 2000. The EA ignores the *diversions*’ environmental impacts on the water *sources* including the American, Trinity, and Sacramento rivers and the Delta—by narrowly defining the “Study Area” to exclude the area most adversely affected, including the source watersheds. This error is prejudicial because the Final Environmental Assessment Accelerated Water Transfers and Exchanges, Central Valley Project, South of Delta Contractors Years 2011-2015 EA-10-51 and FONSI, from which this EA and FONSI are tiered did not analyze the site specific impacts of this project and likewise ignored impacts on the source watersheds. In fact the all of the listed exchanges and contract assignments to Westlands Water District of some 42,858 AF from surrounding districts gobbled up by Westlands highlighted in yellow in **Figure 2**, along with the proposed an additional 50,000 AF from the Kings River ⁵ were or are based on the same fundamental flaw and prejudicial bias. No water needs analysis for Westlands Water District is provided in the EA. As can be seen in Figures 3 and 4 since the end of 2004, Westlands Water District has acquired over 102,878 acres of agricultural lands within the district to be retired from irrigation. ⁶ Despite this land retirement and millions of tax payer dollars invested in irrigation efficiencies at Westland Water District, the district has increased water contract demands from the original 900,000 AF at 2.6 ac feet per acre to the present day 1.115 AF to serve 570,000 acres where over 100,000 acres of that district acreage has been retired. ⁷

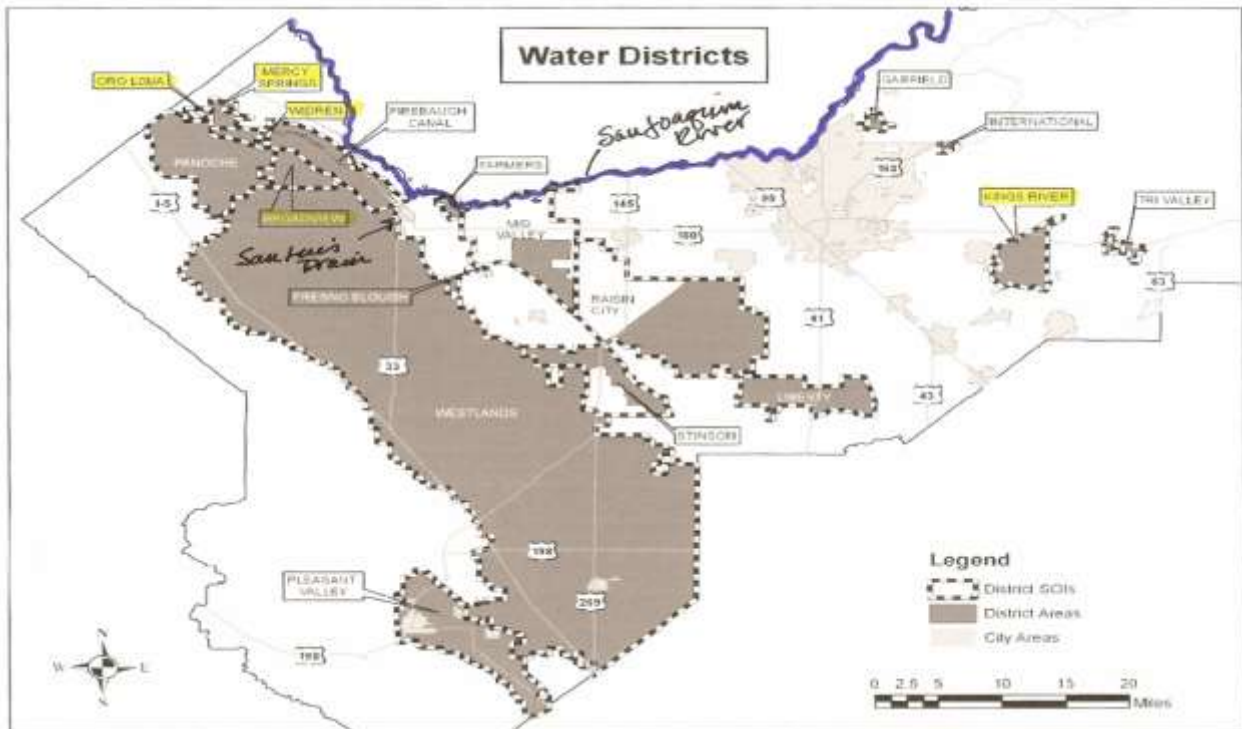


Figure 2 Water Districts’ & Water Taken Over by WWD Or Proposed Transfers Highlighted⁸

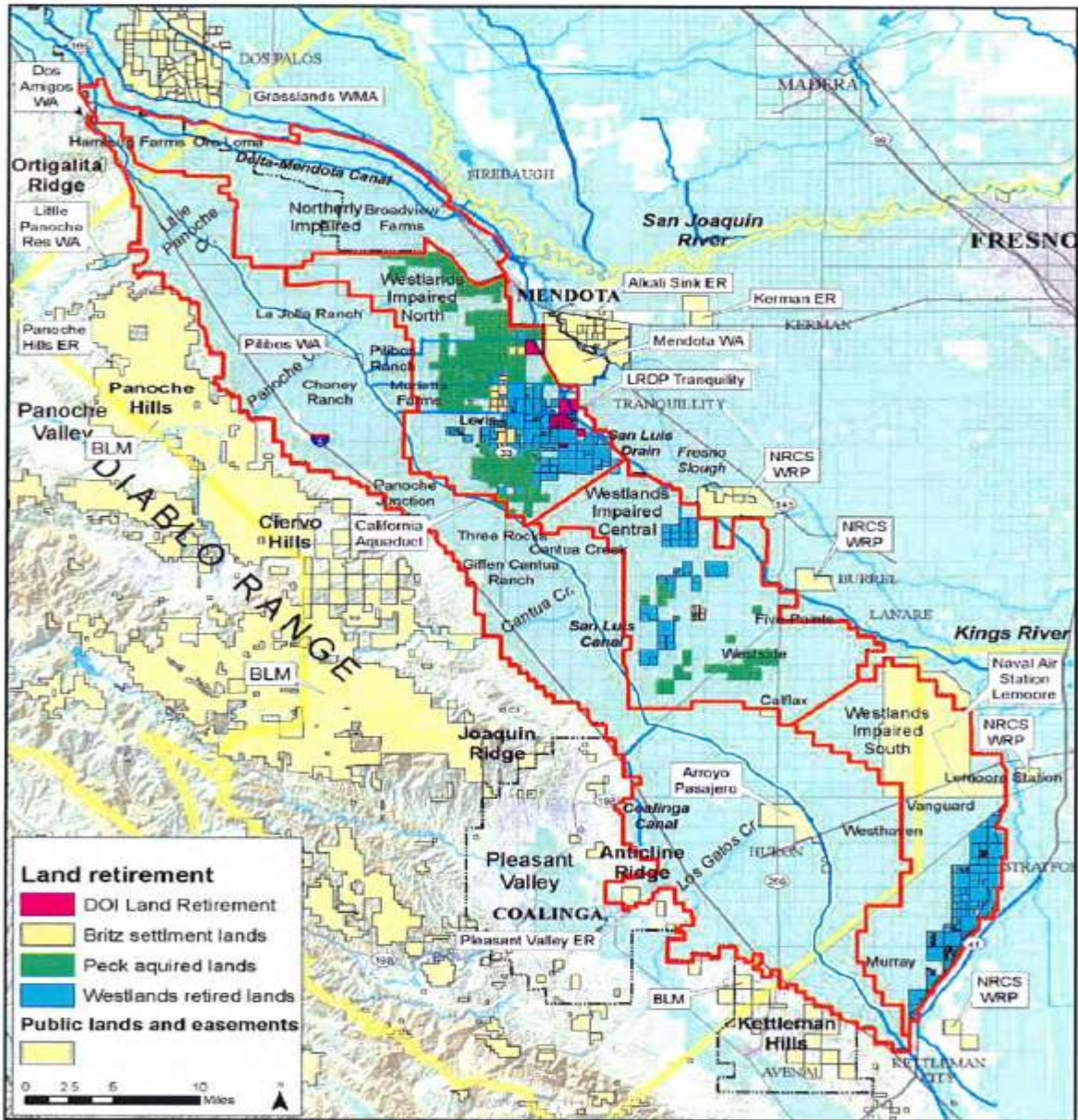


Figure 3—Estimated Lands Retired in WWD in 2006⁹

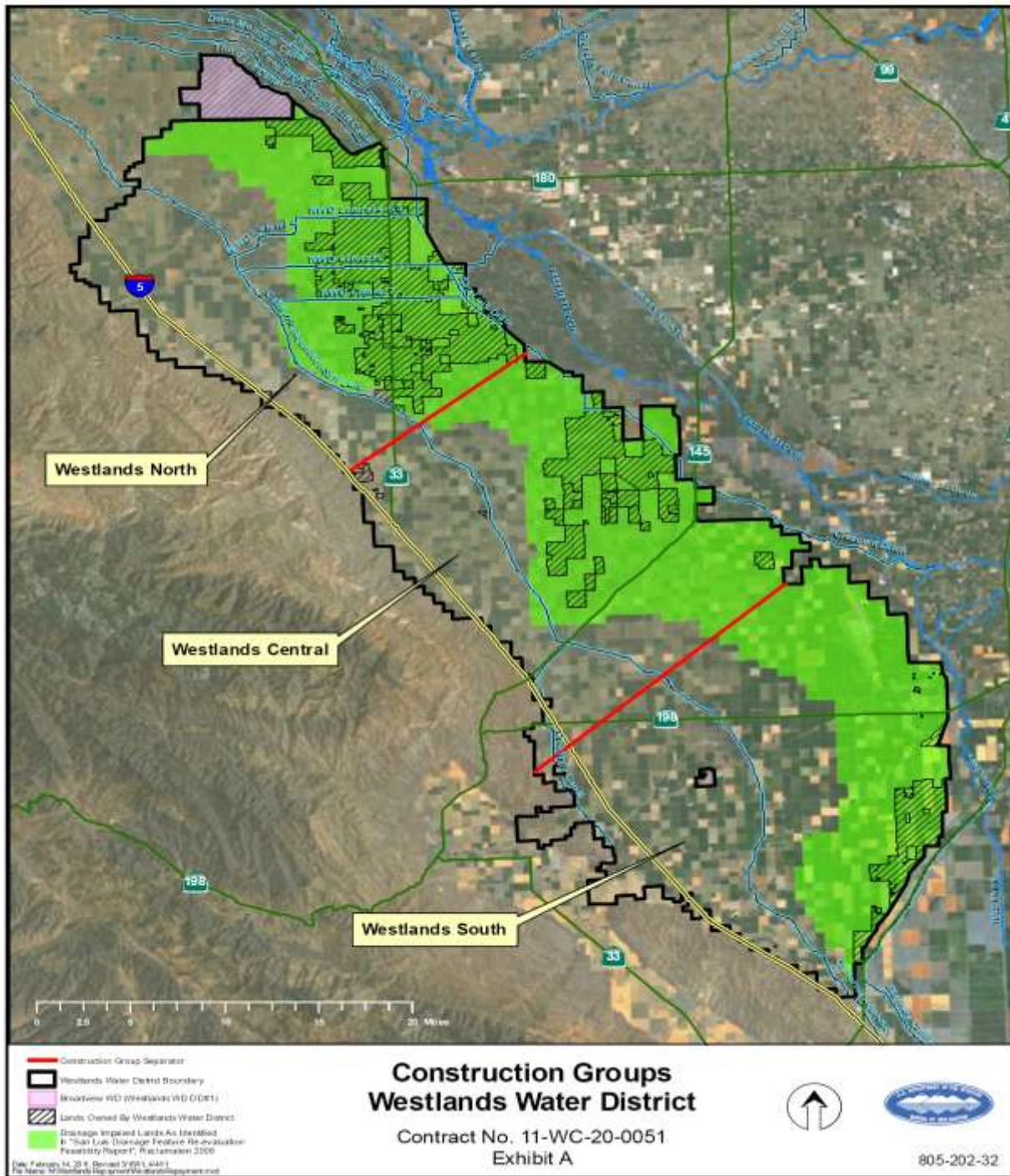
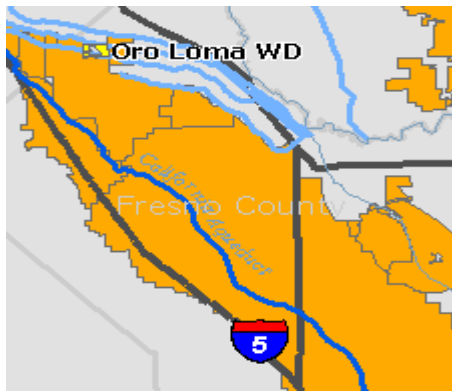


Figure 4 –WWD Retired Lands February 2011 Source WWD.

In February 2006 USBR stated, *“The Westlands contract will contain a provision that will allow Reclamation to conduct a new water needs assessment to determine if the entire amount of water under the new contract can be put to reasonable and beneficial use if a land retirement program is implemented as a means of addressing drainage in the San Luis Unit... If the water*

needs assessment determines that all of the water under the contract cannot be put to reasonable and beneficial use with Westlands on lands that are not retired, the amount of water under the contract can be reduced by Reclamation.”¹⁰ No water needs assessment has been provided to the public and USBR has yet to update the water needs assessment for Westlands Water District to reflect the reduced irrigated acreage within the District. Without such an assessment it is impossible to evaluate whether the water to be transferred will be beneficially used, especially in light of other competing demands, including unique CVP project features such as; wetlands, wild and scenic rivers, refuges, as well as, endangered species and the need to provide clean firm Level 4 water supplies to wetlands that could benefit listed species such as the giant garter snake.¹¹ Additionally alternatives to this and other transfers need to consider alternatives to meet obligations under Title 34 of Public Law 102-575, the Central Valley Project Improvement Act (CVPIA) of 1992, at Section 3406(b)(2), that directs the Secretary of the Interior to dedicate 800,000 acre-feet of Central Valley Project (CVP) water yield to the implementation of the fish and wildlife purposes and measures authorized by the CVPIA. Paramount among the purposes and measures is the rebuilding of Central Valley salmon stocks through a CVPIA Anadromous Fisheries Restoration Program by 2002 which have not been achieved.¹² Finally, the EA does not disclose how the project will comply with the CVPIA full cost provisions and water pricing reforms. As the Environmental Working Group presented in 2002, the Oro Loma Water District receives substantial subsidies from the taxpayers.¹³

Top Water Subsidy Recipients in Oro Loma Water District (2002)



Total CVP Water Purchased	3,123
Total Amount Paid to the Bureau of Reclamation	\$62,735
Total Subsidy1: US Bureau of Rec's "Full cost" Rate	\$40,449
Total Subsidy2: Environmental Water Account Rate	\$341,631
Total Subsidy3: Replacement Water Rate	\$469,487

Map Legend
— Dam Selected Water District
— Aqueduct — Canal Other Water Districts

Sort by: [Farm Name](#) | [Water Purchased](#) | ["Full Cost" Subsidy](#) | [Cost to EWA](#) | [Cost for Replacement](#)

Farm Name	Estimated amount of Oro Loma Water District water purchased in 2002 (acre-feet)	Oro Loma Water District Subsidy calculated at		
		Federal "full cost" rate	State Environmental Water Account rate	Replacement water rate
BLUE STAR FARM	1,879	\$24,000	\$210,000	\$280,000
MILES, RANDY & MAMIE	707	\$9,200	\$77,000	\$110,000
MILES RANCH, LYNN	537	\$7,000	\$59,000	\$81,000

We request the proposed FONSI and EA be rejected and full EIS be prepared to address the environmental impacts of this project and the full range of alternatives.

Thank you for the opportunity to comment and your consideration of our comments.



Jim Metropulos
Senior Advocate
Sierra Club California



Steven L. Evans
Wild Rivers Project Consultant
A Joint Project of Friends of the River and
California Wilderness Coalition



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's
Federation Association Inc.



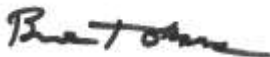
Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League



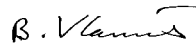
Carolee Krieger
Board President and Executive Director
California Water Impact Network



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance



Bruce Tokars
Salmon Water Now
Frank Egger
President
North Coast Rivers Alliance



Barbara Vlamis
Executive Director
AquAlliance



C. Mark Rockwell
Vice President
Northern California Council
Federation of Fly Fishers



Conner Everts
Southern California Watershed Alliance
Desal Response Group

ENDNOTES:

¹ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8803 pg 1

² http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8000 pgs 2-3. *"The Proposed Action will allow Reclamation to acknowledge the proposed transfers and exchanges without any additional environmental analysis for the period March 1, 2011 through February 29, 2016. The cumulative amount of water transferred or exchanged annually will be limited to 150,000 acre feet. Prior to acknowledgement, each proposed transfer or exchange will be reviewed by the Contracting Officer for consistency with the project description within the EA and all applicable permits, laws and regulations. Cumulatively this action will have a no affect on fish and wildlife in the Proposed Action area. ...Transfers and exchanges under the Proposed Action will not result in cumulative impacts to biological resources in addition to those occurring in the baseline. These issues were evaluated as part of previous environmental documentation...Surface water resources under the Proposed Action in the action area are identical to conditions under the No Action Alternative. ..The limited duration of this supply precludes its use as a reliable source of water. Conversion of native land into agriculture use requires a reliable water supply. Therefore, there will be no loss of native habitat for wildlife species and no affect to listed species or critical habitat"*

³ "Under the Proposed Action, the water will be conveyed in existing facilities to established agricultural lands similar to what has been done for the last five years during annual transfers between Westlands and Oro Loma." ..."Reclamation has determined that the partial assignment of 4,000 AF of Oro Loma's SOD CVP water supply to Westlands would not impact migratory birds. The Proposed Action would not change land use patterns, no ground disturbing activities would take place, and water from this assignment comes from an existing allocation which would not require additional diversions." Pg 3 and 29.

http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8803

⁴ <http://water4fish.org/>

⁵ USBR has issued another FONSI and Draft EA to transfer 50K to 100K water transfer out of the Kings River from Pine Flat to Westlands. Comments are due February 2010.

http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=8805.

⁶ Fresno and Kings County Parcel Records of Ownership 2009 for Westlands Water District within WWD.

⁷ History of WWD Acreage: http://www.usbr.gov/projects/Project.jsp?proj_Name=San+Luis+Unit+Project By the mid-1990s, all WWD acreage holders had agreed to abide by the provisions of the Reclamation Reform Act (RRA)

of 1982.....In 1988, there were 584 WWD water users spread over a total irrigable acreage of 528,718 acres, averaging 905 acres per user. By 1992 the district expanded to 570,552 acres.

<http://www.c-win.org/sites/default/files/GGU-ELJ.pdf> The original WWD consisted of 400,000 acres. Later 215,000 acres of the West Plains Storage District was merged with WWD. As a result the WWD water supply consists of 900,000 acre-feet per year of water under an interim contract with Reclamation and 250,000 acre-feet per year of provisional supply as a result of the Barcellos Court Settlement.

<http://www.usbr.gov/mp/sccao/docs/ea-mendotapool.pdf>

⁸<http://www.fresnolafco.org/documents/staffreports/Approved%20MSR's/Oro%20Loma%20Water%20MSR.pdf> Oro Loma Water District failed to comply with state law. Repeated attempts to contact Oro Loma by Fresno County for its required compliance with state Municipal Service Reviews, the district failed to provide the required information needed to conduct a comprehensive review of the services provided the district with regard to the condition and adequacy of these services and whether or not modifications are necessary.

⁹ <http://www.watereducation.org/userfiles/WestsideResourceConservationDistrict.pdf> Map of 77,130 acres of retired land in Westlands Water District, including 33,864 acres from the Sumner Peck settlement, 3,100 acres from the Britz settlement, 38,022 acres acquired by Westlands as part of the Sagouspe settlement, and 2,144 acres retired through the CVPIA land retirement program. This map does not include the retired 9,700 acres from Broadview Water District. From S.E. Phillips, Draft Environmental Baseline of the San Luis Unit, Fresno, Kings, and Merced Counties 2006

¹⁰ <http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=10282>

¹¹See also the Biological Opinion for the Long Term Operation of the Central Valley Project
http://cdm15025.contentdm.oclc.org/cdm4/item_viewer.php?CISOROOT=/p267501ccp2&CISOPTR=1418&CISOBX=1&REC=2

¹² <http://www.pcouncil.org/habitat-and-communities/habitat/habitat-document-library/>

¹³ http://archive.ewg.org/reports/Watersubsidies/subsidies_wd.php?wd=ORO+LOMA+W.D



December 13, 2010

Rain Healer
South Central California Area Office
U.S. Bureau of Reclamation
1243 N St
Fresno, CA 93721

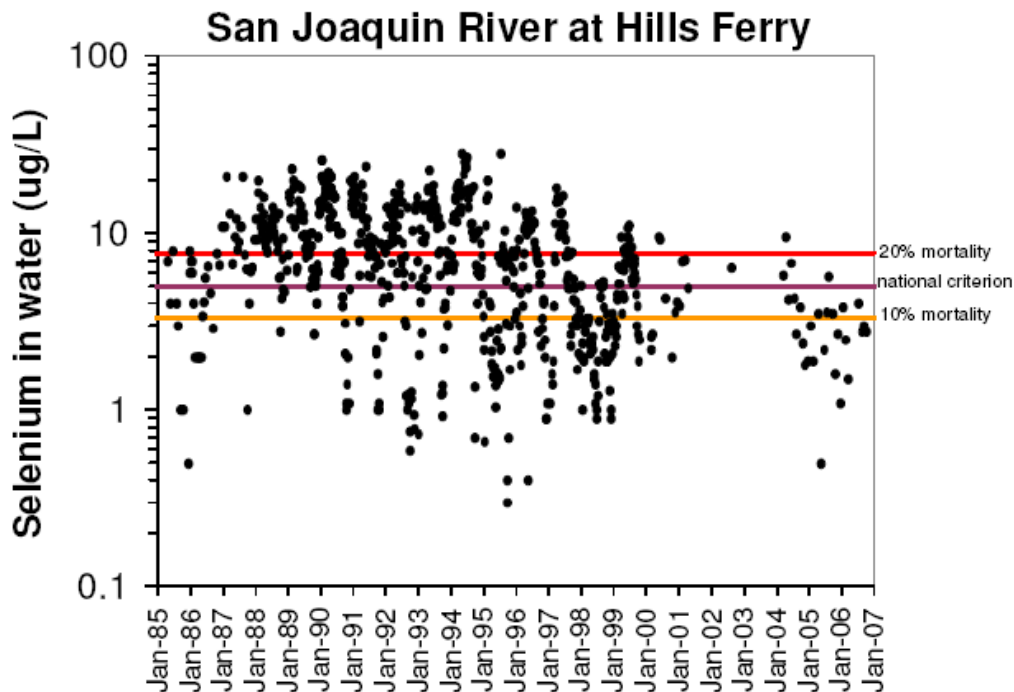
Subject: Comments on the Draft Finding of No Significant Impact [FONSI] San Luis Water District's [SLD] and Panoche Water District's [PWD] Water Service Interim Renewal Contracts 2011-2013 FONSI-10-070.

Dear Ms. Healer:

We oppose the adoption of the above referenced FONSI. The proposed contracts and Draft FONSI supported by the Draft Environmental Assessment Number EA-10-070, San Luis Water District's Panoche Water District's Water Service Interim Renewal Contracts 2011-2013 ignore the increased environmental impacts caused by two more years of diversions under these contracts. Comments by the above groups and others were basically ignored.¹

The draft documents are legally inadequate and must be withdrawn. These water contracts whereby provisions of the 1963 water contracts are simply renewed do not reflect the realities of water quality impacts, endangered species impacts, and water supply impacts. Nor do these contracts reflect the water quality permit obligations and mitigation to the areas of diversion that supply this diverted water from the Delta including the Trinity River, Sacramento River and American River. This water is diverted to irrigate toxic selenium soils resulting in return flow pollution to the Delta and Bay estuary. This polluted groundwater and discharge to the San Joaquin River and surrounding wetland areas impacts endangered species along with the environmental and economic well being of the estuary.² As you can see from the concentration data below, discharges from these districts and others into the San Joaquin River increase the mortality of federally listed endangered Chinook salmon, Central Valley Steelhead and North American green sturgeon and impact their critical habitat.

Figure 1. Selenium concentrations measured in the San Joaquin River at Hills Ferry (data from the Central Valley Regional Water Quality Control Board).



Continuing to divert water to these toxic lands and discharging pollution to the San Joaquin River will only increase the impacts to these endangered species and the garter snake, endangered San Joaquin Kit fox and threatened Delta smelt along with critical habitats. Further, the contract renewals also do not reflect the legal obligations of the Bureau of Reclamation to the areas of origin under their water rights permits.

The Bureau continues to ignore its legal obligations under the Central Valley Project Improvement Act and other state and federal laws to incorporate meaningful reforms in these new contracts and accurate analysis of their impacts in the environmental reviews. For the past decade environmental and federal agencies have raised these concerns that have been ignored. Despite repeated requests to accurately reflect the law the Bureau also continues in this document to suggest that it is an **obligation of the Secretary to** “renew water contracts.” This failure to accurately reflect the Secretary’s discretion has been repeatedly brought to the Bureau’s attention and yet this inaccurate recital is repeated again in this FONSI.

PWD and SLWD have uncontrolled groundwater pollution, polluted drainage and runoff that are not under required water discharge permits from the State Water Resources Control Board, violate Clean Water Act Standards and violate both the Federal and State Water Quality Antidegradation policies. Further we request a full Environmental Impact Statement be completed so the decision makers and the public can:

1. Make an informed decision regarding the impact of approving specific water contract quantities that exceed available supplies;
2. Assess the Bureau of Reclamation’s compliance with duties under Federal and State law including the goals and provisions of the 1982 Reclamation Reform Act [RRA] and the 1992 Central Valley Project Improvement Act [CVPIA]. Federal and State law require water delivered is beneficially used, encourages conservation, and will not cause further environmental harm, pollution, or degradation to the waters of the state and other beneficial uses of the land or Public Trust Values.
3. Assess compliance with regulatory actions under the Clean Water Act, the CVPIA, the Migratory Bird Treaty Act, Indian Trust Assets and the Endangered Species Act from renewing contract quantities that do not accurately reflect the delivery capability and water availability of the CVP.

Analysis of the environmental documentation is insufficient to support a finding of no significant impact for the renewal of the San Luis Water District’s [SLD] and Panoche Water District’s [PWD] Water Service Interim Renewal Contracts 2011-2013 and it does not meet the legal requirements of the National Environmental Policy Act [NEPA].

Further we find the exclusion from the analysis of the environmental impacts of changes to the contractor’s service areas, water transfers and exchanges, contract assignments, Warren Act Contracts and drainage to be arbitrary because it fails to provide any analysis or information so there can be an informed decision regarding the environmental impacts from these actions. Nor does this meet the standard of providing sufficient information for public review and comment. The reliance on individual environmental assessments or other programmatic decision making documents segments the information and fails to fully disclose the cumulative and the compounding nature of the environmental impacts

from these proposed actions and the exaggerated quantities of water in these contract renewals.

Finally this document is tiered to a variety of environmental documents including the CVPIA Programmatic EIS (PEIS). Some of the documents are not complete, some of the documents rely on different baselines than this project, and some documents rely on untested or unproven promises of environmental mitigation or benefit. Use of an environmental assessment instead of an environmental impact statement limits full public disclosure and full public comment provisions that are necessary given the complicated nature of the issues raised in contract renewals including impacts to other water users in the state, pollution, water transfers and use of public wheeling facilities.

The environmental analysis provided does not fully disclose the site-specific circumstances of the SLWD and PWD contracts and the specific impacts environmental impacts caused by diverting water to irrigate these agricultural lands. Further the baseline in the various documents is different rendering the analysis of impacts incomplete. Actions taken under this FONSI are not consistent with the project description in the various ESA consultations could render the analysis of impacts on the survival and recovery of proposed and listed species invalid for the proposed action. The baseline used for the consultations is different than the baseline under the proposed project. The public is denied the opportunity to fully evaluate the impacts to endangered species because the biological assessments were not included in the document.

The Draft FONSI supported by the Draft Environmental Assessment Number EA-10-070 does not meet the legal requirements of the National Environmental Policy Act (NEPA). Specifically the document is deficient for the following reasons:

- Insufficient information is provided to make an informed decision of no significant impact.
- Impacts from federal actions associated with the interim contract water delivery were arbitrarily excluded from the analysis, including but not limited to, the impacts from water transfers and exchanges, contract reassignments, water delivery from the California Aqueduct and changes to the contract service areas or places of use.
- The full range of alternatives was not analyzed in the supporting environmental documents including reduced contract deliveries.
- The analysis of the impacts from the implicit promise of unsustainable water contract quantities promised for delivery do not accurately reflect the delivery capability of the CVP, especially after regulatory actions under the Clean Water Act, the CVPIA and Endangered Species Act are considered. This “over commitment” of CVP supplies has adverse impacts that were not fully disclosed.
- Selection of a narrow study area precluded analysis and information needed to assess the impacts of the proposed action on other CVP contractors, surrounding agricultural lands and impacts to the sources of water such as the Delta, the Sacramento, Trinity and American rivers.

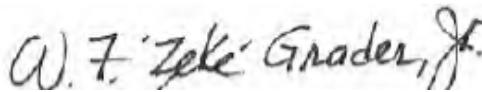
- There is little or no information on the direct, indirect and cumulative impacts of the proposed actions including among other impacts, mobilization of pollutants from applying imported water to toxic soils and movement from the irrigation of upslope toxic lands. Subsurface polluted ground water can contain extremely elevated levels of selenium, salt, boron, mercury and other toxic constituents that can migrate and/or adversely affect surrounding domestic wells, downslope agricultural farmlands, and surface waters and associated wetlands receiving drainage inputs, the San Joaquin River and Delta. Selenium is a potent reproductive toxicant to vertebrate species and can readily bioaccumulate to toxic concentrations in the food chain. We are particularly concerned with adverse selenium impacts to salmonids associated with discharges of polluted groundwater, sump water and drainage to the San Joaquin River.

Thank you for your consideration of our comments. We urge you to reject the proposed Finding of No Significant Impact and instead prepare an Environmental Impact Statement.

Respectfully submitted,



Jim Metropulos
Senior Advocate
Sierra Club California



Zeke Grader, Executive Director
Pacific Coast Federation of
Fishermen's Associations



Conner Everts
Executive Director
Southern California Watershed Alliance



Larry Collins
President
Crab Boat Owners Association Inc



Carolee Krieger
Board President and Executive Director
California Water Impact Network



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance



Byron Leydecker, Chair
Friends of Trinity River



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League



Bruce Tokars, Co-Founder
Salmon Water Now

Attachment: Detailed comments

cc: Interested parties

DETAILED COMMENTS

1. The draft FONSI and supporting environmental document fail to analyze the ongoing impacts and continued impacts of water deliveries on water quality, soils or other natural resources from water to applied to contaminated soils. Insufficient information is provided to support the conclusion there will be “no effect on surface water supplies or quality” or the conclusion that there will be “no significant effect on groundwater supplies or quality.”[Pg.2 FONSI-10-070]

The area affected by the delivery of water under these interim contracts includes waters of the United States (the San Joaquin River and many of the west tributaries, such as Mud and Salt Sloughs and the Grasslands wetland channels) that are listed as impaired pursuant to the Clean Water Act. The 2005 Bureau of Reclamation's DEIS and Supplemental Information for Renewal of Long Term Contracts for San Luis Unit acknowledges that deliveries under these contracts have adversely altered both groundwater flow and quality (pp.3.8-4 and 3.8-6) and that all of the alternatives evaluated in the DEIS, including the no-action alternative (i.e. renewal of the contracts with current terms and conditions) would result in the continuing degradation of water quality in the area.

The draft FONSI and environmental documents do not analyze the irrigation of upslope lands as sources of selenium mobilization into drainage, ground or surface water. Studies since the early 1990's have established that irrigation and associated drainage from the San Luis Unit contribute significantly to the movement of pollutants,

particularly selenium, which affect surface and ground water within the region³. Selenium in soils from the San Luis Unit are mobilized by irrigation and storm water runoff [see 1990 Drainage Management Plan for the West San Joaquin Valley, California, Figure 6, p.28] with the highest concentrations of salts and selenium located down slope [Figure 2.5 San Luis Drainage Feature Re-evaluation Preliminary Alternatives Report, Dec. 2001]

According to EPA water deliveries from these contracts where selenium concentrations exceed water quality standards affect important resources such as the Grassland Ecological Area.⁴ Concentrations in some canals have reached levels 20 times the standard protective of aquatic health.⁵ EPA goes on to note, "*There is potential for the water deliveries to exacerbate mobilization of pollutants and movement (through shallow groundwater) into areas where there could be fish and wildlife exposure.*"⁶ Clearly the draft FONSI should have provided information on the San Luis Water District and Panoche Water Districts' role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identified the impacts to these wetlands and wildlife.

There is no information or analysis to support the draft FONSI and environmental documents finding that the proposed action "would have no effect on birds protected by the Migratory Bird Treaty Act (16 USC Section 703 et seq.)" In fact the assertion is not supported by existing data. Monitoring data in 2009 shows there has been harm to migratory bird eggs and increased mortality from irrigating these selenium lands

In addition, the draft FONSI's contention that the language in the Section 3404(c) of the CVPIA precludes the Secretary from considering reduced contract quantities as a project alternative is not accurate. The carte blanche elimination of this alternative is not consistent with Secretarial discretion contained in Section 3404 (c) and fails to consider the requirement that Secretary is required to ensure water is put to beneficial use.

The Draft FONSI and environmental documents should include both information on the relationships between irrigation in the San Luis Unit [Westlands and northern districts] and ground water movement downslope, in terms of flow and water quality. It should provide information on how the delivery of water to the San Luis Unit is adversely altering both groundwater flow and quality and the potential for movement (through shallow groundwater of pollutants (e.g. selenium) to the waters of the San Joaquin River and its tributaries, such as Mud and Salt Sloughs and the Grasslands Channels that are listed as impaired pursuant to the Clean Water Act.

Based on this information a full EIS should include mitigation measures, such as monitoring and adaptive tools, farm edge groundwater monitoring, water contract provisions, or changes in water contract amounts and location of water applied, which will reduce groundwater pollution and selenium mobilization.

Such alternatives and mitigation measures would not, however, address the need for environmental water to mitigate the impacts from the creation of such a nuisance or pollution. These additional mitigation measures are needed to meet state and federal law obligations under the Bureau's water right permits.

2. The FONSI for this water contract renewal narrowly defines the project and assumes the impacts of importing water and exporting pollution does not extend to the San Francisco Bay Estuary and Sacramento-San Joaquin Delta.

Exporting water supply from the Delta, which affects key habitat variables such as channel configuration, delta hydraulics, delta inflows and water quality are identified as one of the contributors in the decline of key fish species. The FONSI and supporting environmental documents exclude any analysis of these impacts from the proposed action. Further the FONSI and environmental documents exclude any analysis of Warren Act contracts, water transfers and exchanges, all of which could increase the diversions from the Delta under the proposed action to renew these contracts at quantities which exceed available supplies.⁷

Additionally the California Regional Water Quality Control Board, September 10, 2005, identified potential Delta impacts from constituents that originate in the San Luis Unit project area. In particular, analyses related to implementation of the salinity/boron TMDL have pollutant loads coming from sub-watersheds such as the Grasslands area, which includes the Northern contract area. Also the proposed action does not provide sufficient information or analysis from the combination of impacts that could result from this action and the recent federal action under the USBOR Grasslands Bypass ROD December 22, 2009 where selenium discharges that do not meet protective aquatic objectives will be discharged into tributaries of the San Joaquin until January 1, 2020.

3. The proposed action does not reflect legal and environmental constraints on water deliveries. The impact of this package of false promises to the financial markets and other CVP contractors is not disclosed.

Financial Assurances based on exaggerated water supplies are false and lead to increase risks to bondholders. The quantity of the interim contract renewals should be based on existing, developed project supplies. The needs assessment contained in the draft FONSI and environmental documents do not accurately reflect environmental needs, Indian Trust obligations, and Public Trust obligations. The environmental documents readily admit relying on a 2007 needs assessment that is faulty. In the environmental documents "the analysis for the Water Needs Assessment did not consider that the CVP's ability to deliver CVP water has been constrained in recent years and may be constrained in the future because of many factors including hydrologic conditions and implementation of federal and state laws".

The proposed action should accurately reflect realistic contract quantities with existing developed water supplies and reasonably foreseeable water availability. Failure to

truthfully reflect actual contract amounts can potentially lead to financial market speculation based on unrealistic water contract deliveries. The San Luis Delta Mendota Water Authority and its member districts, including the San Luis Water District and Panoche Water District, have already leveraged these federal water contracts to borrow from the financial markets in 2009 over \$50 million dollars.⁸ Even the environmental documents suggest retaining these inaccurate water quantities in the contracts provides assurances for investments. These are false assurances and could lead to substantial financial dislocations to bond holders and financial markets. These impacts have not been analyzed or disclosed.

All contracts should include an honest and full disclosure that water service contracts are not permanent entitlements. The rationale that these false representations provide assurance is misleading. Further the FONSI and supporting draft environmental assessment suggest that the Bureau is bound to this charade because of the PEIS for the CVPIA. NEPA compliance and the law require an accurate analysis of the impacts of a proposed project action. The cumulative effects of this exaggeration of water delivery quantities will only become more acute as senior water rights holders upstream develop their water supplies [See PEIS, Figures IV-79 and IV-80 and accompanying text.] These exaggerated contract amounts lead to false assurances to financial institutions and bond holders.⁹ These false assurances by the San Luis Water District and Panoche Water District use exaggerated water contract amounts as collateral claiming the water can be marketed outside of the district boundaries to buyers in Southern California and San Francisco.¹⁰ No analysis or information regarding the environmental impacts of water sales, transfers or exchanges is provided despite the fact numerous transfers are taking place within, outside and into the Westlands.

Environmental Impacts from Exaggerated Water Contract Amounts Are Not Disclosed. The draft FONSI and environmental documents allow for the continued obligation of contract water quantities above the amounts that are currently delivered. No detailed evaluation of the environmental effects caused by the delivery of water above currently delivered amounts is provided. Failure to provide this information leaves out critical impacts of the proposed action and understates the cumulative impacts. For example, the American River Division plays a key role in the operation of the CVP to meet Endangered Species Act [ESA] requirements, water quality regulations, and water supply demands within, and south of the San Francisco Bay-Delta.¹¹ A detailed analysis of these environmental effects is important because increased diversions from the American and Sacramento Rivers to meet these contract renewal amounts can adversely affect beneficial uses, such as water quality and habitat for threatened and endangered anadromous fishery.

4. The water contract quantities are arbitrarily fixed and renewed without regard to updated site specific situations and impacts.

5. Despite completion of the Programmatic EIS for the Central Valley Project Improvement Act (CVPIA PEIS), the Draft FONSI and environmental documents do not adequately address site specific impacts of the Proposed Action. These proposed environmental documents do not fill in the gaps contained in the CVPIA PEIS.

6. Given the changes in the CVP operation and specifically the potential increase of water deliveries to selenium soils within the San Luis Water District and Panoche Water District from exchanges, water transfers, Warren Act contracts or contract assignments along with the proposed changes to the Grasslands Bypass project and the proposed actions contained in this draft FONSI and environmental documents, consultation should be reinitiated with USFWS and National Marine Fisheries Service (NMFS) for the proposed action. The baseline of the original consultations has changed. These consultations need to analyze the cumulative effects of this proposed project along with new information regarding the impact of selenium and other contaminants upon the anadromous fishery in the San Joaquin River¹² and wildlife within the Study Area described in the Programmatic Environmental Impact Statement for the CVPIA.

7. Contract terms to include repayment of costs for the Trinity River Restoration Program as Operation and Maintenance costs pursuant to CVPIA Section 3406(b)(23) should have been included in the Proposed Action.

¹ We incorporate by reference: Comments of the Bay Institute and NRDC on Draft EA and Draft FONSI for the San Luis Unit interim renewal contracts (Central Valley Project, California); Sierra Club California, Friends of the River and the Planning and Conservation League January 29,2010; and California Water Impact Network and California Sportfishing Protection Alliance January 29,2010.

² Oppenheimer and Groeber 2004 noted, *The Grassland Subarea contains some of most salt-affected lands in the LSJR watershed. This subarea is also the largest contributor of salt to the LSJR (approximately 37% of the LSJR's mean annual salt load). Previous studies indicate that shallow groundwater in the LSJR watershed is of the poorest quality (highest salinity) in the Grassland Subarea (SJVDP, 1990).* The authors further found that, *The Grassland Subarea contributes approximately 400 thousand tons of salt and 490 tons of boron per year to the LSJR, which accounts for approximately 36 percent of the rivers total salt load and 50% of the rivers total boron load at Vernalis... Subsurface agricultural drainage from the DPA in the Grassland Subarea represents the most concentrated source of salt and boron in the LSJR Watershed.*"

References: **Oppenheimer, E.I. and L.F. Groeber. 2004a. Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Salt and Boron Discharges into the Lower San Joaquin River. Draft Final Staff Report of the Central Valley Regional Water Quality Control Board, San Joaquin River TMDL Unit, Sacramento, CA, 121 pp.** Available at:

http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/vernal盐_boro

[n/index.shtml](#)

and

Oppenheimer, E.I. and L.F. Groeber. 2004b. Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Salt and Boron Discharges into the the impacts associated with this drainage discharge allowance for the GBP go beyond selenium Lower San Joaquin River. Draft Final Staff Report Appendix 1: Technical TMDL Report. Central Valley Regional Water Quality Control Board, San Joaquin River TMDL Unit, Sacramento, CA, 109 pp. Available at:

http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/vernalissaltboron/index.shtml

Also see: G Fred Lee at the Bay Delta Science Conference in September 2010 suggested that discharges from the Grasslands Bypass Project to Mud and Salt slough were a significant source of nutrients contributing to the low dissolved oxygen (DO) and fish die-offs at the Stockton deepwater ship channel.

He stated that high phosphorus and algal "seeding" from the drainage resulted in algal blooms further downstream that strips the San Joaquin River of DO in Stockton. He also noted that the low DO at Stockton could impair fall run salmon migration. A copy of Dr. Lee's presentation is available at:

<http://www.gfredlee.com/psjriv2.htm>

With respect to mercury pollution of the San Joaquin River and Delta from Westside irrigation practices see **Reference: Wood, M.L., C. Foe, and J. Cooke. 2006. Sacramento – San Joaquin Delta Estuary TMDL for Methylmercury. Draft Staff Report for Scientific Peer Review. Central Valley Regional Water Quality Control Board, Rancho Cordova, CA, 177 pp.** Available at:

http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/scientific_peer_review/delta_hg_rpt.pdf

³ "A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley," September 1990 [Bureau of Reclamation, Fish and Wildlife Service, US Geological Survey, Ca Dept. of Fish and Game and California Department of Water Resources.]

⁴ EPA Detailed comments for the DEIS and Supplemental Information for Renewal of Long-Term Contracts for San Luis Unit Contractors, CA, April 17, 2006.

⁵ Ibid.

⁶ Ibid. Attachment A. See also EPA comments re The Notice of Intent for Long-term Contract Renewal, Central Valley Project, California, January 8, 1999. And EPA comments re Proposed Long Term Contracts and Associated Environmental Assessments. December 8, 2000.

⁷ See Public Hearing 1998 Bay-Delta Water Rights Hearing, Wednesday, April 7, 1999 pp 13231-32
"Mr. Sagouspe [President of San Luis Water District]: ..Or another alternative was to transfer water from other districts or purchase other supplies that landowners individually could do or the district could do....A lot of farmers in all the west side districts farm in more than one district. So, they will transfer water between districts... There has been water available on certain occasions from some of the state contracting districts. There has been various means of and ways to get certain amounts of water..."

⁸ Fitch Rates \$50MM San Luis & Delta Mendota Water Auth., California Revs 'A'; Outlook Stable © Business Wire 2009-03-05. The Fitch Bonding Agency states, "The inherent value in the district's extensive water entitlements through its role as the contractor with the federally owned CVP is a credit strength."

⁹ See Public Hearing 1998 Bay-Delta Water Rights Hearing, Wednesday, April 7, 1999 pp 13208-09

“Mr. Sagouspe [President of San Luis Water District]: In the years since 1977, the district has borrowed money a number of times. In each case, but one, the bonds were certificates of participation, were sold to the public at large and the debts were secured by the district's ability to bill these lands for water deliveries into successive lands based on the value of irrigated farmland.”

¹⁰ Ibid. Business Wire 3-5-09. “There is concentration amongst WWD water purchasers. But offsetting this risk somewhat is the value of the cash crops farmed in the district (about \$1.3 billion in fiscal 2008) and the absence of alternative/equivalent supplies or infrastructure to deliver water. In addition, WWD potentially has the ability to sell and transfer water rights outside the district should agriculture cease to be economic, as the demand for water in southern California and the San Francisco Bay area by users with connectivity to the CVP is very high.”

¹¹ FEIS for Renewal of Long-Term Municipal and Industrial Service Contracts for the American River Division, Central Valley Project [CVP] (pgs. 4-4 and 4-6)

¹² C-WIN Letter to Hayes regarding the Dr. Lemly Memo 12-9-09



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180



NORTH
COAST
RIVERS
ALLIANCE



March 29, 2010
Revised

Ms. Shauna McDonald
Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Re: Draft EA/FONSI for Transfer of up to 20,500 acre-feet of Central Valley Project Water from Central California Irrigation District to San Luis, Panoche, Del Puerto and Westlands Water Districts and up to 5,000 acre-feet of Central Valley Project Water from Firebaugh Canal Water District to San Luis Water District or Westlands Water District, EA-10-02 March 2010.

Dear Ms. Mc Donald:

Thank you for the opportunity to comment on the Draft EA/FONSI for the 2 year proposed transfer of up to 30,500 acre-feet of CVP contract surface water from Central California

Irrigation District [CCID] and Firebaugh Canal Water District [FCWD] to Westlands, San Luis, Panoche, and Del Puerto Water Districts. We received no scoping notice of the proposed action and observed a notice of the DEA on March 19th with a comment period ending March 29th on the Bureau's Mid Pacific website where the DEA unavailable for at least two days during that minimal ten day comment period. Announced on March 24th the Bureau of Reclamation extended the comment deadline to April 9th for a project that is planned to commence on April 1, 2010, nine days before the close of the comment period and consideration of public comments.¹

As we understand the proposed action, CCID intends to transfer 20,500 acre-feet of CVP surface water to the lands of CCID landowners which are located in other neighboring districts. FCWD also intends to transfer up to 5,000 acre-feet of CVP surface water to the lands of FCWD landowners which are located in other neighboring districts. The lands of these multi-district owners are also in San Luis, Panoche, Del Puerto, and Westlands Water Districts. Within CCID and FCWD, the districts propose to substitute locally pumped groundwater for the transferred surface water supplies from the CVP. Both FCWD and CCID anticipate pumping high volumes of shallow groundwater, some of which is within the aquifer contaminated by selenium, agricultural drainage and other agricultural contaminants leached from the soil.

In general we find the DEA woefully deficient and insufficient to support informed decision making. Public involvement and the environmental information provided prior to the completion of the EA have been non-existent despite extensive public involvement and concern. There are numerous inaccuracies and assertions which are little more than water project developer opinions unsupported by data or facts asserting there is no impact on the environment from this project. Misleading statements are made to support an urgent need that presents a flawed analysis of available water for delivery and limits the range of alternatives considered. Six other environmental assessments involving the substitution of groundwater supplies for surface contract sales and transfers are proffered as a rationale for this project. Instead these are ample evidence that there is a systematic segmentation of the project impacts from these various projects that propose to substitute surface water contract supplies for long term groundwater pumping. We urge the document be reissued for public comment after the substantive deficiencies are fixed.

No Evaluation of Water Quality Impacts – Selenium & Other Contaminants. The DEA's most glaring omission is the Bureau's failure to analyze water quality impacts of the proposed action carefully. The Bureau makes no attempt to evaluate the quality of groundwater that would be pumped from under lands of the CCID and the FCWD to substitute for Central Valley Project surface water that the two districts would transfer to their Transfer Recipient Districts (TRDs). This groundwater occurs in an area well know for high concentrations and loads of selenium and other contaminants, each of which are easily mobilized by irrigation water from upslope

¹ http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=5243

agricultural activities. Both FCWD and CCID anticipate pumping high volumes of shallow drainage tainted groundwater from approximately 23 largely undisclosed well locations within CCID and 5 wells within FCWD that will be used to substitute for the transferred surface water supplies. Some of the tainted groundwater from FCWD would be pumped directly into the Mendota Pool where it would then enter FCWD's Intake Canal for distribution to participating landowners in the district. At the present time monitoring data for selenium and other contaminants in the Delta Mendota Canal, Mendota Pool and at Vernalis are not gathered and were not presented in this DEA, despite the fact that the Bureau has staff in its Fresno office producing monthly monitoring reports on Delta Mendota Canal water quality, including salts and selenium concentrations and loads.

The DEA acknowledges no restrictions for selenium in pumped groundwater from FCWD, and makes no attempt either to document selenium concentrations and loads from the DMC's discharge into the Mendota Pool or to assess the total concentrations and loads from the proposed action and the DMC's discharge in relation to TMDL regulations for selenium that is enforced by the Central Valley Regional Water Quality Control Board. The restrictions on levels of selenium in pumped groundwater from CCID are not defined in the DEA, even though they are clearly stated in these adopted regulations. The amount of water that is proposed to be pump from the semi-confined aquifer is much more than the San Joaquin Valley Drainage Program had recommended. It is likely that with these higher pumping volumes, the highly contaminated shallow drainage will migrate down and contaminate the wells being used.²

The DEA indicates CCID requires salt water quality levels for blended downstream quality not to exceed 700 mg/L, but the DEA does not require monitoring or reporting with regard to groundwater quality in either district to ensure this blended salt standard is achieved and the quality of the receiving waters are not degraded from the various contaminants identified in this groundwater.³ For the FCWD the DEA notes the groundwater often exceeds 3,000 mg/L of

² See SJVDP [1990] As noted in the Final Report of the SJVDP, groundwater management may be viewed as a planned degradation of the groundwater resource, even though this degradation is occurring under existing conditions. As part of the SJVDP Planning effort, a finite element model was used to develop a detailed analysis of pumping the semi-confined aquifer for management of the shallow water table (Quinn, et al., 1990). The results of the analyses showed the importance of well field design and such factors as depth of pumping, pumping rate, and aquifer properties for achieving management of the shallow water table through groundwater pumping. The final recommendations included only 8,000 AFY in a well field area of 10,000 acres with even well spacing on the quarter mile grid.

³See BOR EA/IS for 25-Year Groundwater Pumping/Water Transfer Project for the San Joaquin River Exchanges Contractors Water Authority 2007. "Along the Outside Canal west of Firebaugh, electrical conductivities ranged from about 3,700 to 6,400 micromhos in 2002 at the Snyder and Del Rey wells. Near the First Lift Canal north of Arbios, the electrical conductivity was about 5,500 micromhos in 1989. These three wells are thus located in the highest salinity area for groundwater in the Sierran Sands. The first two of the wells are in the area where the water for transfer would be developed. A number of monitor wells have been installed in the area that would develop the water for transfer by the Exchange Contractors, Westland WD, Broadview WD, and other entities. TDS concentrations were about 11,000 mg/l in groundwater at a depth of about 50 feet at FC-7, near Nees Avenue and the DMC. A TDS concentration of 9,900 mg/l was found in groundwater from a depth of about 50 feet at FC-6, near

salt. The groundwater quality data presented in the DEA is from previous groundwater investigations contained in a previous Environmental Assessment⁴ from 2000-2004 and appears to be from deep wells and not applicable to the proposed shallow drainage tainted groundwater pumping proposed in this project. The DEA, without any analysis or data declares that increasing the groundwater pumping transfer program from 15,000 acre feet per year to 40,500 acre feet per year will not have any water quality or air quality impacts nor will it “likely have little or no direct effect on groundwater levels or flow patterns within the source area over the 25-year duration” of the project.⁵

Public Involvement has been curtailed. Courts have consistently wanted to see evidence of meaningful public involvement for environmental assessments. Council on Environmental Quality [CEQ] regulations require public involvement in Environmental Assessments [EAs] to the fullest extent practicable (40 C.F.R § 1501.4(e)(2)). Providing a ten day comment period for a draft EA when the document was only available for 8 days is not sufficient, when federal agencies and their responsible entities typically apply a 15-day public comment standard prior to agency approval and implementation of proposed actions. We appreciate the additional nine days of comment period to April 9, 2010, but note the announcement seems to both grant the public an extended time period and to take away consideration of comments by keeping the federal action date of April 1, 2010.⁶ No information or input from the public in the form of scoping or stakeholder meetings were conducted to make sure there was meaningful public involvement prior to the approximately eight day comment period provided prior to the Bureau’s decision to transfer up to 61,000 acre feet of surface water over a 2-year period and substitute an equal amount of groundwater to replace this transferred contract supply.

Herndon Avenue, between the Second and Third Lift Canals. This groundwater is present in oxidized Coast Range deposits above the Sierran Sands, and also contains significant selenium concentrations. That is, selenium concentrations exceeded the drinking water standard and fish and wildlife water quality criteria”. [pp 3-62] “Few water supply wells have been completed in most of the FCWD and Camp 13 Drainage District because of the poor groundwater quality and the availability of canal water for irrigation. These wells are either deep wells (600 to 710 feet, tapping strata below the Corcoran clay) in the west part of the area that would develop the water for transfer or shallow wells in the east part (180 to 390 feet deep, tapping strata above the Corcoran clay). Wells in the City of Firebaugh and CCID wells in the area are generally less than about 250 feet deep. Better quality groundwater has generally been present between about 100 and 250 feet in depth than in other depth intervals in the east part of the area where the water for transfer would be developed.” (page3-58)

⁴ **ibid.**

⁵ Draft FONSE-10-02 March 2010 pg 5. In the 2007 EA 15,000 AFY was authorized and 30,500 AFY is authorized in this DEA for a total of 40,500 AFY.

⁶ <http://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=32041>

The DEA relies on flawed data. Courts have consistently held misleading data presented as fact or failing to take “hard look” at the project’s true effect fails to inform the public of project’s environmental impact.⁷

The need for the project is misleading. As a basis for the purpose and need the DEA presents several facts that are misleading. First, while the Bureau of Reclamation did issue an allocation of 5% on February 26, 2010, this allocation has subsequently been increased closer to 25% for most South of Delta contractors.⁸ Equally while it might be technically correct that CVP contractors “south-of-Delta” experienced reduced “water supply allocations” in 2007, 2008 and 2009, most did not experience huge reductions in water deliveries and received 74% to 100% of their contract water supplies⁹. In fact Westlands Water District, the most junior water contractor received 74% of their CVP contract as of 5-13-09 from various sources including the state’s drought water bank and groundwater pumping. And in 2008 and 2009 they had surplus or carryover storage. Table 1 at page 11 of the DEA that lists the “Average SOD agricultural allocation as a percentage of the contract total” is misleading, because it does not include the actual deliveries, carryover and surplus supplies provided to these contractors. It again reiterates the inaccurate allocation figure of 5% for 2010.

The location of the over 23 CCID groundwater supply wells are not disclosed, along with an accurate description of the depth from which water is extracted. The depth cited in the DEA consequences section, suggest this is in the relatively shallow 180 to 240 feet, an area that could include selenium and agricultural drainage tainted groundwater above the Corcoran Clay. Without information on where these wells are located, the water quality impacts and impacts to wildlife, public health and air quality are not fully disclosed and therefore cannot be accurately determined by the Bureau and district administrators. This lack of information about the spatial extent of CCID wells that are integral to the proposed action compounds the Bureau’s failure to evaluate water quality impacts from pumping local groundwater supplies to substitute for CVP surface water supplies. These flaws in the DEA cast doubt on Bureau’s compliance with the purpose and intent of the National Environmental Policy Act.

Further there is no description or map of which conveyance facilities will be used for the water transport of this tainted water. The spatial location of the wells, the volume pumped and location of conveyance facilities all can have significant impacts on the environment.¹⁰ The DEA merely states, “Landowners in CCID would pump from up to 23 wells interspersed throughout

⁷ Natural Resources Defense Council v U.S. Forest Service (9th Cir. August 5, 2005) and Native Ecosystems Council v. U.S. Forest Service (9th Cir. August 11, 2005)

⁸ <http://www.usbr.gov/mp/PA/water/index.html>

⁹ Lester Snow to Senator Feinstein, May 15, 2009.

¹⁰ See Rainbow Report (San Joaquin Valley Drainage Program 1990)

CCID with a total capacity of 75 cfs..” page 5 and concludes there would be no impact on endangered species ... “because water would move in existing facilities..” pg 37. There is an aerial map of the five wells in the FCWD with well # 5 discharging directly into the Mendota Pool (Figure 3 of the DEA). It is likely the discharge of this degraded water directly into the Mendota Pool would require a permit pursuant to the federal Clean Water Act and the state’s Porter-Cologne Water Quality Control Act. Briefly at page 6 of the DEA mentions potential hearings to determine if CEQA or other aspects of the California Water Code apply. Clearly before this project proceeds, compliance with CEQA and all required permits need to be disclosed and acquired.

Neither hydrological data, nor peer-reviewed groundwater modeling of the volumes to be pumped, nor actual water quality data are provided to support the Bureau’s conclusions of no significant impact. Pumping of groundwater in the semi-confined aquifer (above the Corcoran clay layer) from drainage impacted areas while protecting the environment, public health and maintaining agricultural productivity is a complex feat, and the disclosure of all the steps the Bureau needs to take to achieve this outcome is missing from the DEA. The DEA seems to suggest the six other “related environmental analyses” completed from 2004-2009 provides adequate assurance and data, despite the segmented and different project definitions, without doing the analysis to demonstrate that is in fact the case. *Indeed, this is not the case.* The volume of water, this specific 2 year program and the 25 year time period of the overall Exchange Contractor’s water transfer program, and lack of information on well locations makes this conclusion and the document flawed. Furthermore, reliance on the 2007 EA, where two wells were pumped for 45 to 60 days at 1,000 ac feet from a different aquifer is not conclusive.¹¹

The project does not adequately consider groundwater quality degradation. Pumping such large volumes of water from the aquifer (above the Corcoran clay) will result in a steep gradient where selenium, salts and other contaminants will likely migrate.¹² Salts leached from the soil, pesticide byproducts and from the applied groundwater will also add contaminants that will further degrade the groundwater. No monitoring is required in FCWD and while the CCID

¹¹ See Hydro Report in Appendix F **ibid**. USBOR 2007 pg 139 pg 2.

¹² See “Geologic Sources, Mobilization & Transport of Selenium from the California Coast Ranges to the Western San Joaquin Valley, A Reconnaissance Study”. USGS 90-4070. Presser, Swain, Tiball & Severson. 1990

“Irrigation-Induced Contamination of Water, Sediment, and Biota in the Western United States.” USGS Professional Paper 1655, 2003. More than 40 percent of the surface water-samples exceeded the U.S. Environmental Protection Agency [USEPA] aquatic-life chronic criterion [5 micrograms per liter]. In groundwater, more than 35 percent of the selenium concentrations exceeded the MCL [50 micrograms per liter]. Because ground water can discharge to the surface where wildlife can be exposed to it the criteria used for ground water were both the maximum contaminant levels (MCL’s) for drinking water and the chronic criteria for the protection of freshwater aquatic life”. pp 1.

requires “non-detect” for selenium in the well water pumped from this project, there is no definition of what this limit is or even if monitoring is required to determine this level. FCWD will discharge directly into the Mendota Pool. There is no selenium limit and as the DEA notes groundwater often exceeds 3,000, mg/l TDS.¹³ Finally the DEA at page 22 also concludes there will be no subsidence from this groundwater pumping. No data is provided only this assurance from the project advocates, “The Mendota Pool Group reports have shown that pumping from shallow aquifers does not cause subsidence”. This is based on one year of data based on significantly different volumes of water pumped. With one district requiring monitoring of groundwater conditions and the other not, the Bureau must step in and require consistent administration of the National Environmental Policy Act, the federal Clean Water Act, and the California Porter-Cologne Water Quality Control Act to ensure that the waters of the United States and the state of California are protected through appropriate implementation of the proposed action.

The DEA does not provide any data to support the conclusion there will be no impact to threatened species such as the Giant garter snake, to winter-run Chinook salmon, or migratory birds. As mentioned FCWD will discharge directly into the Mendota Pool and yet the DEA at page 26 indicates there is no impact to the Giant garter snake or to the water quality of the Mendota Pool where flows are diverted into the Grasslands area. Again as mentioned there is no monitoring required nor data collected regarding the selenium contaminants in FCWD groundwater that will be discharged directly into the Mendota Pool nor is it clear what levels of selenium will or will not be detected in the CCID monitoring. These discharges are likely to elevate selenium, salt, mercury and other contaminant levels in these surface waters threatening migratory birds, the Giant garter snake and other wildlife.¹⁴

Further the impacts to the San Joaquin River Restoration are not considered. Much of the following statement at page 17 regarding the San Joaquin River is not accurate:

“The reach from Gravelly Ford to Mendota Pool (about 17 miles) is perennially dry except during flood control releases from Friant Dam. During the irrigation season, most of the water released from the Mendota Pool to the SJR and to irrigators is imported from the Delta via the DMC. This water has higher concentrations of Total Dissolved Solids than water in the upper reaches of the SJR, and can be affected by runoff and seepage into the canal. The reach from Gravelly Ford to Mendota Pool (about 17 miles)

¹³ DEA at page 25: “Groundwater in FCWD has generally not been pumped for direct irrigation use (without mixing), because of the high salinity (often exceeding about 3,000 mg/l of total dissolved solids) (Reclamation 2004).”

¹⁴ See Drainage Solutions: Homage to the Ponds of Folly, Joseph Skorupa, U.S. Fish and Wildlife Service. 2003 U.C. Salinity/Drainage Annual Conference March 26, 2003. WWD Peck Ranch SE 750 ug/l 50% embryo deformity rate; severe overall avian reproductive failure >70%; WWD Britz-Deavenport SE 65 ug/L 33% embryo deformity rate; WWD Red Rock Ranch SE 1,600 ug/l deformity rates 60%,5%,0%,100%; WWD Unidentified Cotton Gin Unknown degree of contamination; groundwater discharge of unknown purpose 16% embryo deformity rate.

is perennially dry except during flood control releases from Friant Dam. During the irrigation season, most of the water released from the Mendota Pool to the SJR and to irrigators is imported from the Delta via the DMC. This water has higher concentrations of Total Dissolved Solids than water in the upper reaches of the SJR, and can be affected by runoff and seepage into the canal.”

The San Joaquin River restoration project has altered this description and the impacts significantly. We agree it is likely seepage, runoff and ground-water from this project will likely contribute to the pollution found in the San Joaquin River. The San Joaquin River is listed as “water quality limited” under Section 303 (d) of the Clean Water Act for multiple constituents of concern including selenium, electrical conductivity (salt) and boron. The Central Valley Regional Water Quality Control Board, peer-reviewed analysis supporting the TMDL objectives for the San Joaquin River water quality objectives identify groundwater as providing 4% of the overall flow draining the lower San Joaquin River watershed at an average concentration of 1,600 mg/L, contributing 30% of the overall salt load.¹⁵ As noted on page 17 of the DEA “Panoche Creek in the Westlands Water District, an ephemeral stream, also flows into Mendota Pool and, during high flows in the winter and spring, high concentrations of selenium have been brought into Mendota Pool via Panoche Creek flows (North State Resources 1999).”

Finally increased surface water deliveries to the 300,000 acres of selenium laden lands and identified drainage impaired lands within Westlands Water District and the approximately 74,000 acres of selenium laden lands and drainage impaired lands within the northerly area will also bring increased groundwater seepage and migration to the San Joaquin River over this specific 2 year project and the 25 year period of the project.¹⁶ No data, monitoring or analysis of these project impacts is provided.

No data or analysis is provided regarding the cumulative impacts from the project. Selenium concentrations precipitate from solution in to sediment and over time bioaccumulate in plant material, benthic invertebrates, fish species, mammals, and fish species, including benthic feeders like sturgeon. The danger of bringing this selenium-laden water to surface and spreading it on fields or in grasslands has brought death, deformity and reproduction problems to wildlife, and the proposed action has serious potential to result in similar outcomes.¹⁷

¹⁵ August 6, 2007 CRWQCB Letter to Bob Eckart USBOR from Gail Cismowski: Comments on the Draft EA and Initial Study for the 25-Year Water Transfer Project for the San Joaquin River Exchange Contractors Water Authority.

¹⁶ See the San Luis Drainage Feature Re-evaluation Record of Decision [2006] Bureau of Reclamation. http://www.usbr.gov/mp/scao/sld/docs/sldfr_report/slfr_3-08_v02.pdf

¹⁷ The U.S. Geological Survey, in cooperation with the SJVDP and as part of the Regional Aquifer System Analysis Program completed a report on the sources, distribution, and mobility of selenium in the San Joaquin Valley, California (Gilliom and others, 1989). This report noted the following with respect to groundwater pumping in the drainage impacted area: “*The large quantity of high-selenium ground water (50 to 1000 pg/L) in the general range of 20 to 150, feet below the water table makes it desirable to use management practices that leave this water where it is, rather than bring it to the land surface or allow it to move into parts of the aquifer that*

The cumulative impacts analysis in the DEA does not include the addition of this surface water transfer along with the cumulative impacts from all the supplemental water imports that will irrigate toxic selenium lands on the Westside of the Central Valley including the various Warren Act contracts, transfers, exchanges, and assignments and these impacts on selenium drainage offsite at Westlands Water District and the various other west side districts receiving these additional supplies of water.¹⁸ In addition the four environmental assessments listed on page 3 as related environmental analyses document how this DEA and the other EA's foster a segmentation of the project need and purpose—providing supplemental water to these Westside CVP contractors—and avoids a hard look at the long term cumulative impacts from delivering imported water to irrigate selenium soils identified by the Bureau of Reclamation as

may be used for water supply. Water-table control strategies based on increasing groundwater discharge need to be carefully evaluated with respect to their potential to affect the movement of water with high selenium concentrations movement of water with high selenium concentrations."

See USBOR Draft EA/IS for 25-Year Groundwater Pumping-Water Transfer Project for the San Joaquin River Exchange Contractors Water Authority. August 27, 2007 USFWS Comments—proposed action would degrade groundwater, increase selenium concentrations in DMC sumps, lessened water quality in the Main Canal and add selenium and mercury loads into refuges and pump mercury and selenium into the Delta Mendota Canal upstream of the Mendota Pool where Mercury levels in fish are already at unsafe levels and the San Joaquin River is listed on the 2006 Clean Water Act Section 303 [d] list. Pp 1-20

¹⁸ Final WQ Data Report for the WWD 2008 Pump-In Project 09/25/2008 (PDF, 40 KB). Description: DWR Bryte Lab data final water quality report for the Westland's ...www.water.ca.gov/publications/browse.cfm?letter=F - Cached

Also see DWR Bulletin 132-95 Westlands Water District--"Turn-In" Agreements. In August 1994, the Department signed two "turn-in" agreements with Westlands Water District. Under the terms of these agreements, WWD could pump up to 100,000 acre-feet of ground water directly into the California Aqueduct from WWD's wells located alongside the aqueduct. In addition, WWD could also pump up to 50,000 acre-feet of ground water into the Mendota Pool for conveyance to the California Aqueduct through WWD's Lateral 7."

"During the term of these agreements, March 1994 through February 1995, 16,000 acre-feet of water was conveyed from the Mendota Pool to the California Aqueduct, through Lateral 7, and 84,600 acre-feet of water was pumped directly into the California Aqueduct. The total, 100,600 acre-feet was conveyed by the Department to Reaches 5 through 7 to be used within WWD's service area."

"Westlands Water District--Kings River Water. A letter agreement signed May 12, 1995, between the Department and Westlands Water District approved the acceptance into the California Aqueduct of up to 10,000 acre-feet of Kings River Water for delivery to WWD through Reaches 5, 6, and 7 of the California Aqueduct. This nonproject water will be made available to WWD through an agreement between WWD and the Kings River Water Association. The water will be released from Pine Flat Reservoir and will flow to the Mendota Pool via the Kings River and Fresno Slough. WWD will then convey the water from the Mendota Pool to the California Aqueduct through WWD's Lateral 7."

Also see: Westlands Water District. 1995. Conveyance of Nonproject Groundwater from the Mendota Pool Area Using the California Aqueduct, Draft Environmental Impact Report, Westlands Water District. pp. 303

causing harm to ground water quality, fish, wildlife and agricultural production. Water delivery to these lands that leach toxins into the ground water and surrounding surface waters is not possible without the Bureau of Reclamation's delivery system and to a large extent the water storage facilities of the federal government.

In short, our organizations consider this draft Environmental Assessment and proposed Finding of No Significant Impact (FONSI) to be seriously inadequate and out of compliance with the National Environmental Policy Act. Please include our organizations and contact persons on your distribution list for all further notices related to these and all other transfers affecting south of Delta Central Valley Project contractors.

Respectfully submitted,



Jim Metropulos
Senior Advocate
Sierra Club California



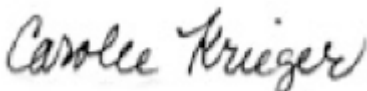
Steven L. Evans
Conservation Director
Friends of the River



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's
Federation Association Inc.



Larry Collins
President
Crab Boat Owners



Carolee Krieger
Board President and Executive Director
California Water Impact Network



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance



Bruce Tokars
Salmon Water Now



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League



Conner Everts
Executive Director
Southern California Watershed Alliance

Warren V. Truitt President
Save the American River Association
Fred Egger President
North Coast Rivers Alliance

Cc:

Dorothy R. Rice, Executive Director, State Water Resources Control Board

Pamela C. Creedon, California Regional Water Quality Control Board, Central Valley Region

Mark Cowin, Director, Department of Water Resources

John McCamman, Director, California Department of Fish and Game

Lisa Jackson, EPA Administrator

Jared Blumenfeld, Region 9 EPA Administrator

Michael Connor, Commissioner Bureau of Reclamation

Donald Glaser, Regional Director Bureau of Reclamation

Jeffrey Kightlinger, General Manager, MWD

S. David Freeman, General Manager, Los Angeles Department of Water and Power

Maureen Stapleton, General Manager, San Diego Water Authority

Richard Atwater, General Manager, Inland Empire Utilities Agency

Michael R. Markus, General Manager, Orange County Water District

Kevin P. Hunt, General Manager, Municipal Water District of Orange County

Gary Bobker, The Bay Institute

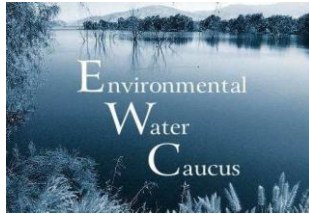
Kate Poole, NRDC

Trent Orr, Earthjustice

Antonio Rossmann, Rossmann and Moore

Interested Parties

III. Protecting Rivers and Sustaining Environmental Flows



CA Save Our Streams Council



September 25, 2018

Ted Alvarez
State Water Project Analysis Office
Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236
watercontractextension@water.ca.gov

Cassandra Enos-Nobriga
Executive Advisor, State Water Project
Department of Water Resources
1416 Ninth Street, Room 1148-3
Sacramento, California 95814
ContractAmendment_comments@water.ca.gov

Cc: ted.alvarez@water.ca.gov; cwf_amendment@water.ca.gov & hand delivered.

Re: Additional Comments Regarding the DEIR SWP Contraction Extension Amendments¹ and the Need for a Subsequent EIR to Disclose and Assess Substantial New Information.

¹ <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/Water-Supply-Contract-Extension/Files/Draft-Environmental-Impact-Report.pdf> Draft Environmental Impact Statement, Natural Resources Agency, Department of Water Resources, August 2016

Dear Mr. Alvarez and Ms. Enos-Nobriga,

Since the close of public comment on the Draft EIR (DEIR) for the SWP Contract Extension on October 17, 2016, significant changes and new information regarding the SWP Contract Extension project have come to light. As a result, CEQA requires that DWR issue a revised and updated subsequent DEIR for public review and comment. This is required because of the substantial changes in the project, the substantial changes with respect to the circumstances under which the project is being undertaken, and because of new information that was not known and could not have been known at the time the original Draft EIR was completed on August 17, 2016, or before DWR closed the public comment period on October 17, 2016. Proceeding to certify the EIR and make a final project decision after reviewing only long-closed comments on the outmoded 2016 DEIR would violate the California Environmental Quality Act (CEQA), Public Resources Code § 21000 et seq. Following, we summarize specific events related to changes in project conditions and new information, and highlight several fundamental shortcomings of the current DEIR in light of both the new events and previously identified short-comings of the current DEIR.

Changes in Project Conditions and New Information Since the 2016 DEIR

Significant and substantive changes over the last two years include, but are not limited to:

1. **September 11, 2018**, DWR Director Nemeth testified before the Joint Legislative Budget Committee and stated that the contract extension amendments project is necessary and will be used to finance the WaterFix project² [referred to at various times as the Delta Tunnels, Cal WaterFix, Bay Delta Conservation Plan (BDCP), and/or the Delta Habitat Conservation Conveyance Program (DHCCP)]. Since 2013, the Planning and Conservation League along with numerous other conservation, Native American and fishing groups have requested that the environmental impacts of the Delta Tunnels project and other projects to be financed with the contract extensions be disclosed.³ To date DWR has ignored these requests and suggested that the 50-year extensions to financing would not be used to fund the Delta Tunnels project, despite the direct statement to the contrary by Director Nemeth. Now it is time to fully disclose the projects that will be enabled by this 50-year extension of contract terms and address them a subsequent DEIR.
2. **September 5, 2018**, DWR reported that the cost for the SWP 2017 Oroville Spillway Disaster and Recovery project soared to \$1.1 billion from the original estimated price tag for repair of damage to the dam's spillway of between \$100 million and \$200 million, the second time in a year that the reported cost of the spillway incident had jumped by 25 percent or more. These are major costs to be added to the SWP contracts along with as yet

² September 11, 2018 the Joint Legislative Budget Committee held an information hearing regarding the State Water Project Contract Extension Amendments. See the exchange between Senator Pan and DWR Director Karla Nemeth starting 1:10:27 to 1:13:43: *Senator Pan: "I do not hear an answer to my question." Director Nemeth, "Yes, we will use these amendments to finance WaterFix... We have a category in our existing contracts that describes the ability of the Department to fund projects in the Delta including delta facilities and that would include WaterFix."*

<https://www.senate.ca.gov/mediarchive/default?title=&startdate=09%2F11%2F2018&enddate=&=Search>

³ <http://www.deltatunnelsboondoggle.com/wp-content/uploads/2017/01/SWP-contract-extension-PCL-DEIR-comments-10-17-16.pdf>

undisclosed financial liabilities and mitigation costs.⁴ None of the costs associated with fixing the spillway or associated environmental damages are disclosed in the DEIR documents. SWP contractors and their ratepayers and taxpayers could be on the hook to pay for the damages that keep rising. As DWR Director Bill Croyle testified at a 2017 legislative hearing, FEMA could reject reimbursement if the agency believed the crisis was caused by poor maintenance.⁵ The Oroville Spillway Disaster and Recovery project is one key example of a major cost that has not been factored into the balance to be funded by the proposed contract extensions.

3. **August 17, 2018**, the Bureau of Reclamation ("Reclamation") served DWR its Notice of Negotiation, instigating a renegotiation of the Coordinated Operation Agreement (COA) contract through which they jointly operate the State Water Project ("SWP") and the federal Central Valley Project ("CVP").⁶ A probable outcome of the renegotiation of the COA will be that the SWP will see further limitations on water available for export from the Delta. Reductions in availability of water for export to the SWP caused by changes to the COA will have impacts on long-term financial stability of the SWP and the viability of specific projects, and thus are reasonably foreseeable impacts related to extending the contracts for fifty years. And yet, DWR has failed to consider these impacts, or to propose and analyze alternatives that include reasonably foreseeable changes to the SWP contracts that may result from changes to the COA in its Contract Extension DEIR. DWR must evaluate the impacts of renegotiation of the COA in its Contract Extension DEIR because the COA contract influences revenue, financial viability of the SWP and how it is operated to meet legal requirements including water quality requirements.
4. **July 27, 2018**, the Delta Conveyance Finance Authority, in a letter to EPA to advance financing for the WaterFix, noted the critical importance of the COA federal-state contract to the operations of both the federal and state water projects.⁷ The Letter of Intent (LOI) describes the organizational structure as consisting of DWR and certain SWP contractors. (LOI, pp. 4-6.) And yet the project also proposes to divert federal Central Valley Project ("CVP") water permitted for diversion by the Bureau of Reclamation ("Reclamation") in the Delta. In addition to the uncertainty surrounding the COA, no information has been provided about the agreement referenced between DWR and Reclamation concerning how

⁴ Oroville Suits Against DWR Move to Court <https://www.chicoer.com/2018/09/14/oroville-dam-lawsuits-against-dwr-moving-along-in-court/> September 14, 2018; January 17, 2018, Oroville Suit Against DWR alleges discrimination and corruption <https://www.chicoer.com/2018/01/17/city-of-oroville-suit-against-dwr-alleges-discrimination-corrupt-culture/> Oroville Dam: Butte County files suit against DWR over road repairs, other damages <https://www.mercurynews.com/2018/08/30/oroville-dam-butte-county-files-suit-against-dwr-over-road-repairs-other-damages/> August 30, 2018.

⁵ May 11, 2017 Assembly Oversight Hearing: The Assembly Water, Parks, And Wildlife Committee and the Accountability And Administrative Review and Budget Subcommittee No. 3 On Resources And Transportation held a joint informational and oversight hearing on Oroville Dam. <https://aar.assembly.ca.gov/sites/aar.assembly.ca.gov/files/Oroville%20Dam%20AAR%20Background.pdf>

⁶ *Western water honchos secretly huddle on tunnels, fish* <https://www.eenews.net/stories/1060095217> & https://www.eenews.net/assets/2018/08/24/document_gw_03.pdf

⁷ Delta Conveyance Finance Authority (Finance Authority) July 27, 2018 letter to EPA Andrew Wheeler, Letter of Interest for Water Infrastructure Finance and Innovation Act (WI FIA) program. <http://www.restorethedelta.org/wp-content/uploads/JPA.pdf> pg 23.

possible impacts to CVP operations will be avoided. (LOI, p. 23.) For example, MWD General Manager Kightlinger testified that under the WaterFix, " *If one set of contractors are entirely pumping from the South Delta and one set of contractors are having dual conveyance both south and north, and making the COA, the Consolidated Operating Agreement, effective and working, we think, we think we'd just be, it become a real nightmare.*"⁸

The LOI glosses over possible effects on operational viability (LOI, p. 23), given the complexity of CVP and SWP interoperation, as well as the differing service areas and water demands. One would be hard pressed to imagine a world in which there are no such effects. These impacts need to be fully disclosed by the updated subsequent DEIR.

5. **July 13, 2018**, DWR released a Notice of Preparation (NOP)⁹, notifying the public of DWR's intent to prepare an Environmental Impact Report (EIR) on the proposed WaterFix contract amendments. PCL et. al. on May 7, 2018, adopted here by reference, requested that DWR analyze all the contract amendments to avoid a segmented and piecemeal approach to the CEQA analysis.¹⁰ Plumas County Flood Control and Water Conservation District (Plumas County) issued comments on August 7, 2018 adopted here by reference.¹¹ Plumas County provides an alternative to the proposed contract amendments that decouples existing debt from new debt for undefined future SWP storage and conveyance projects, suggests alternatives for allocating debt for future SWP capital facilities projects that were not in existence prior to January 1, 1987, and provides alternatives for financing other capital projects not already listed in the contract for which water system facilities revenue bonds could be sold. These project alternatives need to be analyzed along with the associated environmental impacts to ensure the various contract amendments and the contract amendment extension project are not segmented and the impacts piecemealed.
6. **March 27, 2018**, Metropolitan Water District of Southern California (MWD) announced, but did not disclose to the public, a new contract with DWR, called a "master agreement", seeking to give MWD the exclusive right to an additional 33% of the capacity of WaterFix above their allotted Table A amounts.¹² MWD also passed resolutions at its July 10, 2018 meeting adding to its potential role and financial stake in WaterFix, addressed in a pending legal challenge.¹³ The potential ripple effects of MWD's majority control of WaterFix

⁸Op.Cit.https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CDWA%20et%20al/part2rebuttal/sdwa_316.pdf pg 25

⁹ <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/CalWaterFix-contract-amendment/Files/Final-NOP-071318.pdf?la=en&hash=993C33E4D237F45E35DD65178449A89C0A4517B7>

¹⁰ <http://www.deltatunnelsboondoggle.com/wp-content/uploads/2018/09/2-PCL-et-al-Cmts-SWP-Contract-Amendments-5-7-18-Updated-5-8-18.pdf> & <http://www.deltatunnelsboondoggle.com/overview-of-the-proposed-contract-amendments-between-the-department-of-water-resources-and-state-water-project-contractors/>

¹¹<http://www.deltatunnelsboondoggle.com/plumas-county-flood-control-water-conservation-district/>

¹² http://mwdh2o.granicus.com/MediaPlayer.php?view_id=12&clip_id=6670 for the video and pg 9 of the transcript.https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CDWA%20et%20al/part2rebuttal/sdwa_316.pdf

¹³ https://www.centerforfoodsafety.org/files/2018-9-10-mwd-waterfix-validation-complaint-final_04832.pdf.

capacity on extended contract terms and expanded scope (not only SWP projects) must be addressed in an updated subsequent EIR.

7. **July 21, 2017**, DWR authorized the sale of \$11 billion in revenue bonds to pay for WaterFix¹⁴, but the general bond resolution for its authorization relies on repayments from the SWP contractors over the next 70 years. That assumption is incompatible with the repayment periods in the existing SWP contracts, which expire between 2035 to 2042. Nonetheless, DWR's general bond resolution attempts to finesse the ineligibility of WaterFix for revenue bonds by prospectively defining "water supply contracts" to include subsequent amendments. Numerous challenges to the validity of DWR's revenue bonds are pending in DWR's validation action, including challenges to DWR's misuse of its authorizations to circumvent restrictions in the existing SWP water contracts. Since DWR is presently attempting to proceed with validating its revenue bond resolutions without the contract extension amendment, it, and other alternatives to the extension amendment, need to be assessed in an updated subsequent DEIR.
8. **September 21, 2017**, DWR notified State Water Contractors that it had issued Project Order No. 40, adopted on July 21, 2017, which summarily attempted to redefine project facilities known as the California WaterFix to be considered as units of the State's Central Valley Project referenced in California Water Code Sections 11100.¹⁵ Although Project Order No. 40 was not included in the WaterFix CEQA review or its Notice of Determination, and was not disclosed in advance, DWR's notice to SWP contractors confirmed that it was signed by DWR's director "immediately after" signing the Notice of Determination. The lawfulness of DWR's actions with respect to Project Order No. 40, which DWR relied on its general bond resolution, has been disputed by answering parties in DWR's pending validation action. Nonetheless, as Director Nemeth testified¹⁶, undoubtedly this "Project Order" was designed to define the WaterFix water export tunnels under a category in the existing DWR SWP contracts so those funds could help finance the proposed \$19.8 billion tunnel project.¹⁷ This is another major change in financing conditions enabled by the proposed contract extensions, which must be addressed in an updated (subsequent) DEIR.
9. **January 17, 2017**, EPA rated the Federal EIS for the tunnel project (Cal Water Fix, BDCP, DHCCP) inadequate because analyses of the project continued to predict significant adverse

¹⁴ http://www.californiawaterfix.com/wp-content/uploads/2017/10/CWF_Validation_Complaint_.pdf

¹⁵ See: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Management/SWP-Water-Contractors/Files/17-07-P-Project-Order-No-40.pdf> 'Pursuant to Water Code § 11260 and 11500, the Sacramento-Sa Joaquin Delta features of the Central Valley Project, as authorized by Water Code § 11260 and 11500 and as described in the publications referenced in Water Code §11260, are hereby further modified to include the following facilities, as they may be designed and revised as the project proceeds (collectively, the "California WaterFix")'

¹⁶ See September 11, 2018 Joint Legislative Budget Committee Informational hearing -DWR Proposed Water Supply Extension Contract --DWR Director Nemeth and Senator Pan @ 1:12:13 to 1:13:09
<https://www.senate.ca.gov/mediaarchive/default?title=Joint+Legislative+Budget+Committee&startdate=09%2F11%2F2018&enddate=09%2F11%2F2018&=Search>

¹⁷ See JBLC Hearing September 11, 2018 @ 1:11:39 to 1:13:55 &
<https://mavensnotebook.com/2018/09/20/news-worth-noting-congressman-garamendi-sends-letter-to-epa-regarding-wifia-letter-of-interest-submitted-by-the-delta-conveyance-finance-authority-report-integrating-water-efficiency-into-long-term/> Congressman Garamendi Letter to EPA Wheeler Re WaterFix WIFIA Loan, September 19, 2018.

impacts to the Delta and the factual information and background materials provided as part of the EIS were not adequate for a complete evaluation of environmental impacts. Such impacts must be addressed for the adoption of contract changes that will fund and enable a major project that EPA has found will degrade water quality for municipal, agricultural, and aquatic life beneficial uses. The project will cause violation of water-quality standards as the western Delta becomes more saline. Documents also show there will be substantial declines in quantity and quality of aquatic habitat for 15 of 18 fishes evaluated under WaterFix.¹⁸

10. **October 21, 2016**, the 2013 Delta Plan was set aside as “invalid” by the Sacramento Superior Court¹⁹ because WaterFix was found to be inconsistent with the Delta Plan and because it violated the Delta Reform Act. The impacts of these proposed contract amendments, which would enable financing of the WaterFix water export tunnels along with other undisclosed projects over the next 50 years, must be assessed and disclosed. The subsequent DEIR must address the environmental impacts of failing to achieve state policy that requires meeting the coequal goals of restoring the Delta’s ecosystem along with water supply reliability.

These events since the review period for the 2016 DEIR are significant changes in conditions of the project and related matters that substantially impact the financial and physical health of the State Water Project. DWR, in effect, is retroactively seeking to use the contract extension amendments to enable funding of WaterFix and other projects outside the original scope of the SWP and also to change project operations in order to increase water exports and avoid complying with the existing requirements for protecting the already impaired Delta. Moreover, these DWR-driven changes are in addition to Reclamation’s new policy to maximize exports regardless of the consequences for the Bay-Delta environment.

Regarding effects on environmental conditions in the Bay-Delta, DWR has repeatedly failed to disclose or analyze the environmental impacts of the proposed contractual changes on the State Water Project operations, maintenance, and long-term cumulative impacts that likely will result in less investment in conservation, fish and wildlife mitigation and recreation and other beneficial uses and users. These conservation and mitigation projects are needed to meet existing legal requirements and to protect endangered species and areas where additional surface and groundwater supplies will be taken like the fragile San Francisco Bay-Delta Estuary and northern rivers.²⁰

The fiscal changes associated with the contract extensions will cause significant physical impacts. For example, while the existing DEIR fails to disclose or analyze a single project that necessitates the extension of the SWP contracts for fifty years on top of the existing 75 year term, documents

¹⁸ <https://www.epa.gov/sites/production/files/2017-01/documents/waterfix-feis-2017-01-18.pdf> EPA comments on FEIS January 18, 2017.

¹⁹ *North Coast Rivers Alliance v. Delta Stewardship Council*, JCCP No. 4758 at 2, ¶ 2. See also Superior Court, County of Sacramento, Judicial Council Coordination Proceeding No. 4758, Dept. 31, Judge Michael Kenny, on November 23, 2016, Granting Peremptory Writ of Mandate against the DSC.

²⁰ See also Fish and Game Code Section 5937, that provides protection to fisheries by requiring that the owner of any dam allow sufficient water to pass downstream to keep in good condition any fisheries that may be planted or exist below the dam.

show, in contrast, that the costs of the WaterFix project will require this extension²¹ and will more than double the entire SWP project costs to date.²²

CEQA Guideline § 15378(b) sets forth a list of what the term “project” does *not* include. Guideline § 15378(b)(4) in the list exempts from being a “project,” The creation of government funding mechanisms or other government fiscal activities, which do *not* involve *any* commitment to *any specific project* which may result in a potentially significant physical impact on the environment. (Emphasis added.)

The government's fiscal activities involved here do involve commitment to a specific project, in fact a number of projects. It is clear under the CEQA Guidelines including § 15378(b)(4) that “the creation of government funding mechanisms or other government fiscal activities” which involve commitment to a specific project or projects which may result in a potentially significant physical impact on the environment, is an activity, a “project,” which must be preceded by preparation of a legally sufficient EIR. CEQA must “be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.”

The economic impacts of the WaterFix tunnels project in the heart of the San Francisco Bay Delta Estuary on the communities in and surrounding the affected areas also are not included in analysis in the current Draft EIR for the contract extensions or the FEIR for the tunnels project. Furthermore, the reasonably foreseeable environmental impacts indirectly caused by the economic changes and potentially excessive ratepayer debt needed to fund this project, such as the lack of funds to invest in local solutions and conservation mitigation, are necessarily subject to CEQA analysis. The Draft EIR has failed to analyze or disclose these impacts.²³ For example, even the positive economic changes predicted by DWR from continuing to fund the massive spillway rehabilitation and expenditures to remove sediment and erosion debris from downstream of Oroville Dam must be analyzed.²⁴

CEQA also requires agencies to 'consider qualitative factors as well as economic and technical factors and long-term benefits and costs' when evaluating projects²⁵ and it requires a general description of the project's 'technical, economic, and environmental' characteristics.²⁶

²¹ Bond underwriters have acknowledged that SWP contract extension is required before DWR can issue the WaterFix bonds: Morgan Stanley: “We understand that DWR’s water supply contracts are in the process of being extended, likely to 2085, or 50 years from 2035 when most expire. Clearly, in order to finance the substantial costs associated with CM1 in the BDCP [now, WaterFix], the extension of these contracts is essential to allow for the amortization of financing payments over a long period of time.” Stifle: “DWR’s legal counsel has concluded that BDCP [now, WaterFix] is not on the list of approved projects that are eligible for funding, including through bond financing.” <https://mavensnotebook.com/wp-content/uploads/2018/07/PCL-et.-al.-SWP-Contract-Amds.-July-3rd-Senate-Nat.-Res.-Info-Hearing.pdf>

²² See pgs 34-35 Series AW Bonds October 20, 2016 <https://emma.msrb.org/EP554312-EP370213-EP831557.pdf>

²³ [Bakersfield Citizens for Local Control v. City of Bakersfield \(2004\) 124 Cal. App. 4th 1184, 1204](#)

²⁴ CEQA [Guidelines § 15126.2\(d\)](#)

²⁵ [Pub. Res. Code § 21001\(g\)](#)

DWR's DEIR has failed to consider a range of direct environmental impacts, indirect impacts, and cumulative impacts of the proposed contract extension amendments, including a failure to consider the indirect impact of the growth-inducing effects of the contract extension amendments. Omission of these indirect impacts is especially important since delivery of maximum water supplies under the proposed contract amendments is the proposed goal of the project.

Truth in Lending--DWR does not disclose all the costs and finance charges under the proposed Contract Extension--Just like buying a house, consumers have a right to know.

SWP contractors are required to repay DWR's costs of building and operating facilities for collecting, storing, and distributing water, and those facilities by law must be paid for regardless of whether contractors receive water in any given year.²⁷ Just like a mortgage, ratepayers and property taxpayers have been on the hook for decades, paying off this mortgage under a specified term and definition. Ratepayers bought a well-defined "house" (SWP)--one in existence prior to 1987--and they have been paying off over a 75-year term. They did not agree to finance an undefined "mansion" as set out under the proposed new 50-year term SWP contract extension amendments, which enables funding of the WaterFix and other major projects that were not part of the original SWP.²⁸

Terms, Conditions And Debt Are Not Disclosed, Including Resulting Physical Environmental Impacts.

Under the proposed SWP contract amendments, DWR and the SWP contractors want to extend the term of required payments for another 50 years, but the existing definition of the "house" and its "mortgage" is changed. All these changes are scheduled to occur without a vote of the ratepayers and property taxpayers who will be required pay. To date, the DEIR and CEQA analysis has failed to disclose the physical impacts of the projects proposed to be financed, nor has the analysis considered alternatives that would avoid such huge financial investments in previously undisclosed projects. And yet the debt that ratepayers will be forced to pay to cover the costs are extended another 50 years under terms that are not disclosed. Currently the definition of the SWP is limited

²⁶ [Guidelines § 15124\(c\)](#) As stated earlier, CEQA requires a subsequent EIR if substantial changes are proposed in the project or substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions of the EIR, or new information which was not known and could not have been known at the time the EIR was certified, becomes available. See Public Resources Code §21166(a), (b), and (c). The CEQA Guidelines are codified at 14 Code Cal Regs §15000 et seq.

²⁷ The California Water Resources Development Bond Act directs the Department of Water Resources to enter into contracts for the sale, delivery or use of water made available by the system. Changes in the water delivery contracts also contemplate changes to the bondholder's contract because of the anticipated changes in water delivery payments diminishing the revenues which would be used to fund the existing SWP project that by current definition include only those projects in existence prior to 1987. To the extent the SWP contract loosens the purse strings and expands the scope of the SWP project, existing bondholders' security interest is diminished. The impacts of altering this contract also need to be addressed.

²⁸ On the parallels between risks in the housing-driven financial crisis and those associated with complex water infrastructure, see J. Viers and D. Nover, *Too Big to Fail: Limiting Public Risk in Hydropower Licensing*, 24 Hastings Env'tl L.J. 142 (2018).

to the scope that existed prior to 1987. Now this new contract would delete that limitation and make it a virtual blank check for new projects outside the original definition of the SWP. DWR in the DEIR does not list even one project to be funded for the added 50 years, despite their recent statements that the \$19.6 billion WaterFix tunnel project will be funded through the amended contracts.

In yet another undisclosed impact that raises serious legal questions, MWD claims they would be given exclusive control over the 33% of "unsubscribed" capacity of the WaterFix tunnels.²⁹ MWD now controls 47% of the SWP Table A capacity. Under the proposed, as yet undisclosed, master agreement MWD would also control an additional 33% of the CWF capacity.³⁰ The so-called 'master agreement' contract has not been publicly disclosed, including its environmental impacts, such as water quality impacts on the California Aqueduct from selenium and other contaminants discharged or industrial and municipal use if sold to Westlands Water District.³¹ There would also be impacts on housing developments if the additional capacity was sold, for example, to Tejon Ranch.³² This agreement would provide MWD's physical control over an additional 33% of the

²⁹ March 27, 2018 Metropolitan Water District of Southern California WaterFix Workshop pg 9 https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/CDWA%20et%20al/part2rebuttal/sdwa_316.pdf

Patterson, "First and foremost, we believe, and DWR is agreeable, that if we purchased and financed the unsubscribed 33% of the project, we would have a new separate agreement with the Department of Water Resources here. We're calling it the Master Agreement. But the objectives of this contract would be to cover that acquisition, lay out the terms on what we can do with it, be very clear that DWR has assigned to us, Metropolitan, and any other investors the interest in the capacity at the 33% level. So that's ours to manage and make decisions on. And DWR would also agree to utilize that part of the project to maximize the benefits, so they wouldn't arbitrarily go, "Oh, we're going to leave. We have water there we could legally divert under the rules, but we're just not going to do it." No, if you can follow the rules, you got to divert it, because that's what generates the revenue associated with it."

³⁰*Ibid*, pg 30: "Dake: As a little follow-up, Roger described purchase and finance of the unsubscribed portion. I suspect it's more, it's not legal for the state to sell us that. Right? So it's not really a purchase. It's a contracting for, is that

Kightlinger: It would be an ownership interest conveyed to a contract, not actually having fee title to the tunnel, the 33% of the tunnel.

Dake: But what's your characterization of the risk if a governor came to office who was not interested in us having those contractual rights? How would that be managed?

Kightlinger: There's a constitutional provision about interference with contracts that, but perhaps our counsel might opine on that. Our actual practicing counsel.

Dake: We'd be vulnerable

Scully: Yeah. It depends of course on when the contracts were entered into, if the contracts were entered into before the administration changes. If the administration changes before there is a contract and the governor is directing resources to do something else, that's something we'd have to contend with."

³¹ See DWR data for Non-Project Water Pump-ins to the California Aqueduct. <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Water-Quality/Documents/Water-Quality-Assessment-of-NonProject-Turnins-to-the-California-Aqueduct-2013.pdf?la=en&hash=6D3E873C7F4B30D871240B15C4449FB0312543E3> & <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/State-Water-Project/Water-Quality/Documents/Water-Quality-Assessment-of-NonProject-Turnins-to-the-California-Aqueduct-2015.pdf?la=en&hash=DF0AAD3515C7170683E17A4D5893207B66D44130>

³² <http://www.latimes.com/local/lanow/la-me-ln-tejon-ranch-planning-commission-20180829-story.html>
August 29, 2018 L.A. County planners recommend approval of Tejon Ranch development.

WaterFix capacity and the ability to manage the water and sell it to others, who in turn could use it to construct major housing and utility corridors.³³ No environmental analysis of this potential is provided and the impacts are not disclosed.

Some SWP contractors have asserted that under the current SWP contracts, SWP contractors must either pay for the California WaterFix project, forfeit their SWP contract, or find another SWP contractor willing to pay their share of the costs of constructing and operating WaterFix.³⁴ Several SWP contractors, including the Kern County Water Agency, have filed answers in DWR's WaterFix bond validation lawsuit (Sac. Superior Court Case No. JCCP 4942), challenging DWR's authority to impose the costs of WaterFix without their agreement to modifications of SWP contracts. DWR has publicly acknowledged that it is negotiating a second set of amendments to the SWP contracts to include terms that apportion the WaterFix costs and authorize permanent water transfers for those SWP contractors who decide not to pay for WaterFix.³⁵ Extending the contracts and amending the definition of facilities that can be funded segments and piece-meals the project. This would allow DWR to issue bonds for WaterFix without contract amendments that confirm how SWP contractors will repay the costs of WaterFix. This segmentation also allows DWR to proceed without analyzing the environmental impacts of the projects which, by definition, need the contract extension amendment to proceed.

The impacts of this virtual blank check contract extension will mine the property taxes and ratepayers who do not even receive water service from the project such as Los Angeles, San Fernando, and Palo Alto communities including areas of Compton, South Los Angeles and East Palo Alto will fall on the poor and lower income residents. None of these impacts have been analyzed or disclosed. Recent reports³⁶ also show the impacts of the proposed newly funded projects such as the WaterFix tunnels will also disproportionately impact lower income and the poor in communities from where the water will be exported from the Delta estuary.³⁷ Additionally the impacts on these same populations including the Tribes and others north of the Delta estuary will also bear the brunt of the environmental, economic and depletion of water supplies to serve other richer developments south of the Delta.

³³ For example Westlands Water District is creating "Solar Farms"
<https://efiling.energy.ca.gov/GetDocument.aspx?tn=210742>

³⁴ See, e.g., Metropolitan Water District of Southern California, Modernizing the System: California WaterFix Finance and Cost Allocation, available online at:
http://www.mwdh2o.com/DOCSVCS/Pubs/WaterFix/assets/cawaterfix_finance_costallocation_whitepaper_factsheet.pdf at 7-8, 20-21

³⁵ <https://www.water.ca.gov/Programs/State-Water-Project/Management/California-WaterFix-contractamendment>

³⁶ <https://www.restorethedelta.org/2018/09/18/icymi-highlights-from-rtds-ej-report-press-conference/>

³⁷ <https://www.restorethedelta.org/thefateofthedelta/>

The potential effects of climate change on the viability of extended contracts with greatly increased balances needs to be addressed.

Assumptions regarding the availability of water and the capability of the SWP to deliver that water have changed dramatically since the contracts were executed in the 1960s. By ignoring these changed circumstances, as it has currently done in the SWP Contract Extension DEIR, DWR has failed to analyze new and significant environmental impacts of changes in SWP operations that will be necessary during the term of the proposed fifty-year contract extension. It is irresponsible and inadequate under CEQA for DWR to fail to account for these changed circumstances (and associated foreseeable changes to the SWP Contracts) in its analysis of the impacts of extending the SWP Contracts.

The findings from the Fourth Climate Change Assessment indicate that water supplies will continue to decline over the life of the proposed term of the extended SWP Contracts. Declining SWP water supplies has several implications that must be assessed in an adequate CEQA review, including, for example: how reduced net revenues will impact the ability to finance SWP facility construction and maintenance; how reduced net revenues will impact the financial stability of the SWP by limiting the ability to repay bonds; and how limited SWP water supplies would likely be shifted from one use to another, causing changes to the landscape in both the areas receiving water and those not receiving water. This will increase the likelihood that areas that can reliably charge more for water (and thus increase net revenues to pay for SWP infrastructure and operations) will receive more SWP water than they have historically. The findings from the Fourth Climate Change Assessment provide significant new information that DWR must consider and incorporate into its analysis of these likely impacts associated with extending the SWP Contracts for fifty years. The need to do so before extending the SWP Contracts is even more acute because DWR has had a long history of circumventing climate-adjusted analysis in addressing the future operation of the State Water Project's keystone Oroville Facilities, whose long-term operating license expired in 2007. More than a decade ago, PCL, and counties in and near the facilities called on DWR to perform that analysis in its Oroville Facilities Relicensing EIR, noting the strong scientific consensus supporting that request. Butte County's comments on the Draft EIR noted the failure to confront flood risks from the Oroville project, including the risk of "catastrophic flooding in and downstream of Oroville" from a "failure or uncontrolled spill" at Oroville dam, and other commenters also noted both the failure of DWR to account for climate change and its understatement of flood risks. Ignoring those recommendations, DWR refused to perform any climate change-adjusted analysis in its EIR for the proposed new 50-year license term, based on a premise its own scientists had already rejected—that the selective range of water conditions experienced in the twentieth century was "expected to continue for the foreseeable future."³⁸ Making matters worse, in still-pending CEQA litigation challenging its refusal to account for climate change, DWR recently shifted course and has joined in the State Water Contractors' attempts to deprive California courts of jurisdiction to review the EIR.

Under current contracts, debt can be issued only for projects and the operation and maintenance for those projects in existence prior to 1987. The new 50 year extension removes this limitation and would open ratepayers and property tax payers to charges for an undisclosed range of facilities

³⁸ http://www.water.ca.gov/orovillerelicensing/FEIR_080722.cfm; see also <https://www.scientificamerican.com/article/california-dam-crisis-could-have-been-averted/>; <http://www.friendsoftheriver.org/wp-content/uploads/2017/09/The-Oroville-Dam-2017-Spillway-Incident-Lessons-from-the-Feather-River-Basin-Final.pdf>

that are likely to deliver even less water while more than doubling the principal costs paid from 1986-2016.³⁹

Spending billions to pour more concrete and build a massive tunnels project ignores climate changes, clings to out of date solutions, and steals funding needed to address looming shortages through conservation and local investments, which have already demonstrated they work and use less energy and cause less environmental damage. Adopting contract changes that launch building tunnels, more diversions, and dams will not address looming shortages. The inevitable impact of climate changes will result in even less water and higher costs to ratepayers and property tax payers who will be on the hook for these massive undisclosed projects, as well as potentially higher costs to safely operate Oroville Dam and other existing facilities.

No Public Access to DWR & Newly Created SWP Contractors' Finance Committee

The actual physical projects that will be funded through the contract extension amendment will be determined in part through a non-public process. The amendments set up a secret finance committee where SWP contractors have direct access to the DWR Director to determine how SWP revenues are to be spent. No public access or ratepayer representatives are provided for in the proposed Contract extension amendment changes. There is no Legislative oversight or transparency because all funding is off budget.

Shifting Recreation and Wildlife Operation and Maintenance Costs to the General Fund Jeopardizes Required Mitigation.

An aspect of the contract extension changes that has received little attention and yet has far reaching environmental and fiscal impacts has not been analyzed under the DEIR. As noted in the PCL et. al. comments on SWP contract extension amendments⁴⁰ the SWP contractors succeeded in getting the adoption of the existing Davis-Dolwig Act language⁴¹ into 50 year water supply contracts. Furthermore, SWP contractors also obtained additional provisions so that there would be no water supply contract charges for required regulatory permit costs along with operation and maintenance charges for these required fish and wildlife facilities and recreation facilities be charged to the contractors. The California State Legislative Analyst Office (LAO) has issued a series of reports indicating that approximately 10% of costs of the SWP are allocated to fish, wildlife and recreation.⁴² Many times, there are no such benefits. These costs are substantial. In addition,

³⁹ See pgs 34-35 Series AW Bonds October 20, 2016 <https://emma.msrb.org/EP554312-EP370213-EP831557.pdf>

⁴⁰ March 4, 2013 PCL et. al. Comment Letter <https://mavensnotebook.com/wp-content/uploads/2014/04/March-4th-PCL-et-al-SWP-Water-Supply-Contract-Extension-Comment-2.pdf>

⁴¹ California Water Code § 11900-11925

⁴² *LAO Policy Concerns and Recommendations Made in Past Years*. We have raised concerns in the past (again, see "[Funding Recreation at the State Water Project](#)," as well as our [analyses of the 2009-10](#) and [2010-2011](#) Governor's budgets) over DWR's practice of using SCRB to calculate the state's share of SWP costs. Most importantly, the practical implication of the use of this methodology (as implemented by DWR) is that DWR assigns cost responsibility to the state for aspects of SWP that lack any direct recreational component.

See <http://www.lao.ca.gov/laoapp/budgetlist/PublicSearch.aspx?Yr=2011&KeyCol=401>

under the Governor's proposed WaterFix, such fish and wildlife costs along with operation and maintenance are likely to total billions of dollars. Adopting contract language that would shift these types of costs from the water supply contract charges to the taxpayers or General Fund would have serious consequences. The LAO has indicated, "*This allocation of costs without Legislative approval conflicts with the Legislature's exclusive constitutional authority to set its expenditure priorities by making appropriations.*"⁴³ Originally only "enhancements" to fish and wildlife were to be funded by the taxpayer and the General Fund.⁴⁴ Governor Ronald Reagan's DWR Director Gianelli explained the cost allocation this way, "*The mitigation of damages to fish and wildlife resources should be mentioned because it differs greatly from recreation and fish and wildlife enhancement. Requirements for preserving existing, or pre-project fish and wildlife resources, or for mitigation of damages to them, produce no new benefits. Water project funds are used for fish and wildlife mitigation facilities and operations. These costs are project costs and are reimbursable*" [emphasis added]⁴⁵

Compliance with Water Code 147.5 Has Not Been Achieved--Pre-Judging CEQA is not Legal.

From DWR's May 10, 2018, hearing request, DWR contends holding the JLBC hearing on September 11, 2018, triggers a 60-day countdown under Water Code 147.5 so DWR can approve the proposed amendments. New terms would last through 2085, decades beyond current expiration dates (2035-2042). DWR has yet to release its Final EIR, or even to respond to major criticisms about the amendments' costs, risks and environmental impacts made during the public comment on the Draft EIR, which closed in late 2016. Key aspects of the amendments' financial consequences remain unstudied. Extensive analysis that DWR is required to provide under Water Code section 147 remains undone. In effect, DWR proposes a significant redefinition of the State Water Project under the label of a contract "extension." As attorney Roger Moore testified at the September 11, 2018 JLBC hearing⁴⁶, the contract extension amendments as currently proposed seek to remove a limitation on coverage of "water system facilities" in Article 1(hh) of the current contracts that would otherwise pose a major obstacle to covering revenue bonds for the Delta tunnels; moreover, the provision DWR cited to the JLBC as its source of authority, "Article 1(ap)," is a proposed provision not in the existing contracts. Without mentioning the Delta tunnels by name, the extension amendments are designed to overcome specific obstacles to including them in financing under the existing contracts. They seek to do that even without adding the separate set of tunnel-specific amendments DWR has been negotiating, which DWR doesn't believe require any legislative oversight, yet they pose additional environmental impacts.

⁴³ See <http://www.lao.ca.gov/laoapp/budgetlist/PublicSearch.aspx?Yr=2011&KeyCol=401>

⁴⁴ http://www.c-win.org/webfm_send/13. Originally, the General Fund paid the costs assigned to recreation, and fish and wildlife purposes. Since 1989, those costs not reimbursed by the General Fund offset an equal amount the SWP owes the California Water Fund. Recreation and fish and wildlife enhancement costs are non-reimbursable by SWP contractors. (However, contractors are responsible for reimbursing mitigation costs related to recreation, fish and wildlife.)

⁴⁵ DWR Bulletin 117 pg 8

⁴⁶ See Roger Moore's 9-11-18 testimony <https://www.restorethedelta.org/wp-content/uploads/RBM-letter-re-JLBC-9-10-18.pdf> and JBLC Hearing September 11, 2018 oral testimony starting at 2:13:30.

As we have described, DWR proposes to redefine “facilities” covered in the SWP contracts to create the illusion that financing the Delta tunnels, or other risky future projects favored by the largest contractors, can get bundled into the State Water Project approved in 1960. That’s why critics have aptly compared the proposed contract extension to a time machine. By changing the definition of covered facilities, they seek to transport the tunnels to an era before the California Constitution expressly required voter approval of property taxes for projects of this magnitude.

The unsubstantiated claim that the amendments proposed are necessary or helpful to ensure continued water deliveries or to address the State Water Project’s operation and maintenance needs without excessive financial burdens has not been analyzed nor the environmental impacts disclosed. As noted in our previous comments, the alternative of utilizing provisions under the existing current contracts, including the Evergreen Clause, has not been addressed. This viable alternative, exploring ways of addressing debt compression problems without including the risky redefinition of project facilities, needs to be analyzed. That will enable decision makers can see the financial issues going forward at the end of the existing 2035 debt term, such that they can be responsibly addressed without forcing ratepayers to accept the risky changes DWR proposes, which could result in a costly escalation of indebtedness. Alternatively, the debt term could be extended without giving DWR a blank check to issue debt for new projects.

It is doubtful DWR can lawfully represent it knows yet what the operative terms and conditions will be. DWR’s May 2018⁴⁷, hearing request admits it has no plans to release the final EIR for the contract extension amendments until after the JLBC holds its hearing—i.e., until after legislative oversight ends. And DWR’s legislative package on the contract extension doesn’t link to, or mention, critical comments still left unanswered on the Contract Extension Draft EIR. DWR provides some older scoping comments, but not the ones referred to above, and JLBC’s legislative staff didn’t know of anywhere they’ve been made available, to the committee or to the public.

Despite the urgency DWR is currently claiming about expediting the contract extension, DWR conspicuously did not respond to letters received before closing public comment in late 2016. Nor can those letters be considered off-point—they identify major, and still unanswered, concerns about legal, environmental and financial risks from the proposed amendments. For example, the October 17, 2016 comment letter from PCL et al.⁴⁸ makes many of the points. The comments challenge DWR’s EIR assertions that the contract extension amendments are “separate and independent” from WaterFix, and that they wouldn’t change SWP operations and facilities. The comments also challenge DWR’s dubious decision to piecemeal the “extension” amendments from the second set of water supply contract amendments (For those, DWR still has yet to prepare even a Draft EIR). Other comment letters on the Draft EIR, such as those from the Center for Food Safety and NRDC, also make a forceful case for the significant risks from the so-called “extension” amendments—and the implausibility of the notion that these amendments aren’t about WaterFix.

Currently there is an incomplete CEQA review. Thus, the language provided to the Legislature could not have contained "*the details of the terms and conditions of the contract and how they serve as a template for the remaining long-term water supply contracts*" and complied with Water Code section 147.5. It is simply not legally possible because DWR has not reached a legal decision pursuant to CEQA as to the final project and final long term contract unless, it was prejudging the

⁴⁷ https://www.senate.ca.gov/sites/senate.ca.gov/files/083018_hearingagenda.pdf

⁴⁸ [October 17, 2016 comment letter from PCL et al.](#)

analysis. Such pre-judgment would be a classic CEQA error⁴⁹--a project definition that doesn't allow for CEQA's "interactive process" of comment and responsive modification. For the Legislature to accept DWR's submission as "*the details of the terms and conditions of the contract and how they serve as a template for the remaining long-term water supply contracts*" would amount to DWR's CEQA review being a sham. DWR can't assume now that it knows what the contract extension amendment language will be after it completes CEQA review.

Conclusion: The DSEIR Must Be Set Aside, Substantially Redrafted And Re-Circulated To Address These Impacts.

All of these events will have significant impacts on the operations of the State Water Project, its contract revenues and associated construction and environmental mitigation. Further these events also have significant impacts on the existing mitigation of adverse impacts from the SWP operations and, hence, "will require major revisions in the environmental impact report." (Pub. Resources Code, § 21166.) Because the DEIR fails to address any of these events and any of these impacts, the DEIR must be set aside and substantially redrafted and re-circulated to address them.

Thank you for the opportunity to provide comment.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
Institute for Fisheries Resources
noah@ifrfish.org



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Adam Keats
Senior Attorney
Center for Food Safety
akeats@centerforfoodsafety.org

⁴⁹ County of Inyo v. City of Los Angeles (II) (1976) 61 Cal.App.3d 91 (appellate jurisdiction and relief); (III) (1977) 71 Cal.App.3d 185 (Owens Valley groundwater management); (V) (1980) 124 Cal.App.3d 1 (groundwater management); (VI) (1984) 160 Cal.App.3d 1178 (dispute resolution); (VII) (1993) Cal. App. unpublished (appellate jurisdiction); (VIII) (1997) (final resolution and dismissal)

Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com

Barbara Barrigan-Parrilla
Executive Director
Restore the Delta
Barbara@restorethedelta.org

Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](mailto:EnvironmentalWaterCaucus)
connere@gmail.com

Eric Wesselman
Executive Director
Friends of the River
caleenwintu@gmail.com

Bill Jennings
Chairman Executive Director
California Sportfishing Protection
deltakeep@me.com

Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net

John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org

Eric Wesselman
Executive Director
Friends of the River
Eric@friendsoftheriver.org

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

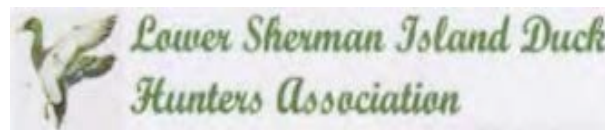
Larry Collins
President
Crab Boat Owners Association
papaduck8@gmail.com

Exhibit 1: CDs 1 & 2: September 11, 2018 Joint Legislative Budget Committee Informational Hearing DWR Proposed Water Supply Contract Amendments.



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180

CA Save Our Streams Council



NORTH

COAST

RIVERS

ALLIANCE



Coalition Scoping Comments on Water Supply Contract Extension

October 10, 2014

Ted Alvarez
State Water Project Analysis Office
Department of Water Resources
1416 Ninth Street, Room 1620
Sacramento, CA 95814

E-mailed to ted.alvarez@water.ca.gov

Subject: Scoping Comments on EIR for Water Supply Contract Extension and Negotiated Agreement in Principal (AIP) Project (Contract Extension)¹

Dear Mr. Alvarez:

The undersigned groups represent hundreds of thousands of ratepayers and taxpayers throughout the State. We appreciate the opportunity to comment on this proposed project that includes amending certain provisions of the State Water Resources Development System (SWRDS) Water Supply Contracts (SWP Contracts) to among other things, extend the term of the contracts. SWRDS (defined in Water Code Section 12931), or more commonly referred to as the State Water Project (SWP), was enacted into law in the Burns-Porter Act.

The California Department of Water Resources (DWR) is the lead agency to assess the environmental impact of extending the SWP contracts for an additional 50 years as contemplated under The Project and AIP, which has not been approved by all of the existing 29 State Water Contractors (SWP Contractors).

The proposed changes must be evaluated with the benefit of historical knowledge. Some 75 years ago with various amendments adopted since², DWR and each of the SWP Contractors entered into SWP Contracts in the 1960's with the expectation to achieve full payment of the then estimated \$1.75 billion dollar cost, but which at the present time has more than quadrupled. Despite being generally uniform, there are significant contract differences and different amendments to the various individual contracts that have been made over time, including the Monterey Plus Amendments that are currently under court challenge.³ Because the first SWP Contract—executed by DWR and Metropolitan Water District of Southern California (MWD)—terminates in 2035, DWR has determined that this date limits the debt issuance timeframe for all contracts. All SWP contracts will terminate by 2042. Thus the contract extension proposed in the AIP could provide a debt term of up to 2085 (2035 plus 50 years) where ratepayers and taxpayers would be obligated to continue to fund the SWP project and an as yet undefined list of capital projects.

Through the AIP, the SWP Contractors wish to rely on the State of California credit rating and continue to have DWR sell revenue bonds for some as yet to be specified SWP

¹ http://www.water.ca.gov/swpao/watercontractextension/docs/00202-AIP_Concerning_Extension_of_SWP_Water_Supply_Contracts_Execution_Version_6-18-2014.pdf

² See Preliminary Official Statement Dated September 19, 2014—\$652 Million, State of California Department of Water Resources Central Valley Project Water System Revenue Bonds Series AS pages 43-52

³ <http://calsport.org/news/court-strikes-down-environmental-review-of-kern-water-bank/>

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operation, maintenance and construction projects for another 50 years into the future. Moreover, they would accomplish this by creating a non-public “financing committee” consisting of specified contractors with those who receive the greatest “water entitlements” having prime membership and concentrated influence. The project would extend the termination dates of all SWP contracts with unknown impacts to ratepayers and taxpayers under “take or pay” contracts that guarantee property tax levies for the amounts borrowed if ratepayer revenues are insufficient. The stated objective is to “ensure DWR can continue to affordably finance SWP expenditures well into the future.” These expenditures and proposed “operation, maintenance and construction” projects, however, remain undefined. The estimated amounts of ratepayer and taxpayer debt and revenue needed for these as yet to be defined projects for some 50 additional years also remains undefined.

The undersigned groups adopt by reference previous comments sent to DWR during the SWP Contract Extension negotiating sessions, where issues and impacts to the environment were raised and need to be addressed by the proposed project.⁴ Additionally the undersigned groups have additional concerns that need to be addressed in six key areas:

1. The nature and scope of the projects being funded and associated revenue requirements need to be clearly defined.
2. The “no project” alternative needs to be clearly defined and evaluated.
3. The full range of project alternatives needs to be identified, described, and evaluated.
4. The impacts to SWP contractors who choose not to sign the proposed contract extension must be clearly explained, defined and justified in terms of Table A allocations, conveyance capacity and the ability to transfer water supplies. Scare tactics are currently being used to coerce SWP contractors into supporting the contract extension and the Bay-Delta Conservation Plan (BDCP).
5. The Contract Extension and Negotiated AIP project appears to piecemeal multiple poorly defined projects, apparently attempting to avoid the legally required assessment of cumulative impacts.
6. The impact on fish and wildlife from Objective 3(d) in the AIP whereby the SWP contractors would no longer be responsible for funding certain fish and wildlife and recreation impacts from the projects.

Each of these concerns is described in more detail below.

1. The Nature and Scope of the Projects Being Funded and Associated Revenue Requirements Need to be Clearly Defined:

The single most critical concern we have with the proposed Contract Extension is that there is no clear plan for what “projects” would be funded by the increased revenue, nor what the revenue requirements are, and thus the potential impacts cannot possibly be evaluated. Critical to a determination of whether a project has significant impacts is the definition of the project itself. The proposed contract changes will obligate taxpayers and ratepayers to pay

⁴ http://www.water.ca.gov/swpao/watercontractextension/public_comments.cfm

July 3, 2013 comment letter; July 11, 2013 comment letter; September 23, 2013 email comment; January 29, 2014 comment letter and March 3, 2014 comment letter.

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for unspecified capital projects with unspecified impacts. Objective 3C of the AIP eliminates the January 1, 1987 date for existing facilities within Article 1(hh). This will open the door to financing projects with unknown impacts and costs. The amount of debt and payment under the proposed changes for each contractor is tied to a formula for an unrealistic amount of project yield. Ratepayers and taxpayers, along with decision makers, need to know the capital costs proposed to be financed with the proposed changes. In addition to the amount of revenue needed to fund the existing SWP capital projects, it appears that the contract extension may also fund future SWP capital projects. These expenditures, revenues and costs for these proposed projects must be defined. Without an accurate description of the capital project needs, ratepayers, taxpayers and decision makers would be asked to provide financing for what amounts to a blank check.

As one example, financing a blank check of debt would have significant impacts on local land use planning. Land use decisions are predicated in large part on assumptions about the available water supply. Nature has not provided the water assumed under the existing SWP project. This paper water is an illusion. Revenues continue to be based on these imaginary entitlements for the build out of a project that has not happened and probably never will. The Contract Extension by definition should not continue to promote this fantasy. Ratepayers have a right to know the realistic costs of the existing SWP project, operation and maintenance costs and proposed future projects all to be funded by this contract extension.

A possible example of the types of capital costs and required revenues to be financed under the proposed project can be found under the State of California Department of Water Resources Central Valley Project Water System Revenue Bonds Series AS—Preliminary Official Statement Dated September 19, 2014—for \$652 Million. (See Appendix I Capital Expenditures for Water System Projects, listed as of September 4, 2014.)⁵ Starting at page I-6 is a list of “Water System Projects” that have not been completed, but could be funded by the issuance of such debt including the “*Delta Facilities Program*” which includes dredging, channel improvements, flow control etc. Any such facility anticipated to be funded by the Contract Extension changes would need to comply with permit conditions pursuant to the United States Army Corps of Engineers compliance with Section 404 of the Clean Water Act which prohibits discharge if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem.

The proposed projects and associated costs to be funded by the Contract Extension also likely will impact the General Fund expenditures and Legislative decision making and planning. Without an accurate project description these impacts will remain unknown. For example the California Legislative Analysis Office has noted, “*Existing statute provides DWR with the authority to spend SWP funds without legislative approval for these purposes. As an example, DWR is moving ahead with a \$350 million capital improvement project to make seismic safety retrofits to the dam at Lake Perris without legislative oversight—even though a portion of costs will be allocated to Davis-Dolwig and could be viewed as an obligation of the state. The SWP contractors have raised concerned with the portion of costs that they will be required to*

⁵ Ibid. Appendix I see pages I-1 to I-8.

pay for Lake Perris, as they feel that there is limited water supply benefit and a more cost-effective alternative to the capital improvement project exists.”⁶

The Contract Extension also proposes a mechanism for financing capital projects with SWP Project funds and recovering those costs with interest from the SWP Contractors along with establishing an account to pay for certain SWP expenses not chargeable to the SWP Contractors. What future projects and associated impacts are anticipated from this change? How will these proposed increased revenues and debt with interest, especially under paper water entitlement provisions, impact local land use decision making, schools, libraries, prisons or other essential services?

2. The “No Project” Alternative Needs to be Clearly Defined and Evaluated.

Equally critical to assessing the impacts from the proposed Contract Extension is the definition of the “No Project Alternative.” In addition to an accurate “scope of work” to be funded by the proposed project, a clear description of the existing project is required. This “no project” description must describe under the current SWP Contracts the amount of principal paid, amount owed and why the current or existing SWP project facilities will need additional revenues past the pay off date under the existing contracts. Ratepayers and taxpayers agreed to contract terms some 75 years ago that anticipated the project would be paid in full at the end of the term. What are the amounts of the original remaining capital costs under the existing contracts? What are the anticipated revenue needs for maintaining the existing capital system? How much would each of the 29 contractors be required to pay in annual expenses to maintain the existing system? Under the existing costs and revenues, why is another 50 years of debt required? The current contract provisions authorizing DWR to charge the SWP Contractors annually for the full amount of the required annual debt service and coverage on the bonds will continue in any extended contract. This baseline of existing capital costs, revenues and expenditures needs to be clearly provided and is essential for each contractor and the State of California to understand and weigh the impacts of the proposed project.

Under existing contract provisions the Bay Delta Conservation Plan—Delta Habitat Conservation and Conveyance Program (BDCP-DHCCP) planning activities have been funded through activity agreements and operation and maintenance charges under the existing SWP Contracts. These costs have more than doubled since commencing in 2009. They are expected to more than double again sometime in 2014 or 2015.⁷

3. The Full Range of Alternatives Needs to be Identified, Defined, and Evaluated

Any environmental analysis of the proposed Contract Extension needs to look at the impacts of a full range of alternatives. At a minimum, once the baseline remaining capital costs are known and a realistic list of operation and maintenance projects provided, then the revenues needed to maintain the existing SWP project system can be assessed and the

⁶ http://www.lao.ca.gov/analysis_2009/resources/res_anl09004003.aspx

⁷ http://www.mercurynews.com/ci_24795356/delta-tunnels-plans-true-price-tag-much-67 Delta tunnels plan's true price tag: As much as \$67 billion by Paul Rogers San Jose Mercury News December 2013.

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alternatives can reasonably be defined and considered, including a shorter refinancing period. Also many smaller districts appear to have been threatened with the loss of their current water supplies and capital investment if they do not agree to the proposed contract extensions. If true, an alternative to this type of extortion is needed.⁸ At the present time, pending SWP capital projects are estimated to require expenditures of at least \$1.5 billion. The proposed extension will lengthen the term of the contract potential by some 50 years, and allow these capital expenditures to be financed over an extended financing period. The City of Santa Maria contends, *"If the contract expires and the (Santa Barbara) County fails to extend the contract beyond 2035, County water purveyors will no longer have rights to State Water, thereby rendering useless a capital project that has already been paid for. Some have characterized this as paying off your house before burning it to the ground."* If the City of Santa Maria's analysis is correct—DWR has threatened that failure to approve this contract extension will result in the loss of 'rights to State Water' that one has paid for pursuant to the current contract and paid in full—then the EIR needs to fully evaluate alternative financing, debt, and contract extension provisions so that existing capital investments are protected without a threat to the loss of water or access to SWP water if one chooses to operate under the existing contract provisions and payout provisions. This could include pay-as-you go or alternative debt issuance by individual contractors so any ongoing identified operation and maintenance costs are paid, and yet, entities are not obligated to expensive additions that likely will produce little or no water supplies.

Previous contract amendments adopted under the December 1994 Monterey Amendment have twice been challenged in court and the courts have held the environmental reviews insufficient. DWR has agreed under a settlement agreement from the first lawsuit to pay for certain watershed improvements in Plumas County. These costs and expenditures need to be considered in the full range of alternatives and as part of the definition of the current project costs and contract obligations and under any project contract extension. Additionally, on March 5, 2014 and October 2, 2014, the Sacramento Superior Court ruled the EIR for the transfer of the SWP's Kern Water Bank was not sufficient and the environmental impacts of the transfer were not analyzed.⁹ In the October 2, 2014 ruling, the court stated:

"DWR's environmental review should include the transfer, development, and operation of the Kern Water Bank. The terms of the Settlement Agreement require the EIR to include such analysis." P.7 of 15 of Opinion issued on Oct. 2nd.¹⁰

A full range of alternatives under the Contract Extension should consider both the financial and resulting physical impacts of divesting this public asset to control by a private company.

4. The impacts to SWP contractors who choose not to sign the proposed contract extension must be clearly explained, defined and justified in terms of Table A allocations, conveyance capacity and the ability to transfer water supplies. Scare

⁸ http://www.cityofsantamaria.org/staffrep/Archive/2013/Oct_01/3H.pdf

⁹ <http://calsport.org/news/court-strikes-down-environmental-review-of-kern-water-bank/>

¹⁰ http://www.c-win.org/webfm_send/451

tactics are currently being used to coerce SWP contractors into supporting the contract extension and the Bay-Delta Conservation Plan (BDCP).

Will SWP contractors lose their Table A Allocation if they don't sign the contract extension? Why?

Will SWP contractors lose their capacity in SWP conveyance facilities if they don't sign the contract extension? Why?

Will SWP contractors lose their ability to transfer purchased water in the SWP conveyance facilities if they don't sign the contract extensions? Why?

5. The Contract Extension and Negotiated AIP Appears to Piece-Meal Multiple Poorly Defined Projects, Apparently Attempting to Avoid the Legally Required Assessment Of Cumulative Impacts.

Under the California Environmental Quality Act (CEQA), cumulative impacts of all aspects of the project must be identified and “piece-mealing” a project is prohibited. Although the Contract Extension and negotiated AIP states the BDCP and DHCCP participation decision will not be part of the SWP contract amendment—a separate public negotiation and environmental review process to develop appropriate SWP water supply contract amendments for the BDCP and DHCCP is already scheduled for December 2014.¹¹ As mentioned above, under existing SWP contract provisions, planning for the water tunnels anticipated under the BDCP and DHCCP are presently funded.¹²

It would be illogical for the proposed 50 year Contract Extension to evaluate the direct impacts of this extended term of debt, and the resulting list of SWP projects that would result or are needed to be funded with the issuance of the debt, and yet completely ignore the impacts of the pending 50 year permit being sought under the BDCP/DHCCP project. Simply put, the Contract Extension enabled under the negotiated AIP is essential for issuing the debt to fund the BDCP-DHCCP—thus they are inexorably linked. The SWP Contractors clearly

¹¹ http://www.water.ca.gov/swpao/watercontractextension/docs/00202-AIP_Concerning_Extension_of_SWP_Water_Supply_Contracts_Execution_Version_6-18-2014.pdf pg 12.

¹²http://awpw.assembly.ca.gov/sites/awpw.assembly.ca.gov/files/hearings/First%2BAmendment%2BMOA%2BSept%20%2B2011_ocr.pdf and see the April 11, 2013 MOA Agreement for the Funding Between the Department of Water Resources and the San Luis Delta Mendota Water Authority for the Costs of Environmental Analysis, Planning and Design of the Delta Conservation Measures, including Delta Conveyance Options.

<http://www.kysq.org/docs/MWD.%20BDCP.Cost.Analysis.Sep2010.pdf>

The DHCCP Funding Agreement establishes uniform terms between participating SWP contractors and DWR to fund their collective half of DHCCP costs. The DHCCP Funding Agreement provides program costs to be included in each participating SWP contractors' annual Statement of Charges. Table 1 captures the BDCP and DHCCP program budgets and identifies Metropolitan's share that would be applied to its annual SWP Statement of Charges. Metropolitan's share of these planning costs is incorporated into its annual budget for SWP supplies. 9/14/2010 Board Meeting pgs 1-2.

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understand this necessary link. For example a Kern County Water Agency staff memo in September 2013, noted, “DWR and SWP Contractors need to come to agreement on a contract extension that matches the term of the BDCP and provides the SWP Contractors with a more appropriate role in managing SWP expenses.”¹³ And, in response to a State Water Project Contractors Authority’s request for a proposal regarding financing the BDCP-DHCCP in March 2014, Morgan Stanley Investment Banker’s stated,

“Water Supply Contracts. We understand that DWR’s water supply contracts are in the process of being extended, likely to 2085, or 50 years from 2035 when most expire. Clearly, in order to finance the substantial costs associated with CM1 in the BDCP, the extension of these contracts is essential to allow for the amortization of financing payments over a long period of time.”¹⁴

To investment bankers, the contract extension is “essential” to the financing of the BDCP-DHCCP. Clearly, this is a “reasonably foreseeable probable future project” that in fact requires this fifty-year contract extension for the viability of financing. Despite the AIP suggestion that environmental review of the financing of the BDCP-DHCCP will occur in December 2014 in a separate environmental document, these two projects are intimately connected. The law requires that environmental reviews must be fully analyzed in a single environmental review document and not in a piecemeal manner, or segmented into two separate reviews. Chopping up the project in such a manner fails to analyze the entire project with consideration of its cumulative effects.

6. The impact on fish and wildlife from Objective 3(d) in the AIP whereby the SWP contractors would no longer be responsible for funding specified fish and wildlife and recreation requirements for the SWP. [This provision is designed to avoid the FERC licensing mitigation measures among others. They include recreation and FERC views them as mitigation and part of the project’s responsibilities.

The EIR should analyze alternatives to Objective 3(d) in the AIP (page 11) whereby the public, rather than SWP contractors would pay for specified fish, wildlife and public recreation. Public funding is limited for fish, wildlife and recreation, and often mitigation of SWP impacts is incorrectly identified as enhancement. The reduction of funding in Objective (3d) for fish, wildlife and recreation adversely affected by construction and operation of the SWP should be disclosed. Alternatives need to analyze with and clearly disclosed the impacts. To assist in weighing these impacts an alternative where the costs would be reimbursable by SWP contractors needs to be presented. The environmental impacts of reduced or eliminated payments for fish, wildlife and recreation should clearly be identified compared to existing conditions.

¹³ Kern County Water Agency memo dated September 23, 2013 “Resolution of Issues Necessary to Inform a Development of a Business Case to Support a Decision on Continued Funding for the Bay Delta Conservation Plan and the Delta Habitat Conservation and Conveyance Program. Page 1.

¹⁴ See Morgan Stanley: State Water Project Contractors Authority: Response to Request for Qualifications and Proposals for Underwriting Services March 19, 2014 pg 8.

Coalition Scoping Comments on Water Supply Contract Extension


Conclusion

Evaluation of the proposed Contract Extension and negotiated AIP project needs to clearly address the four concerns that we have outlined and answer the following questions:

1. How much is still owed in capital costs for the existing SWP?
2. How much revenue is required and what is the basis for the determination?
3. Have the needed revenue projections taken into account the lack of water sales due to climate change and droughts? If not, the source or sources of water that will supplement a dwindling supply must be fully disclosed and impacts evaluated.
4. What is the list of projects that make up the need for the additional revenues under the contract extension of some 50 years?
5. What is the proposed 50 year repayment contract term based upon?
6. Over the 50 year contract extension term how much of the revenue is projected to come from property taxes?
7. If the projection of capital costs and revenue needs does not include the proposed BDCP-DHCCP water tunnels, then why doesn't the proposed contract clearly state no revenues generated by the extension will be used for the BDCP-DHCCP project?

Thank you for the opportunity to comment.

Sincerely,



Carolee Krieger
Board President and Executive Director
California Water Impact Network
Caroleekrieger7@gmail.com



Bill Jennings
Chairman and Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Barrigan-Parrilla
President
Restore the Delta
barbara@restorethedelta.org



Larry Collins
President
Crab Boat Owners Association Inc.
lcollins@sfcabboat.com



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League
jminton@pcl.org

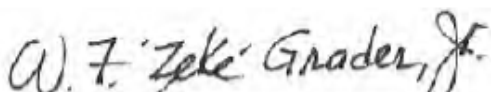
Lloyd Carter
President
Save Our Streams Council
lcarter0i@comcast.net

Coalition Scoping Comments on Water Supply Contract Extension



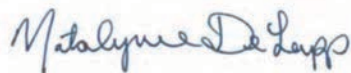
Conner Everts
Executive Director
Southern California Watershed Alliance
And Environmental Water Caucus
connere@gmail.com

Roger Mammon
Lower Sherman Island Duck
Hunters Association
r.mammon@att.net



Zeke Grader, Executive Director
Pacific Coast Federation of
Fishermen's Associations and Institute
for Fisheries Research
zgrader@ifrfish.org

Kathryn Phillips, Director
Sierra Club California
Kathryn.Phillips@sierraclub.org



Natalynne DeLapp, Executive Director
Environmental Protection Information Center
natalynne@wildcalifornia.org

Diana Jacobs
Chair, Board of Directors
Sacramento River Preservation Trust
diana@sacrivertrust.org

Larry Glass, President
Safe Alternatives for our Forest Environment
Larryglass71@gmail.com

Cecily Smith
Executive Director
Foothill Conservancy
cecily@foothillconservancy.org



Barbara Vlamis
Executive Director
AquAlliance
barbarav@aqualliance.net

Lowell Ashbaugh
Northern California Council
Federation of Fly Fishermen
ashbaugh.lowell@gmail.com

Marty Dunlap
Citizen's Water Watch of Northern
California
dunlaplegal@yahoo.com

Chelsea Tu
Center for Biological Diversity
CTu@biologicaldiversity.org

Miriam Gordon, California Director
Clean Water Action
mgordon@cleanwater.org

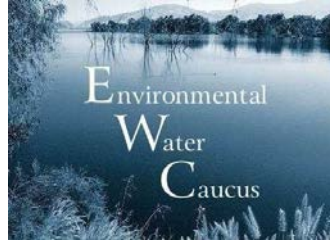
Ron Stork
Senior Policy Staff
Friends of the River
rstork@friendsoftheriver.org

Robyn DiFalco
Executive Director
Butte Environmental Council
robynd@becnet.org

Dan Bacher, Editor
The Fish Sniffer Magazine
danielbacher@fishsniffer.com

Coalition Scoping Comments on Water Supply Contract Extension

Frank Egger
North Coast Rivers Alliance
fegger@pacbell.net



CA Save Our Streams Council

January 29, 2014

Carl Torgersen
Deputy Director of the State Water Project
California Department of Water Resources Contract Extension
1416 9th Street, Room 1640-H4
Sacramento, CA 95814

Via email: watercontractextension@water.ca.gov

Subject: State Water Project Water Supply Contract Extension Project—Project scope & financial risk to retail ratepayers and taxpayers needs to be disclosed, expansion of scope needs to be clearly prohibited, contracts in default should return water to the public and the urban preference reinstated.

Dear Mr. Torgersen:

The undersigned respectfully submit the following comments regarding the SWP water supply contract extension negotiation project.

As you reported at the last negotiation session, failure to be transparent “makes the hair on the back of State DWR Director Cowin’s neck stand up.” This alarm expressed by Director Cowin is shared by ratepayers and taxpayers who will be the ones on the hook for the unspecified scope of allowable costs, unspecified legislative changes, and the increased risk to bondholders and the public from excessive debt needed to fund this blank check of unspecified costs. We have carefully monitored the negotiations and herein argue for both improved transparency AND improved protection of public interests.

A. Ratepayer and Taxpayers Threatened by Unspecified SWP Capital Costs.

The retail SWP customer—ratepayers and taxpayers—are on the hook to pay sufficient revenues to the Contractors to fund the operations, maintenance, replacement reserve, and emergency costs of the State Water Project. If one contractor cannot pay under contract provisions, the remaining contractors must pick up that financial burden, even if it means increasing both property taxes and water rates. As mentioned in previous comments, the original cost promise of \$1.75 Billion has more than quadrupled under the present 75—year contracts, which are set to expire around 2035 for most contractors.

B. Scope of Allowable Capital Costs must be clearly defined: If the Peripheral Tunnels (BDCP-DHCCP) are excluded, as has been claimed during negotiations, then the contract should clearly prohibit such financing under the Water Supply Contract Extension.

It remains unclear what will be financed under the water supply contract renewals for another 40 to 75 years. Mr. Torgersen and Metropolitan Water District chief negotiator, Deven Upadhyay, have said the financing of the peripheral tunnels—the Bay Delta Conservation Plan (BDCP) and Delta Habitat Conservation and Conveyance Program (DHCCP)—are “not part of this negotiation.”¹ To back up these public statements, any extension of the water supply contracts should clearly state that any new Delta conveyance or Peripheral Tunnels planning, construction, and associated mitigation costs are not allowable charges under the contract extension. This water supply contract extension needs to be transparent on this and other potential expansions of scope—and should not hide financing of the Peripheral Tunnels or any other new conveyance project in the Delta Estuary. A clear cut statement is needed that the various new funding pots, supplemental billings, emergencies, expenditures, and the “new” chartered financing committee (led by DWR and Contractors) is not intended to fund, without public review, expensive new capital projects or any planning for such projects. As we have stated before, the public has a right to know what their ratepayer charges and property taxes will fund.² They took on debt and paid increased property taxes believing the project would be paid for by 2035. Now, some 65 years later, we are told more debt must be issued that they need to spread out payments for another 75 years.

C. As a “Package” Deal, all Elements of the Package Needs to be disclosed for Public Comment and Review Pursuant the Monterey Settlement Agreement.

At the last negotiation session, final touches on the charter for the Finance Policy Committee were set for review by department and water contractor lawyers. Ratepayers and California State Legislative representatives are absent from this high level “finance policy” committee, which has uniquely influential “direct” access to the DWR Director to ‘assist’ in financial decision making with regard to funding for the SWP.

Negotiations have clearly stated that the term of the contract extension, the formation of various funding pots—supplemental billings, cash reserves and ‘emergency’ funding—and this new Finance

Committee are a “package deal.” The claim is that this “Finance Policy Committee” can be formed by charter and implemented outside of the contract extension approval process.³ By definition, however, it is part of the State and inseparable from the contractors’ actions and the water supply contract extension. Thus, there is a need for full environmental and fiscal review by the public through disclosure in CEQA documents prior to implementation and approvals of such a major State and water contractor action.

MWD’s chief negotiator, at the last negotiation session, referenced the need for some legislative changes that would be outside of the contract extension negotiations. Any such contemplated changes need to be disclosed for public review and comment. The State Water Project, pursuant to the Burns Porter Act, authorized \$1.75 billion in general obligation bonds to fund capital costs of the State Water Project.⁴ *“An additional \$510 million for Project construction came from the California Water Fund which was created using Tidelands Oil revenues. Since the Tidelands funds were an interest free loan, taxpayers have had to make up for the money that the state declined to charge in interest.”*⁵ Pursuant to the State of California Central Valley Project Act, additional capital costs of some \$7 billion have been funded with the issuance of revenue bonds.⁶ One of the main rationales given for this contract extension beyond the existing repayment term is that the Department of Water Resources cannot sell revenue bonds whose maturity dates extend past the contract end date of 2035—and that all project costs have a revenue source including recreation costs and mitigation costs. Thus, the proposed strategy contends that issuing more debt to finance the necessary capital expenditures would be more affordable if bonds with longer terms could be sold. But, there is no specific plan provided of the amounts of money needed and “necessary” capital expenditures. Ratepayers, taxpayers and the public at large, all of whom thought the debt already issued would fund the capital expenditures and be paid off in 2035, have a right to know why more debt is needed, how much is needed, when it will be needed, and for what it will be spent.

Federal and state water contractors are also seeking additional SWP financing authority to fund the \$51 to \$67 billion peripheral tunnels delta conveyance that proposes to divert water directly from the Sacramento River bypassing the Delta Estuary.⁷ Water Code §85089 requires the beneficiaries to enter contracts to pay these costs.⁸ Under current law authorizing the State Water Project, there is no clear DWR authority to accept and spend state and federal contractor moneys for pre-construction activities and, in the case of state water contractors, collect revenues and repay debt service on the statement of charges.⁹ Perhaps this is the change referenced in the negotiations. The public has no way of knowing because, thus far, there has been only passing reference without disclosure. Any such “package deal” of anticipated legislative or contract changes to allow such activities should be publicly disclosed.

D. Increased Risks to Ratepayers, Taxpayers and Bondholders Need Greater Transparency.

1. Debt Reserves Reduced By 50% & Riskier Investments Authorized.

The lower reserve requirement and reliance on reserve investments outside of cash can be viewed as risky or a *negative* credit event for the bond holders. The counterclaim contends that relying on MWD's property taxpayers and ratepayers is sufficient to avoid this risk and provides an opportunity to return more cash to the contractors and to 'reimburse' costs needed to fund the planning and engineering costs of the new water tunnels under the delta conveyance strategy.¹⁰ These would be exceptional and unreasonable burdens on MWD ratepayers, and is highly unlikely to be simple to implement. The reduced reserve cash is substantial and most likely being used to pay off contractors and other expenses, but the amounts are not disclosed in one location. This concentrated reliance on MWD ratepayers and taxpayers is also a risk to other smaller or less 'wealthy' SWP contractors, who may lose their water in the process. Contractors who have paid into the project for years may not be able to afford these massive increased costs. Requests for an "opt out" option have thus far been ignored.¹¹

2. Any Payment Defaults Require the Rest of the SWP Contractors to Step Up and Pay More, Therefore Increasing Costs to Retail Customers.

In 2000, DWR and the SWC started a process to reduce the maximum annual debt service (MADS) level by 50% and authorize riskier investments for reserve funds.¹² This below average reserve is brushed aside by those who proposed it and benefit, but over the next 75 years, given climate changes, droughts and increased energy pumping costs, ratepayers and taxpayers in Southern California (who now provide the bulk of the SWP revenue that services the debt), could balk at ever increasing water rate and property tax rates.¹³ Some MWD customers, such as San Diego Water Authority, have filed suit over the rate increases and property tax charges.¹⁴ Additionally, default provisions in the existing water contracts require the other SWP contractors to pick up these defaulting contractors and to pay regardless of whether they receive water.¹⁵ And, in the event of a contractor's operating revenues being less than required to make its fixed contract payment, the contractor has an obligation to levy a property tax assessment in an amount to make up the shortfall (this supplemental levy falls outside of the Proposition 13's 1% property tax limit).

3. The Risk of Partnering with Federal Contractors Needs to Be Disclosed.

Westlands Water District (WWD) is likely to issue debt to pay up to 90% of the federal half-share of the DHCCP-BDCP additional planning costs of \$1.2 billion due this year. State Water Project contractors need to raise the other \$600 million.¹⁶ Retail irrigators, like Mark Borba of WWD, recently rang the alarm bell because of rising costs of water and the fear of losing his land. Mark Borba stated, "*With regard to the \$1.2 billion, and I guess our share is just about half—that's roughly \$1,100 an acre debt on every acre in the Westlands Water District just to prepare the documents, get the engineering done, and we haven't turned a teaspoon of dirt... If the District goes broke, will the bondholders not come back [and go after the Westlands landowners]?*"¹⁷ In reply, Westlands' General Manager Tom

Birmingham reassured Borba that Westlands landowners are not at risk. Birmingham, reported WWD would just declare bankruptcy in the event of the inability to meet its debt obligations:

*“The security on the bonds is the [Westlands] District’s revenue, not the landowner’s land. [I]n a worst case, we file for bankruptcy. That’s what the District could do. The landowners’ land is not security.”*¹⁸

In 2009, at the time WWD became the obligator for the federal share of debt for the Delta Conveyance facility planning and engineering costs, bond rating agencies, based on WWD documents, assured bondholders that it could sell water to Southern California or the Bay Area, even though the water rights are held by the federal taxpayers and WWD does not have long term contracts for the water.¹⁹ Note that the United States holds the water right, that this water is supplemental and available only when there is water that is surplus to other higher priority water right holders. This raises a fundamental question for state contractors and their retail customers—will the new contract being negotiated require them to pay the costs of any as yet undisclosed additional SWP capital facilities if a federal contracting partner defaults? Again, if the SWP contract extension does not anticipate how the costs of new capital facilities will be charged under the proposed contract extension, then a strict prohibition against such charges needs to be included. A clear-cut statement is needed to protect retail customers, ratepayers and taxpayers from potential “liar loans” based on paper water.

4. Water from Any Defaulting Contractor Should Be Used to Reduce “Paper Water” Promises.

As stated under existing state water supply contracts, any default requires the other contractors who have not defaulted to pay the bills; the allocation of water supplies is then adjusted among the remaining contractors. It is likely that only the large irrigators under federal water contracts or mammoth urban contractors under the state contracts are favored under such a reallocation. It is likely that small retailers will be priced out of the market. Most important, however, nothing is done to reduce the unrealistically large quantity of “Paper Water”—it’s just reallocated! Instead, since the public has paid a substantial portion of the State Water Project (about \$2 billion), any failure to pay should be viewed as an opportunity to reduce the paper water promises and dedicate this “freed-up” water to public trust values. Rather than allow a contractor to remarket and sell these precious, over-allocated water supplies, the inflated yield of the project needs to be reduced.

E. In Times of Drought and Shortages the Urban Preference—Drinking Water Over Irrigation—Needs to be Reinstated.

The present drought reminds us that the urban ratepayer who has paid a disproportionate amount of the costs for the SWP needs the reliability that, during times of shortage, drinking water will

receive priority over irrigation of crops. Many have criticized the export of so much water for supplemental irrigators. University of California Professor Emeritus, Dr. Richard Walker recently remarked, *“I have a better solution. Instead of building the Delta Drains, use the money to buy out Westlands, about \$9 billion at current land prices. This would be cheaper and have the added benefit of saving 1 million acre-feet a year (average) now going to Westlands, leaving that water for other farmers and urban users.”*²⁰ It bears repeating for decades, urban ratepayers invested millions of dollars to ensure an urban preference during times of shortages.²¹ Others note that drinking water, domestic supplies and irreplaceable public trust values threatened with extinction should have priority over irrigators. *“I understand that almonds garner high prices worldwide and are profitable for Californian farmers. But maybe in an extreme drought, the governor could decide that he wants to spend our limited water on preserving our native species, and not providing Chinese people with pleasant snacks.”*²²

The urban preference was an insurance policy whereby these municipal water users would receive water on a priority basis during times of water shortages. In closed door SWP contractor sessions, without ratepayer or public participation, this preference was removed in 1995. Given droughts, climate extremes, and uncertainty of State Water Project water supplies, any contract extension must include this preference and reinstate these contract provisions that were removed without ratepayer notice or participation. This urban preference requirement would ensure that decades of promises, contract obligations, and ratepayer investments by these users, who pay the bulk of the project costs, would not be abrogated. *“It is one of the many ironies of the SWP that those who get the most water pay the least, while those who get the least pay the bulk of the costs.”*²³

Thank you for consideration of these views from groups representing hundreds of thousands of ratepayers and taxpayers throughout the State of California.



Bruce Reznik
Executive Director
Planning and Conservation League
breznik@pcl.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@gmail.com



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com

cc: Interested Parties

Attachments:

A: Gary Lasky, Transcription of Westlands Water District Board Meeting 1-15-2014, Harris Ranch, Ca.

B: 26th Supplemental May 1, 2002 No DWR-WS-49 Amending 1986 DWR Bond Resolution Central Valley Project Water System Revenue Bonds General Bond Resolution No DWR-WS-1

C: 25th Supplemental May 1, 2002 No DWR-WS-48 Amending 1986 DWR Bond Resolution Central Valley Project Water System Revenue Bonds General Bond Resolution No DWR-WS-1

ENDNOTES

¹ See http://www.water.ca.gov/swpao/watercontractextension/2013_contract_negotiations.cfm & [Department of Water Resources Objectives](#) also see <http://mavensnotebook.com/2013/09/04/contract-length-cash-reserves-and-more-input-from-contractors-at-issue-in-state-water-project-negotiations/>

² This includes seismic retrofit costs of existing facilities, FERC relicensing costs and required mitigation measures, along with changes to debt financing resolutions that would use debt to amortize and fund operations and maintenance, and the added debt costs of “capitalizing” interest costs if included in the financing proposals.

³ [SWRDS Finance Committee Charter - Draft 01.08.14 v.3](#)
http://www.water.ca.gov/swpao/watercontractextension/contract_negotiations.cfm

⁴ Under State statute issuance of Revenue Bonds by the Department of Water Resources [DWR] to fund the SWP automatically requires or places a lien on property taxes from the contracting water districts to repay for the revenue bond debt obligations. To date water districts have utilized a combination of water rate increases and property tax assessments to cover the costs of the SWP. In adopting a bond funding resolution DWR typically relies on the Central Valley Project Act (Water Code, § 11100 et seq.), enacted in 1933 as amended. Under the act the department is empowered to construct and operate various water facilities, among which are those authorized by section 11260 of the Water Code. The act further empowers the department to issue revenue bonds to carry out the objects of the act and provides that the bonds shall not be obligations of the state but shall constitute a first lien on revenues. (Water Code, §§ 11700, 11705, 11720-11722.)

Some mistakenly believe that DWRs authority to issue the revenue bonds was superseded by the California Water Resources Development Bond Act [the Burns-Porter Act Water. Code, § 12930 et seq.]. This was passed by the Legislature in 1959 & approved by the voters in 1960. The Burns-Porter Act authorizes the department to construct and operate the State Water Resources Development System, and provides for the issuance, in an aggregate amount not to exceed \$1,750,000,000 of general obligation bonds. (Water Code, §§ 12931, 12935, 12938.)

The courts have ruled otherwise. see <http://scocal.stanford.edu/opinion/warne-v-harkness-32852>

There is wide discretion for DWR to issue revenue bonds for the construction, operation and maintenance of the Central Valley Project and State Water Project as defined under state law. Once issued water districts have the authority, without a vote of property taxpayers, to raise property taxes to pay for the principal and interest. In a general provision the Burns-Porter Act declares that the facilities authorized as part of the Central Valley Project "or facilities which are acquired or constructed ... with funds made available hereunder" shall be "acquired, constructed, operated, and maintained pursuant to the provisions of the code governing the Central Valley Project." (Water Code, § 12931.)

⁵ <http://www.citizen.org/documents/SWPReport05.pdf> Mismanaging the California State Water Project 2005 @ pg 2

⁶ *Ibid.* pg 2

⁷ See [Bay Delta Westlands BDCP DWR Workshop 11-20-13 Powerpoint](#) Also See the 2011 LAO Report: http://www.lao.ca.gov/handouts/resources/2011/BDCP_Planning_process_10_19_11.pdf @ pg 5 *Implications for BDCP Implementation Funding. The voluntary aspect of planning phase funding also has implications for future funding of BDCP implementation, namely the construction and operation of an alternative system of conveyance that is being evaluated under the planning process. Costs of such conveyance have been estimated at \$12 billion or*

higher. Funding BDCP implementation therefore cannot rely on voluntary contributions and will require amendment of long-term water supply contracts between DWR, the Bureau of Reclamation, and the contractors in order to provide the funding mechanism.

⁸ Water Code §85089. Construction of a new Delta conveyance facility shall not be initiated until the persons or entities that contract to receive water from the State Water Project and the federal Central Valley Project or a joint powers authority representing those entities have made arrangements or entered into contracts to pay for both of the following: (a) The costs of the environmental review, planning, design, construction, and mitigation, including mitigation required pursuant to Division 13 (commencing with Section 21000 of the Public Resources Code), required for the construction, operation, and maintenance of any new Delta water conveyance facility. (b) Full mitigation of property tax or assessments levied by local governments or special districts for land used in the construction, location, mitigation, or operation of new Delta conveyance facilities.

⁹ *Ibid.* @ Footnote 4 See LAO report

http://www.lao.ca.gov/handouts/resources/2011/BDCP_Planning_process_10_19_11.pdf

¹⁰ <http://www.water.ca.gov/publications/financials/docs/dwr12fn.pdf> State Water Resources Development System Management's Discussion and Analysis (Unaudited) For the years ended June 30, 2012 and 2011. Pgs 16, 18 & 28.

Also See State Water Project Contractors Authority letter Subject: BDCP Environmental Analysis and Preliminary Engineering Funding, October 30, 2008. "Funding of the DHCCP will be by advance payments by Participating Contractors. SWP contractors may become Participating Contractors by signing a DHCCP Funding Agreement with DWR. Funding for 2008 will be accomplished through a DWR rebill and a credit equal to the DHCCP funding amount on the rebill from the bond funds released by the Springing Amendment. Funding for 2009 and 2010 will be on the DWR bills and collected in the same manner as the Transportation Minimum Component. Attached is a draft DHCCP Funding Agreement. Also attached is a breakdown of SWP Participating contractors cost share assuming three different participation levels."

http://cf.valleywater.org/About_Us/Board_of_directors/Board_meetings/2009_Published_Meetings/MG37438/AS37448/AI37602/DO37898/DO_37898.pdf Santa Clara Water District 10-13-09 Workshop: "The District along with other CVP contractors provided ... amount on the rebill from the bond funds released by the Springing. Amendment

Funding for 2009 and 2010 will be on the DWR bills and ... the Delta Habitat Conservation and Conveyance Program (DHCCP). See also- San Geronio Pass Water Agency Nov 10, 2008 - become Participating Contractors by signing a DHCCP Funding ... rebill from the bond funds released by the Springing Amendment.

<http://sgpwa.com/pdfs/Agenda-2008-Nov-10-900.pdf>

¹¹ http://www.water.ca.gov/swpao/watercontractextension/2013_contract_negotiations.cfm & [Plumas County Objective](#)

¹² The reserve account provides for the purchase of riskier investments including purchase letters of credit, surety bonds, or other higher rated (AA) or better credit facilities - these are cheaper for the issuer to fund the reserve account. The 1986 Bond Resolution and Attachments B&C: Amendments 25 & 26 to the 1986 Resolution dated May 1, 2002 and April 1, 2002. Common debt service reserve fund levels are 1x MADS. Moody's made the following comment in their review of the 50% reduction under the amendment, "The debt service reserve requirement is also weaker than for the typical municipal water enterprise at only 50% of maximum annual debt service. Given the Department's other credit strengths, however, this below average reserve is not heavily weighted in our analysis."

¹³ On June 11, 2013 a majority of the MWD Board of Directors voted to suspend these limits on property tax rate increases despite protests from the Southeast Water Coalition representing various cities, San Diego Water Authority and some 20 different community leaders and groups. [<http://www.citywatchla.com/lead-stories-hidden/5221-will-angelinos-be-submerged-in-a-new-water-tunnel-tax>] *“Despite efforts by business groups, community activists, mayors and several Southern California water agencies to stop unnecessary rate hikes and increased property tax collection by the Los Angeles-based Metropolitan Water District of Southern California, the board voted to increase spending by \$75 million instead of returning the money or rolling back rate increases.”* [<http://www.mwdfacts.com/momentum-builds-to-halt-mwds-over-collection/>] Proposition 218, known as the Right to Vote on Taxes Act, added Article XIII D. Metropolitan Water District and other wholesalers of water argue that Article XIII C and XIII D do not apply to MWD’s rates because they are not “imposed”; they are voluntary charges for property owned by MWD; and in any event the rates and property tax increases are approved by a 2/3s vote of the “electorate”—in this case the “electorate” is the MWD Board.

¹⁴ [<http://www.sdcwa.org/mwdrate-challenge>] Limits on tax rate increases for the reasonable cost of service and debt are routinely suspended by the MWD Board. Section 124.5 of the MWD Act places limits on property tax rate increases. Section 124.5 permits Metropolitan to suspend the restriction if, following a public hearing, the Board finds that such revenue is essential to the fiscal integrity of the District. [<http://ronkayela.com/wordpress/wp-content/uploads/2013/06/06112013-BOD-8-2-B-1-1.pdf>]

¹⁵ Metropolitan Water District of Southern CA (who makes up 46% of water entitlements) and more than three quarters of the combined contract revenue pledged to the water revenue bonds are rated Aa3 or better. Under existing contracts with DWR the contracts are take or pay contracts, this means certain payments are due regardless of the actual water delivery levels. The Department has a rate covenant of “1.25x” that they charge the contractors and there is a step up provision in the contracts (non-defaulting contractors are generally required to make an additional step up payment of up to 25% of their own contract payment if needed to cure defaults by other contractors). In the event of contractors operating revenues being less than required to make its fixed contract payment, the contractor has an obligation to levy a property tax assessment in an amount to make up the shortfall (this levy falls outside of the state’s 1% property tax limit).

¹⁶ [<http://www.sacbee.com/2013/12/07/5978184/delta-water-tunnel-project-needs.html>] **Delta water tunnel project needs \$1.2 billion more for planning** By Matt Weiser Dec. 7, 2013, *“The giant Delta water-diversion tunnels proposed by Gov. Jerry Brown need \$1.2 billion more spent on planning and design before construction starts or is even assured.”*

¹⁷ See Attachment A: Transcript and Notes from WWD November 2013 Board Meeting @ pg 7.

¹⁸ See Attachment A: Transcript and Notes from WWD November 2013 Board Meeting @ pg 7.

¹⁹ See Fitch Bond Rating 2009, *San Luis and Delta-Mendota Water Authority, California Delta Habitat Conservation and Conveyance Program Development Project*. *“There is concentration amongst WWD water purchasers. But offsetting this risk somewhat is the value of the cash crops farmed in the district (about \$1.3 billion in fiscal 2008) and the absence of alternative/equivalent supplies or infrastructure to deliver water. In addition, WWD potentially has the ability to sell and transfer water rights outside the district should agriculture cease to be economic, as the*

demand for water in southern California and the San Francisco Bay area by users with connectivity to the CVP is very high.”

²⁰ <http://www.sfgate.com/opinion/article/Away-go-our-dollars-down-the-delta-drains-5132228.php>
“Away go our dollars down the delta drains” Richard Walker, SF Chronicle Friday, January 10, 2014.

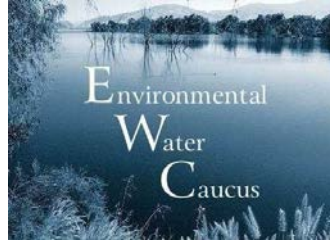
In all this, Westlands is the tail wagging the water dog. The district has the lowest priority water rights and can't get enough water in dry years. The district wants more water diverted from the Sacramento and the North Coast, not less. They don't give a fig for the fish, having sued to stop water releases for salmon in the San Joaquin and Trinity rivers. I have a better solution. Instead of building the Delta Drains, use the money to buy out Westlands, about \$9 billion at current land prices. [This would be cheaper and have the added benefit of saving 1 million acre-feet a year (average) now going to Westlands, leaving that water for other farmers and urban users.]”

²¹ <http://www.citizen.org/documents/SWPreport05.pdf> “To date, the North of Delta and Delta regions have born the near entirety of the direct negative environmental and economic impacts of the project and reaped scant amounts of the economic benefits. Kern County agribusiness, other the other hand, has secured the lion's share of the economic benefits, and has distributed those benefits in a highly inequitable manner. Since the State Water Project began pumping subsidized water to Kern County agribusinesses, the concentration of landownership has steadily increased, numbers of farms have decreased and rural poverty indicators have increased..... The Kern water agency contracts for 24 percent of the State Water Project's water. The Agency has actually received, however, 42 percent of the water and paid for only 13 percent of the costs of the project The Metropolitan Water District of Southern California contracts for 48 percent of the water, but has received only 31 percent while paying for 62 percent.” Pg 4

²² Also see <http://onthepublicrecord.org/2014/01/16/manage-what-exactly/>
<http://onthepublicrecord.org/2014/01/page/2/> “Nut crop growers put a whole lot of capital into their orchards, then point to their orchards as hostages in drought time. “But we must get water, or our trees will die!” I've never understood why the public at large should be the backstop for the bad choice to plant crops with a constant water demand in a variable climate. If there is a state interest in growing nuts and grapes in particular, it hasn't been explained... I understand the grower's interest in growing a valuable crop, but since the profits from that aren't returned to the state, I don't see why the risk should be.”

²³ <https://www.callawyer.com/clstory.cfm?eid=919370> A Run on the Water Bank --A determined investigator pursues a Los Angeles billionaire for allegedly seizing control of the state's water supply. It's Chinatown again, Jake. by Bill Blum | December 2011

Also see: http://www.citizen.org/documents/Water_Heist_lo-res.pdf “Don Villarejo writes that from the first SWP water deliveries in 1968 through to 1980, San Joaquin Valley contractors received 63% of the water delivered—almost entirely for agricultural irrigation—while mostly residential Southern California water users paid 70% of the costs of the project. “It is one of the many ironies of the SWP that those who get the most water pay the least, while those who get the least pay the bulk of the costs.” Pg 28



CA Save Our Streams Council

July 10, 2013

Carl Torgersen,
California Department of Water Resources
California Department of Water Resources Contract Extension
1416 9th Street, Room 1640-H4
Sacramento, CA 95814

Via email: watercontractextension@water.ca.gov

Re: Comments on State Water Project (SWP) WATER SUPPLY CONTRACT EXTENSION Negotiation Project

The undersigned respectfully submit the following comments regarding the SWP water supply contract extension negotiation project, which proposes to extend existing water supply contracts for 40 to 75 years. These extended contracts, if adopted, would rely on water sales to meet as yet undisclosed costs and the resulting long-term debt will saddle ratepayers with increased interest and unknown costs for two to three future generations of Californians.

We agree with both agency groups—SWP contractors and the Department of Water Resources representatives—that each is accountable to elected officials, ratepayers and taxpayers. As such the electorate deserves greater transparency and full disclosure of the costs of this SWP water diversion system including emergencies, maintenance, replacement and reserve projects, and the full cost of any new capital projects, such as the peripheral tunnels project or BDCP—and the total revenues needed to cover these costs.

Central to the water supply contract extension negotiations is a determination of the safe yield of the State Water Project. Federal scientists estimate the snowpack of the Sierra Nevada range could lose 80% of its winter snowpack by the end of the century [87 years].¹ Relying on paper water as collateral for revenue bonds is an unwise folly.²

It is understandable DWR would desire an “emergency” fund to assist with variable costs associated with running such a large state water supply system. But “emergency” by definition means unexpected or unforeseen. The SWP replacement costs, along with the seismic retrofit of the California Aqueduct, dams and bridges are known and expected costs. It is expected that the SWP will coexist with water shortages and droughts. Climate change is not unexpected and will bring variable hydrology, and increased need for flows and cold water to ensure survival of salmon runs and other beneficial uses.³ Power costs due to aging infrastructure and expiring power contracts are increasing costs. As a result, any contract extension must provide for an equitable process to govern the distribution of shortages and address reduced revenues due to the lack of water sales and increased power costs.

As noted in the latest negotiation session [July 10, 2013], the SWP water rights and supply system are owned by the taxpayers of the State of California with attendant public trust and legal duties to ensure operation of the system does not harm these beneficial uses and run afoul of federal and state water quality laws.

The water supply contract extension amendments and refinancing relies on revenue from the sale of water as collateral for repayment of the debt. Thus any water contract extension beyond the existing term of 2035 needs to disclose:

1. The baseline capital debt and interest remaining on the existing SWP project;
2. The capital replacement costs for the SWP water supply system that is more than 50 years old;
3. The seismic retrofit costs of existing dams, bridges and aqueducts at the existing SWP system;

¹ USGS scientist Tom Suchanek <http://www.usgs.gov/newsroom/article.asp?ID=3148> & http://www.almanacnews.com/news/show_story.php?id=10886

² http://www.moodys.com/research/Moodys-assigns-Aa1-rating-to-California-DWRs-Central-Valley-Project--PR_273014 “The rating primarily reflects the strong take-or-pay nature of the water supply contracts from which debt service payments are derived, and the critical, long run importance of the Department’s water supply to its contractors. Also key to the rating are the largest contractors’ strong credit standings, and the Department’s ability to withstand a large amount of delinquencies by contractors with the help of the 1.25x rate covenant and step-up provisions. These considerations largely offset the risk that would otherwise be posed by the tightening legal and regulatory environment for water exports from the Sacramento-San Joaquin Bay Delta, and the volatile annual precipitation levels.”

³ Sacramento River Chinook salmon spawning this year [2013] are threatened by the relaxation of water temperature standards on the upper Sacramento River combined with the violations of water quality standards in the Delta that are the result of the over-allocation of scarce water supplies and diverting too much water in a dry year. http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/decision_1641/conserv/docs/05292013swrcb.pdf http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/decision_1641/conserv/docs/05242013swrcb.pdf

4. Increased power costs from expiring contracts and lower output.⁴
5. Total capital costs for any “new” projects;
6. Clear provisions to allocate water shortages; and
7. Clear provisions as to how cost over runs will be allocated to the contractors and ratepayers.

Prior to extending the existing water supply contracts and debt obligation, DWR should complete a financial disclosure analysis with independent review to ensure taxpayers are not being asked to subsidize costs that should be paid for by the SWP contractors. And further, such independent analysis needs to ensure that the water supply contracts do not put undue risks or commitments on the state's general fund and the taxpayer.

Thank you for consideration of these views from groups representing hundreds of thousands of ratepayers and taxpayers throughout the State of California.



Bruce Reznik
Executive Director
Planning and Conservation League
breznik@pcl.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@gmail.com



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org

⁴ Hoover and SCE supplemental power contracts expire in 2017. Damage to existing project power plants has increased operating costs. “Recently, maintenance issues at the Hyatt Power Plant interrupted hydropower generation, and a fire last November destroyed the Thermalito Power Plant. This has not resulted in loss of water supplies, but does increase the costs of running the project as hydropower not generated by the project must be purchased from elsewhere.”
<http://mavensnotebook.com/2013/04/17/dwr-announces-state-water-project-negotiations-to-start-in-may/>

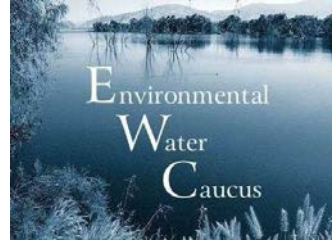


Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com

cc: Interested Parties



July 3, 2013

Carl Torgersen,
California Department of Water Resources
California Department of Water Resources Contract Extension
1416 9th Street, Room 1640-H4
Sacramento, CA 95814

Via email: watercontractextension@water.ca.gov

Re: Comments on State Water Project (SWP) WATER SUPPLY CONTRACT EXTENSION Negotiation Project

The undersigned respectfully submit the following comments regarding the SWP water supply contract extension negotiation project, which proposes to extend existing water supply contracts for 40 to 75 years. These extended contracts would rely on water sales to meet as yet undisclosed costs, while extending ratepayer debt to repay the increased interest and unknown costs for two to three future generations of Californians.

As noted in background documents, the original contract with the people of the State of California assumed a cost of \$1.75 billion in general obligation bonds to fund the construction of the State Water Project. Additional debt to fund full construction, maintenance and operation costs has been required, however. Revenue bonds of \$7 billion have been sold, with \$2.3 billion still outstanding.¹ All of this debt is backed by ratepayers and water sales, if water is available.

¹ <http://www.water.ca.gov/swpao/watercontractextension/>

For decades urban ratepayers invested millions of dollars to ensure an urban preference during times of shortages. This preference was an insurance policy whereby these municipal water users would receive water on a priority basis during times of water shortages. In closed door SWP contractor sessions, without ratepayer or public participation, this preference was removed. Given droughts, climate extremes, and uncertainty of State Water Project water supplies, any contract extension must include an objective to reinstate this preference and these contract provisions that were removed without ratepayer notice or participation. This urban preference requirement would ensure that decades of promises, contract obligations, and ratepayer investments by these users, who pay the bulk of the project costs, would not be abrogated.

Under the terms of the Monterey Settlement Agreement and good business practices, any extension or refinancing of SWP project debt needs to clearly disclose total costs, total interest payments, amounts of water projected to be available for delivery, and needed capital reserves for replacement of this aging infrastructure. Additionally, public disclosure of all costs associated with these contract extensions must be honestly and completely displayed in intelligible language. For example, if this contract extension project proposes to “indirectly” or “directly” finance any “new” as yet unapproved capital expenditures, such as the Governor’s proposed approximately \$25 billion twin tunnels construction costs with estimated debt, operations, and other costs totaling \$51.4 billion²—these costs also need to be disclosed to the public and ratepayers before obligating them to this multi-generational contract extension.

The proposed contract extensions and repayment period will saddle generations with debt and massive interest payments. Prior to any adoption of these proposals, contracting agencies must, under current law, seek approvals from ratepayers disclosing the full costs (including interest and debt payments) and need prior to adopting these obligations that use their property taxes or rate dollars as collateral.

As announced, DWR proposes to disclose at the next negotiating session the costs of the SWP contract extension to state taxpayers under the Davis-Dolwig Act. Hopefully this disclosure will address legislative criticism of how these allocations have over allocated costs to the public for recreation and fish and wildlife enhancements that should be paid by SWP contractors.

By over-allocating SWP project costs to recreation, DWR and the SWP contractors over charge the public for SWP costs and exaggerate recreation benefits or fish and wildlife enhancements of the SWP project. For example the public is charged for “recreation” at the Edmonston Pumping Plant—a facility closed to the public, and yet 3.1 percent of the annual SWP operational costs are allocated to the general fund and thus, the taxpayers.³ These inflated recreation costs, along with regulatory permit condition costs under

² See Chapter 8 Administrative Draft BDCP documents (p. 8-86 & p. 8-88) & <http://mavensnotebook.com/the-bdcp-road-map/project-costs-and-financing/> & http://www.mercurynews.com/science/ci_22791436/next-big-step-jerry-browns-23-billion-delta & <http://www.latimes.com/news/local/la-me-delta-cost-20130530.0.3249093.story>

³ http://www.lao.ca.gov/analysis/2009/resources/res_anl09004003.aspx Also see Legislative Analyst Report that raised concerns about DWR’s methodology for calculating Davis-Dolwig costs documented in the 2009 report, *Funding Recreation at the State Water Project*.

FERC relicensing, must be paid by the State Water Project Contractors and should not be allocated to the general taxpayer.⁴ As documented by the Legislature, allocating regulatory compliance costs of SWP operations to Davis–Dolwig and thus, the general fund, rather than including them in charges to SWP contractors (users of the water system), shifts these costs that should be considered costs of doing business by the SWP as typically public utilities are required to do.⁵ DWR does not have the power to continue to obligate the general fund for these inflated SWP costs without Legislative approval.

In summary, the State Water Supply Project contract extension project should accurately reflect all costs, including interest, anticipated under any “refinancing” or debt reauthorization. We do not believe that past court rulings meant to provide DWR with a blank check of debt authorization in *Warne v. Harkness*, 60 Cal.2d 579. Critical to this accurate reflection of the costs should be an honest appraisal of replacement costs and emergency provisions for pump failures or repair costs. Just one example is the miles of the California Aqueduct impacted by subsidence. Further, this debt refinancing also must include accurate data regarding the amount of water that may or may not be available for sale over any given repayment period, especially given climate change. Finally this debt refinancing necessarily needs to include “op out” provisions for those contractors who either will not benefit or do not want to participate, or whose ratepayers do not want the added expense of proposed “new conveyance tunnels” that are likely to be exorbitantly expensive and will not provide benefits sufficient to warrant the additional construction, operating and debt costs.

Any changes to current debt loads and contract costs demand DWR and the SWP Contractors understand ratepayers and taxpayers are at a breaking point. Water rates are projected to more than double over the next ten years under existing operating costs, replacement and power costs. Full disclosure of debt costs and new construction proposals need to seriously consider the ability to rely on ratepayers to foot the bill and whether water supply projections are accurate to support such increased debt loads.

⁴ http://www.lao.ca.gov/2009/rsrc/reforming_davis-dolwig/davis-dolwig_030909.pdf “There a number of facilities in the SWP that are regulated under FERC, including Lake Oroville—a site in the final stages of renewing a license for a further 50 years of operation. As part of the relicensing process, DWR has agreed to provide recreation facilities that will cost an estimated \$500 million over the 50 years of the license. The Department of Water Resources (DWR) plans to allocate these costs to Davis-Dolwig and hence to the state..... Currently, these regulatory-related costs for providing recreation at Lake Oroville amount to approximately \$1.5 million annually. However, DWR has estimated that these regulatory-related costs could increase to \$11.5 million per year, for a period of 50 years.”

⁵ http://www.lao.ca.gov/2009/rsrc/reforming_davis-dolwig/davis-dolwig_030909.pdf pg 9

Thank you for consideration of these views from groups representing hundreds of thousands of ratepayers and taxpayers throughout the State of California.



Bruce Reznik
Executive Director
Planning and Conservation League
breznik@pcl.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@gmail.com

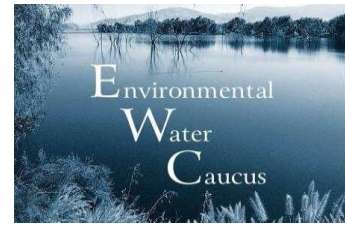


Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com

cc: Interested Parties



NORTH
COAST
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August 2, 2012

Senator Dianne Feinstein
United States Senate
331 Hart Senate Office Building
Washington, D.C. 20510

Senator Barbara Boxer
United States Senate
112 Hart Senate Office Building
Washington, D.C. 20510

RE: Assistance Obtaining Answers to Seven Fundamental Questions Regarding the Decision to Proceed with the Twin Tunnels Peripheral Canal Project under the Bay Delta Conservation Plan.

Dear Senator Feinstein and Boxer:

We request your assistance. On June 27, 2012, community, conservation and fishing groups¹ wrote to the departments of Interior and Commerce requesting answers to seven fundamental questions (attached for your reference) regarding the Bay Delta Conservation Plan's (BDCP) twin tunnel peripheral canal project. We have not received a response. We would appreciate your help in obtaining answers to these questions and two new questions.

The Secretary of Interior, on July 25, 2012, "announcing the 9,000 cubic feet per second three-intake structure", speaking on behalf of the Departments of Interior and Commerce announced, "*This is the United States of America speaking to all of you...we are here united with the State of California to move this project forward and get it done.*"² The public was barred from attending the press conference and no materials were provided that answer our seven fundamental questions regarding the project. The announcement, however, did bring up additional questions.

The Secretary declared the San Francisco Bay/Sacramento-San Joaquin Delta Estuary to be a landscape of national significance, and yet, his decision appears to already be made to proceed with this project to divert more water and isolate the estuary from this critical fresh water flow essential to habitat and species recovery. The Secretary's announcement to proceed with the project raises two additional questions for which we seek your aid in obtaining answers:

1. *What documents did the Secretary rely upon to remove the red flag issues elevated by the federal scientific community with regard to the project's failure to ensure recovery of the more than 12 endangered or threatened species in the estuary? –and,*
2. *Did the science that the Secretary relied on adhere to the February 2011 DOI Scientific Integrity Policy³ and include peer review? Your assistance in obtaining copies of these peer review comments and the documents prepared by the scientists that assisted the Secretary in reaching his announcement to proceed with this project, would be greatly appreciated.*

We are concerned the decision to proceed with such a massive twin tunnel project—that will divert much of the remaining fresh water flows critical to the health of the San Francisco Bay/Sacramento San Joaquin Delta Estuary, is arbitrary. Answers to these questions will assist our thousands of members arrive at an informed decision.

Regards,



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League
jminton@pcl.org



Jim Metropulos
Senior Advocate
Sierra Club California
jim.metropulos@sierraclub.org

¹ <http://blogs.alternet.org/danbacher/tag/bay-delta-conservation-plan/>
http://sierraclubcalifornia.org/2012/06/27/policy_before_plumbing/

² http://www.water.ca.gov/news/newsreleases/2012/072612bdcp_190mb_long.wmv Governor Brown News Conference on Tunnels <http://vimeo.com/46505877>

³ <http://www.fws.gov/science/pdf/DOIScientificIntegrityPolicyManual.pdf>



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@west.net



Caleen Sisk
Spiritual Leader and Tribal Chief
Winnemem Wintu Tribe
caleenwintu@gmail.com



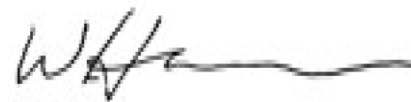
Bruce Tokars
Executive Director
Salmon Water Now
btokars@salmonwaternow.org



Larry Collins
President
Crab Boat Owners Association
lcollins@sfcraabboat.com



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org



Wenonah Hauter
Executive Director
Food and Water Watch
whauter@fwwatch.org

Jackson Chapman
President
California Striped Bass Association
Jackson.Chapman@comcast.net

Jennifer Clary
Water Policy Analyst
Clean Water Action
jclary@cleanwater.org

Captain Jim Cox, President
West Delta Chapter
CA Striped Bass Association
jimcoxsportfishing@yahoo.com

Stephen Green
Vice President
Save the American River Association
gsg444@sbcglobal.net

Leda Huta
Executive Director
Endangered Species Coalition
lhuta@stopextinction.org

Siobahn Dolan
Director
Desal Response Group
siobhan.dolan@gmail.com

Frank Egger,
President
North Coast Rivers Alliance
fegger@gmail.com

EJ Melzer
President
Peninsula Fly Fishers
eimelzer@peninsulaflyfishers.org

E. Robert Wright
Senior Counsel
Friends of the River
bwright@friendsoftheriver.org

Attachments: Seven Questions

Cc: Representatives George Miller, Jerry McNerney, Anna Eshoo, Mike Thompson, Doris Matsui, John Garamendi, Mike Honda, Lynn Woolsey, Jackie Speier, Barbara Lee, Zoe Lofgren and Pete Stark
Interested Parties

Robyn DiFalco
Executive Director
Butte Environmental Council
robvnd@becprotects.org

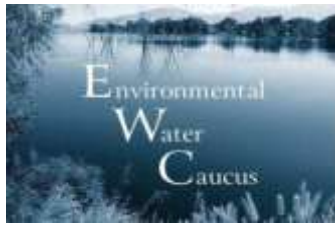
Marty Dunlap
Attorney at Law
Citizens Water Watch of Northern California
dunlaplegal@yahoo.com

Roger Mammon
President
Lower Sherman Island Duck Hunters Asso.
r.mammon@att.net

Andrew J. Orahoske
Conservation Director
Environmental Protection Information Center
andrew@wildcalifornia.org

**Seven Questions Re the 9,000 cfs Twin Tunnel [3] Intake Delta Water Export
Asked June 27, 2012:**

1. How much will it really cost? We're being told that just the record size tunnels project costs are estimated at least \$12.691 billion, but this does not include operation and maintenance which ups the cost to \$17 billion, add in financing and the costs reach \$51 billion according to BDCP documents. [See Chapter 8 BDCP documents (p. 8-86 & p. 8-88)]. Governor Brown estimates the costs at \$14 billion.
2. Who pays for it? Who REALLY pays for it? And the impacts? The State of California last week released a "Benefit Analysis of the BDCP" that suggests the project makes economic sense for the south of the Delta water contractors, but only if huge costs are shifted to others and benefits not part of the project are counted. The sponsors concede that no true statewide or other cost benefit analysis has been prepared or is planned for this massive public works project. How does this failure to conduct a benefit cost analysis comply with federal law?
<http://baydeltaconservationplan.com/Files/June%202012%20Public%20Meeting%20Presentation%206-20-12.pdf> The "others" in this case are statewide, but focused most intensively in Northern California where entire communities and their jobs and resources would suffer with the inevitable decline of the San Francisco Bay Delta Estuary. [see Dr. Michaels analysis, Director of the Business Forecasting Center, Eberhardt School of Business at
<http://valleyecon.blogspot.com/2012/06/is-bdcp-good-deal-for-water-agencies.html> & <http://blogs.esanjaquin.com/san-joaquin-river-delta/files/2012/08/JeffMichaeltoJohnLaird0712.pdf>
3. How much "new" water will be produced annually? 250,000 AF? 500,000 AF? 1 MAF? 1.5 MAF? What is the source? What are the real export levels and how were they determined?
4. When will this "NEW" found water be available – 2018? 2020? 2023? 2026? 2030? 2050? What is the date of the first drop of water from completed construction?
5. How will this "new" water pie be divided? Who gets what? How and when will that be determined?
6. What are the upstream impacts of this project on flows, temperatures, fisheries protection and reservoir operations?
7. Scientists report that climate disruption will impact California – its coastline, sea level, weather patterns, precipitation rates and a growing list of other conditions. The current proposed plan indicates climate assumptions will be "forthcoming". Can you guarantee that multi-billion dollar expenditures for plumbing being recommended will have meaningful utility in 2020, 2030, 2050, and beyond?



Sacramento River Preservation Trust



Sacramento, The River City Chapter



Catch More Fish. GOLDEN WEST WOMEN FLYFISHERS



CA Save Our Streams Council



NORTH
COAST
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ALLIANCE

June 27, 2012

The Hon. Ken Salazar
Secretary
U.S. Department of the Interior
Washington DC

The Hon. Rebecca Blank
Acting Secretary
U.S. Department of Commerce
Washington DC

Dear Secretary Salazar and Acting Secretary Blank:

We agree with the twelve northern California lawmakers who called on Obama administration officials to delay the “imminent announcement” of the proposed “expensive and potentially damaging water diversion project” until fundamental details of the Bay Delta plan are made available. These Congressional Members warned that the unpopular plan to build a peripheral canal or tunnels – as described in a recent briefing in Washington and public meetings in Sacramento –

“raises far more questions than it answers, and appears to turn the maxim of ‘policy before plumbing’ on its head.”

Departments of Interior and Commerce are poised to join with the State of California to recommend the construction of a multi-billion dollar plumbing project before defining how much it will cost, how it will be operated, or how much water it will produce without environmental damage. The State of California proposes construction of two world-record-size tunnels capable of taking nearly all of the average freshwater flow of the Sacramento River – 15,000 cubic feet per second—away from the San Francisco Bay Delta Estuary. Recent briefings indicate diversion would initially be limited to 9,000 cubic feet per second. And proposed exports levels from the San Francisco Bay Delta Estuary as high as 5.3 and 5.9 million acre feet—higher than either state water board officials or federal scientists have determined are safe to protect public trust resources.

The Sacramento River is at the heart of the federal Central Valley Project and is the most pristine source of water for the remaining Central Valley salmon runs and the estuary. Its diversion would have devastating ecological and economic impacts on Sacramento Valley communities, farms, streams, and myriad species. Despite that, the proposed project is being called the “Bay Delta Conservation Plan” or BDCP. Its primary purpose is to deliver the Sacramento River water through Federal and State pumps to provide subsidized irrigation to agricultural operations on the western side of California’s San Joaquin Valley and in the name of conservation, dewater the Delta estuary.

The proposed double tunnel project is designed to give a federal assurance of water to south of the Delta irrigators. As proposed the plan will give a federal guarantee of increased water to be taken from the San Francisco Bay Delta estuary. This proposed higher diversion will create chronic drought conditions and environmental devastation in the estuary. Over the past decade, the current high diversions have degraded fish habitat, leading to dramatic fish declines that in turn led to court-ordered reductions in water exports in order to protect salmon and other endangered fish of the estuary.

The National Academy of Sciences issued a scathing review of the BDCP. The independent science panel declared that the BDCP’s scientific analysis is inadequate. Scientists with the Departments of Interior and Commerce have raised “red-flag” warnings about the biological impacts of the project.

As of today, the BDCP has no feasibility report, no operations plan and no blueprints. It is likely to further endanger salmon and some 20 other species that depend on the San Francisco Bay Delta Estuary and are already in trouble. If costs are fairly assessed, it cannot provide cost-effective water supplies, even to its intended beneficiaries. A recent analysis by the University of Pacific’s Eberhardt School of Business, Business Forecasting Center says the costs of the tunnel would be 2.5 times larger than its benefits.

The verbal briefings without written documents make any agreement to proceed tantamount to signing on to a blank check. When will the true costs be disclosed? And, when will ratepayers and/or taxpayers be given the opportunity to vote on this scheme?

The twelve Members of Congress who wrote and requested “policy before plumbing” reported that, when briefed by federal officials, almost every question was answered with a “we-don’t-know” OR a “we’ll-have-to-get-back-to-you” response. Such responses from the Departments of Interior and Commerce are justification enough for the delay requested by these Members of the California Congressional Delegation.

The Department of the Interior, Bureau of Reclamation and other Federal agencies should not embark on a massive construction program when so many critical questions remain unanswered. We request, before any decisions are made or pronouncements issued that basic questions are fully and comprehensively answered and Californians are allowed to know what’s being proposed.

1. How much will it really cost? We’re being told that just the record size tunnels project costs are estimated at least \$12.691 billion, but this does not include operation and maintenance which ups the cost to \$17 billion, add in financing and the costs reach \$51 billion according to BDCP documents. [See Chapter 8 BDCP documents (p. 8-86 & p. 8-88)]. Governor Brown estimates the costs at \$14 billion.
2. Who pays for it? Who REALLY pays for it? And the impacts? The State of California last week released a “Benefit Analysis of the BDCP” that suggests the project makes economic sense for the south of the Delta water contractors, but only if huge costs are shifted to others and benefits not part of the project are counted. The sponsors concede that no true statewide or other cost benefit analysis has been prepared or is planned for this massive public works project. How does this failure to conduct a benefit cost analysis comply with federal law?
<http://baydeltaconservationplan.com/Files/June%202012%20Public%20Meeting%20Presentation%206-20-12.pdf> The “others” in this case are statewide, but focused most intensively in Northern California where entire communities and their jobs and resources would suffer with the inevitable decline of the San Francisco Bay Delta Estuary. [see Dr. Michaels analysis, Director of the Business Forecasting Center, Eberhardt School of Business at
<http://valleyecon.blogspot.com/2012/06/is-bdcp-good-deal-for-water-agencies.html>]
3. How much “new” water will be produced annually? 250,000 AF? 500,000 AF? 1 MAF? 1.5 MAF? What is the source? What are the real export levels and how were they determined?

4. When will this “NEW” found water be available – 2018? 2020? 2023? 2026? 2030? 2050? What is the date of the first drop of water from completed construction?
5. How will this “new” water pie be divided? Who gets what? How and when will that be determined?
6. What are the upstream impacts of this project on flows, temperatures, fisheries protection and reservoir operations?
7. Scientists report that climate disruption will impact California – its coastline, sea level, weather patterns, precipitation rates and a growing list of other conditions. The current proposed plan indicates climate assumptions will be “forthcoming”. Can you guarantee that multi-billion dollar expenditures for plumbing being recommended will have meaningful utility in 2020, 2030, 2050, and beyond?

Twelve Members of the California Congressional Delegation requested that you not proceed at this time. They are right. Californians deserve a more forthcoming Department of the Interior and Department of Commerce. Full disclosure – and “policy before plumbing” should be provided to all Californians and every taxpayer. Absent responsible policy firmly in place, this proposal looms as a giant unfunded Federal mandate and a recipe for a boondoggle, not one for reliable water service.

Sincerely,



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Jim Metropulos
Senior Advocate
Sierra Club California
jim.metropulos@sierraclub.org



Dick Pool
President
Water4Fish
pool94549@sbcglobal.net



Barbara Barrigan-Parrilla
Executive Director
Restore the Delta
Barbara@restoredelta.org

Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net

Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com

Conner Everts
Executive Director
Southern California Watershed Alliance
connere@west.net

Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League
jminton@pcl.org

Adam Lazar
Staff Attorney
Center for Biological Diversity
adamlazar@gmail.com

Wenonah Hauter
Executive Director
Food and Water Watch
whauter@fwwatch.org

Bruce Tokars
Executive Director
Salmon Water Now
btokars@salmonwaternow.org

Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net

Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org

Larry Collins
President
Crab Boat Owners Association

Dr. Mark Rockwell
Calif. Rep. Endangered Species Coalition
mrockwell@stopextinction.org

Andrew J. Orahoske
EPIC, Conservation Director
andrew@wildcalifornia.org

*Chris Acree,
Executive Director
Revive the San Joaquin*

*Dan Bacher
Editor
Fish Sniffer*

*Lloyd Carter
President
California Save Our Streams Council*

*Jackson Chapman
President, Sacramento Chapter
California Striped Bass Association*

*Cindy Charles
Conservation Chair
Golden West Women Flyfishers.*

*Jennifer Clary
Water Policy Analyst
Clean Water Action*

*Capt Jim Cox
Vice President State Board of Directors
California Striped Bass Assoc.*

*Robyn DiFalco
Executive Director
Butte Environmental Council*

*John Merz
President
Sacramento River Preservation Trust*

*Pietro Paravano
Chairman of the Board
Institute for Fishery Resources*

*Nate Rangel
President
California Outdoors*

cc: Senator Dianne Feinstein
Senator Boxer
Governor Brown
Interested Parties

*Siobahn Dolan
Director
Desal Response Group*

*Frank Egger,
President
North Coast Rivers Alliance*

*Stephen Green
Vice President
Save the American River Association*

*Victor Gonella
President
Golden Gate Salmon Association*

*Huey D. Johnson
Founder and President
Resource Renewal Institute*

*Gene Kaczmarek
President, Northern California Council
Federation of Fly Fishers*

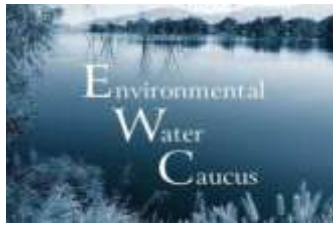
*Roger Mammon
President
Lower Sherman Island Duck Hunters Asso.*

*Jim Martin
Conservation Director
Berkley Conservation Institute, Pure Fishing*

*Roger Thomas
President
The Golden Gate Fishermen's Association*

*George Wendt
President & Founder
The O.A.R.S. Family of Companies*

*E. Robert Wright
Senior Counsel
Friends of the River*



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Sacramento,
The River City Chapter



Golden Gate
Salmon Association



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June 12, 2012

The Honorable Ken Salazar
Secretary of Interior
Department of the Interior
1849 C Street, N.W.
Washington DC 20240

Dear Mr. Secretary:

The State of California is poised to make an enormous mistake, and potentially drag the Department of Interior and the American people along with it. California Secretary for Natural Resources, John Laird, recently informed us in a May 24, 2012, briefing that the State intends to proceed with construction of a world-record-size tunnel or pipes capable of diverting 15,000 cubic feet per second from the Sacramento River - nearly all of its average freshwater flow. Diversion of this water, which is the most pristine source of water to the San Francisco Bay Delta Estuary, would have devastating ecological impacts. Scientists within the Department of Interior have been pivotal in assessing these impacts and have raised "red-flag" warnings. This \$20 to \$50 billion dollar, highly controversial project will primarily serve to deliver Sacramento River water, through State and Federal pumps, to provide subsidized irrigation water to corporate agricultural operations of the western San Joaquin Valley.

In addition to the ecological devastation, the project will destroy jobs dependent on tourism, farming, recreation, fishing and seafood production in California and the entire

Pacific Coast. The decision outlined in the May 24th briefing has stirred urgent concerns among fishing communities, farming communities, and conservation organizations throughout the West Coast. This project is a poorly conceived assault on the public trust that desperately needs a strong hand of reason from your Department.

The State has not provided the details of how it reached this proposed action—nor have they answered questions about significant constructability challenges, provided blueprints, or developed a plan of operations. The State has not answered our questions regarding how the 22 species facing extinction in the Delta Estuary will be protected from this massive engineering project and water diversion. We are not reassured by the State's announcement that this project proposal was not pre-decisional and would not undermine the lawful environmental consideration of the project. We were surprised and dismayed that the State of California is headed in this direction, as it appears to contradict or ignore the consensus of expert opinions repeatedly expressed by scientists with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the National Research Council of the National Academy of Sciences. Most recently, State and Federal fishery and wildlife agencies issued official "red flag memos" detailing their concerns that the 50-year permit could hasten the extinction of Central Valley salmon, Delta smelt, longfin smelt and other fish species.

We need you, Mr. Secretary, to take a stand for the public. It would be folly for the Department of Interior to follow the State of California down this risky path. We hope that Interior will instead work to dissuade the State from pursuing this misguided policy. As you know, the Federal and State funding and cooperative assistance agreement, signed in March 2009, promised the following: "*Reclamation will, upon completion of the Program, have the documentation and engineering information **to gain Congressional approval to move toward feasibility, design, and implementation of restoration projects to benefit fish and wildlife habitat.***" [Emphasis added Cooperative Agreement 09FC200011 Page 3 of 32]

We urge you to uphold the Obama Administration's promise to ensure the Department of Interior's scientific integrity and not bow to political pressure. Circumventing peer-reviewed science with faulty modeling, analysis, and engineering, as the State is proposing, is legally questionable and will damage public trust. Further, protecting our national public trust demands the Department of Interior champion the State of California's flow criteria to protect public trust resources for the San Francisco Bay-Sacramento-San Joaquin Delta (Delta) ecosystem and water quality.

The Department of Interior should also raise the Cooperative Agreement's requirement to "*...address measures that improve conditions for and allow conservation and rehabilitation of habitat supporting the Federally-listed endangered Delta smelt, winter-run Chinook salmon..... These species are considered by many to be the gauge of the health of the Delta ecosystem. Additionally, consider measures that benefit other fish, wildlife, and bird species that have been negatively affected by changes to the natural ecosystem, some caused by Central Valley Project operations.*" [Cooperative Agreement 09FC200011 Page 2 of 32.] No justification has been given for the scale of the proposed tunnels or pipe, nor is there any assurance of operations consistent with ecosystem goals.

Please do not put the interests of South-of-Delta water contractors before the public and San Francisco Bay-Delta dependent farmers, fishermen, and local communities. Narrow special interests should not be allowed to take these public water resources for private gain without regard to costs to one of our nation's most important estuaries. Mr. Secretary, two-thirds of existing Delta Estuary water exports serves corporate irrigators of the western San Joaquin Valley, which accounts for less than .5 percent of California's economy and population. Less than a third of the water goes to the urban areas that make up half of the state's population and economy. Levels of water demand are artificially high due to taxpayer subsidies. Basic fairness, binding commitments, and economic reality all demand that the fast tracking of this massive engineering experiment be rejected because it cannot meet basic legal, economic, and scientific requirements.

We urge you to take the rightful stand against this project and reject these unsustainable water demands and their high public costs, and instead invest in more efficient use of our scarce water resources through cost-effective water conservation and recycling. This will not only protect the pocket books of millions of California ratepayers and U.S. taxpayers, but will help ensure that legally-required salmon doubling goals, estuary restoration, and public trust values are honored for future generations. The planning for California's water future must return to a lawful, science-based, inclusive, and transparent process. The San Francisco Bay-Delta Estuary must not be stripped of the freshwater flows upon which so many vital public trust resources and West Coast communities depend. From its inception, this plan has been crafted by, and for, South-of-Delta exporters. They have used their economic power to influence and rush this half-baked, multi-billion dollar water tunnel.

Planning for California's legitimate water needs, and preserving recreational, fishery, environmental and agricultural resources are way too important to be rushed. California voters said "No" thirty years ago to a plan to dewater the Delta Estuary. It is doubtful they will like the idea any better this time. As Representative Grace Napolitano determined from Congressional testimony, water efficiency and conservation can save one million acre feet of water quickly and cost-effectively—and can start now.

It will be an unimaginable shame if the Department of Interior, the keeper of the public trust resources of our Nation, makes the mistake of going along with the State's poorly conceived and destructive plan.

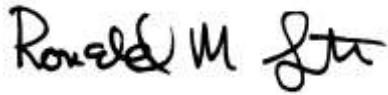
Sincerely,



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Jim Metropulos
Senior Advocate
Sierra Club California
jim.metropulos@sierraclub.org



Ronald Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Barbara Barrigan-Parrilla
Executive Director
Restore the Delta
Barbara@restorethedelta.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@west.net



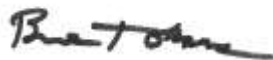
Caleen Sisk-Franco
Spiritual Leader and Tribal Chief
Winnemem Wintu Tribe
caleenwintu@gmail.com



Adam Lazar
Staff Attorney
Center for Biological Diversity
adamlazar@gmail.com



Wenonah Hauter
Executive Director
Food and Water Watch
whauter@fwwatch.org



Bruce Tokars
Executive Director
Salmon Water Now
btokars@salmonwaternow.org



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org



Larry Collins
President
Crab Boat Owners Association



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League
jminton@pcl.org

Paola Ramos
Interim Executive Director
Environmental Justice Coalition for Water

*Chris Acree,
Executive Director.
Revive the San Joaquin*

*Jackson Chapman
President
Sacramento Chapter
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Cc: Governor Jerry Brown
Interested Parties

Water4Fish

*Nate Rangel
President
California Outdoors*

*Michael Schweit
President
Southwest Council, Federation of Fly
Fishers*

*Roger Thomas
President
The Golden Gate Fishermen's Association*



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FEDERATION OF
FLY FISHERS

May 5, 2011

The Honorable David Hayes
Deputy Secretary of the Interior
Department of the Interior
1849 C Street, N.W.
Washington, DC 20240

Subject: Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities.

Dear Deputy Secretary Hayes:

Thank you for your most recent pledge to ensure that the Bay-Delta Conservation Plan (BDCP) process is more open and public. As you know, some of the undersigned groups were barred from membership to develop the plan because they would not agree to the proposed peripheral canal/tunnel as a precondition of participation.

Thus, as a coalition of 18 organizations impacted by diversions from the Delta, we request that you direct Interior Department agencies to revise the Notice of Intent (NOI) for the BDCP so that it is consistent with currently acknowledged actual water supplies available rather than promising to deliver inflated water contract demands.

Adding the goal of attaining “up to full contract deliveries” in the February 2009 revision of the NOI creates confusion and likely delay. As EPA notes, there is no definition of “full contract amounts” and, depending on the definition, that amount has never been delivered in the past 50 years.¹ Moreover, new information suggests even existing amounts of diversions are not sustainable and raises serious concerns with regard to the changes made to the statement and purpose for the Bay Delta Conservation Plan (BDCP) published in the Federal Register February 2009 Notice of Intent.² The changes suggest that the underlying purpose and need of the BDCP, which will drive the alternatives and decision making, is to provide “...conveyance facilities to enhance operational flexibility and water supply reliability.....to Restore and protect the ability of the [State Water Project and Central Valley Project] to deliver up to full contract amounts” **The addition of the objectives of a conveyance facility to deliver full contract amounts is a significant change from the first NOI for the BDCP that was jointly issued by National Marine and Fishery Service and U.S. Fish and Wildlife Service.** (73 Fed. Reg. 4178 (January 24, 2008). Moreover, such a goal is in conflict with constraints that have already been clearly identified by the State of California³ and US EPA.⁴

¹ EPA June 10, 2010 Letter from Alexis Strauss and Enrique Manzanilla to D. Glaser, R McInnis and R. Lohofener. RE Purpose Statement for Bay Delta Conservation Plan (BDCP) see:

<http://www.epa.gov/region9/water/watershed/pdf/EpaR9Comments-BdcpPurpose-ExportPolicy.pdf>

² http://baydeltaconservationplan.com/Libraries/General_Documents/BDCP_NOI.sflb.ashx).

³ SWRCB letter May 15, 2009 see

http://baydeltaconservationplan.com/Libraries/EIR_EIS_Public_Comments/California_State_Water_Resource_s_Control_Board.sflb.ashx

April 19,2011 Letter from SWRCB to Gerald Meral <http://www.pcl.org/files/SWRCBLetterBDCP.pdf>

⁴ Ibid. EPA Correspondence June 10, 2010 & May 14, 2009 EPA correspondence from Kathleen Goforth and Karen Schwinn to to Lori Rinek US Fish and Wildlife Service Re Scoping Comments for the BDCP. See

http://209.210.252.50/Libraries/EIR_EIS_Public_Comments/US_Environmental_Protection_Agency.sflb.ashx

These inflated promises of water create a confusing mirage that does a disservice to all involved. Water contractors that expect to benefit from increased water diversions threaten to leave unless they are given a guarantee, which clearly is not the Department's intent and would be impossible to achieve without further damaging the environment and other beneficial users.⁵

As you know, the State of California State Water Resources Control Board recently reported that a 75 percent increase in net Delta flows (not exported) is needed to protect public trust values, beneficial uses, fisheries and water quality. Furthermore, the Department of Interior's most recent report to Congress regarding the impact of climate change predicts that already scarce water supplies in the western US will probably dwindle further as a result of climate change, causing problems for millions in the region.

We agree with EPA, that the revised NOI purpose "**....promises to deliver a significant increase in exports out of the Delta which is inconsistent with state law**".. and that "**significantly increasing exports out of a stressed Delta is the wrong policy.**"⁶

The Bureau's implicit exaggeration of the amount of water available for export creates false expectations among its contractors and tends to override wise planning because such expectations of water supply promises are created that cannot be met. Water contract clauses that limit delivery and construction obligations to cases where they are "physically and financially feasible" are conveniently ignored. Compounding the false expectations for increased water supplies, these exaggerated water diversion promises are used to secure debt and financing where payments are due regularly regardless of climatic fluctuations or more realistic water supplies. **Ratepayers are left on the hook to fund these huge capital projects that do not deliver much water, yet damage water quality, the environment, and the economic base of local communities dependent on local fishing and farming jobs.**

State water code 11460 and 11463, included as part of the State's original Central Valley Project act passed in 1933, clearly protects area of origin water rights. Additionally, the Delta Protection Act of 1959, protects both the quantity of water needed in the Delta, as well as, its quality. Existing diversions of water from the Delta have resulted in violations of water quality standards causing impacts on Delta communities, fisheries and aquatic ecosystems of the estuary. The Bureau of Reclamation and the Department of Water

⁵ <http://blogs.edf.org/waterfront/files/2010/12/Westlands-resigns-BDCP-Nov-2010.pdf>

⁶ <http://www.epa.gov/region9/water/watershed/pdf/EpaR9Comments-BdcpPurpose-ExportPolicy.pdf> pg. 5

Also: The Sustainable Water Use and Demand Reduction Act (Water Code Section 85021)states:

"The policy of the State of California is to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency."

Resources are currently in violation of Delta water quality standards.⁷ The Board issued a strongly worded "cease and desist" order to the federal and state agencies for violations of the SWP and CVP permit and license conditions requiring compliance with salinity objectives in the California Delta. Diverting even more water would further violate these water quality standards. The original intent of the CVP was to export "only surplus water" – that which was no longer needed to meet the needs of the Sacramento valley, and to repel salt water from entering the Delta. Can it be scientifically proven that additional diversions from the Delta to meet contract obligations will only be "surplus water?" Frankly, it is questionable that even current diversions are "surplus." These are but a few examples of inconsistencies with state law that pose a significant hindrance to the Delta Stewardship Council progress. There are additional examples of inconsistencies with federal law.⁸ A revised NOI is essential to ensure its legal integrity if the BDCP is to be legally acceptable to the council for inclusion in the Delta Stewardship Plan.

The NOI is also inconsistent with the Reclamation Projects Authorization and Adjustment Act of 1992 (Public Law 102-575), which included Title XXXIV- Central Valley Project Improvement Act (CVPIA), signed into law October 30, 1992. The CVPIA amended previous authorizations of the CVP to include fish and wildlife protection, restoration, and mitigation as a project purpose having equal priority with irrigation and domestic water supply uses, and fish and wildlife enhancement having an equal priority with power

⁷http://www.swrcb.ca.gov/waterrights/board_decisions/adopted_orders/orders/2010/wro2010_0002.pdf

⁸ The CVP authorization of the New Melones Dam is one example where Congress (76 Stat 1191-92, Pub. L. 87-874) included the following provisos: "before initiating any diversions of water from the Stanislaus River basin in connection with the operation of the Central Valley project, the Secretary of the Interior shall determine the quantity of water required to satisfy all existing and anticipated future needs within that basin and the diversions shall at all times be subordinate to the quantities so determined" (emphasis added). . . . Provided further, "That the Secretary of the Army adopt appropriate measures to insure the preservation and propagation of fish and wildlife in the New Melones project and shall allocate to the preservation and propagation of fish and wildlife, as provided in [the 1946 Fish and Wildlife Coordination Act]. . . an appropriate share of the cost of constructing the Stanislaus River diversion and of operating and maintaining the same." This is by no means an exhaustive list, but another example is in the Trinity River division authorization where Congress included unique area-of-origin protections for the Trinity River basin by including exceptions or provisos to the "integration" requirement. The first proviso of the 1955 Act in section 2 requires that the Secretary determine the flow releases to the Trinity River that would be necessary for the preservation and propagation of Trinity River basin fish and wildlife, subject to a statutory minimum release. That proviso is the basis for the Trinity River ROD flows determined by the Secretary in 2000 with the concurrence of the Hoopa Valley Tribe as required by section 3406(b)(23) of the Central Valley Project Improvement Act. The second proviso of the 1955 Act states: "That not less than 50,000 acre-feet shall be released annually from the Trinity Reservoir and made available to Humboldt County and downstream water users."

generation. Diverting even more water to meet inflated water contract demands would put further stress on an already over-stressed fishery and its habitat. It certainly puts in question BDCP's conformity with CVPIA goals and objectives for fish recovery and water quality requirements.

In addition, Congress has not specifically authorized a new conveyance facility either a peripheral canal or a tunnel that would require a new canal from the Sacramento River to the SWP Harvey O. Banks and the CVP C.W. Jones pumping plants near Tracy. Nor has Congress appropriated funds for this new conveyance project. The cost estimates range from \$10 billion to \$53 billion to construct and mitigate such a huge project.⁹ The redirection of funds authorized by Congress for operation and maintenance funds to instead conduct environmental reviews for this new conveyance facility likely runs afoul of federal law.¹⁰ While these shifts in federal funds did not take place under this administration, the Federal Anti-deficiency Act prohibits agencies from entering into a contract that is not "fully funded" because doing so would obligate the government in the absence of an appropriation adequate to the needs of the contract.¹¹ Defining the purpose of the project to, in effect, construct a new tunnel, or peripheral canal or dual facility to deliver more water than is available, defines the range of alternatives before Congress has acted to even authorize a project.

The Bureau's response of October 26, 2010, to EPA, suggests that, "consistent with federal law and the NOI, the alternatives must represent a reasonable range of potential conveyance configurations, water operations, habitat restoration measures and measures ...capable of achieving the two coequal goals of water supply reliability and Delta ecosystem restoration."¹² ***We can find no reference in federal statute to an obligation of federal agencies to provide, a new conveyance canal.*** The project is likely to cause navigation and salinity impacts necessitating a Corps of Engineers issued permit.¹³ These water quality, navigational, and water diversion changes alone likely will require another full environmental impact statement to consider the range of alternatives. In addition to all the state and federal permits needed this change in the NOI demands that the impacts from increasing diversions by over 1 million acre feet from the existing Delta diversion amounts

⁹ <http://www.cvbizjournal.com/general/local-news/secret-meeting-agenda-pushes-peripheral-canal-option.html?print=1&tmpl=component>

¹⁰ San Luis Delta Mendota Water Authority Minutes, 9-26-08 & Memo 1-8-09 See http://www.c-win.org/webfm_send/148 and http://c-win.org/webfm_send/149

¹¹ The Anti-deficiency Act prohibits federal agencies from obligating or expending federal funds in advance or in excess of an appropriation or apportionment per [31 U.S.C. § 1351](#) and [31 U.S.C. § 1517\(a\)](#).

¹² <http://www.epa.gov/region9/water/watershed/sfbay-delta/pdf/LeadFedAgncysBdcpPurpose-NeedLtrOct262010.pdf>

¹³ Sections 10 & 14 of the Rivers and Harbors Act of 1899, 33 U.S.C. §403 § 408 (1970)

need to be disclosed and analyzed.¹⁴ These are all additional reasons why increased diversions from the Delta cannot be attained, and will likely need to be reduced. Changing the NOI to eliminate the goal of increased water exports will help clarify this issue.

EPA, quoting the California Supreme Court, noted: *"The CALFED program is premised on the theory, as yet unproven, that it is possible to restore the Bay-Delta's ecological health while maintaining and perhaps increasing Bay-Delta exports through the CVP and SWP. If practical experience demonstrates that the theory is unsound, Bay-Delta water exports may need to be capped or reduced."*¹⁵ **EPA goes on to note that in the intervening ten years the theory has not been proven accurate and they do not believe it is possible to sustain the estuary and export an additional 1 million acre feet.**¹⁶

The State Water Resources Control Board echoes these concerns in their comments on the revised notice, **"Uncertainty remains concerning the amount of water that can be diverted from the estuary without significantly impacting fish and wildlife beneficial uses. These impacts must be analyzed under CEQA before significant changes are made to the plumbing and hydrology of the Delta. In addition, independent of CEQA, the State Water Board has an obligation to consider the effect of the proposed project on public trust resources and to protect those resources."**¹⁷

At the present time the proposed purpose of the project is a large scale habitat restoration program and a major construction project to reconfigure export water conveyance in or around the San Francisco Bay Delta Estuary. The adoption of a Habitat Conservation Plan (HCP) under the federal Endangered Species Act is subject to NEPA as are numerous other permits that are likely needed for the project. Science and federal laws protecting endangered species are ignored by suggesting that a new canal project expecting to export even more water from the Delta ecosystem will restore this imperiled ecosystem.¹⁸ As EPA mentions, "Delta inflows will also be restricted in future years

¹⁴See:http://209.210.252.50/Libraries/EIR_EIS_Public_Comments/US_Environmental_Protection_Agency.sflb.ashx

¹⁵Ibid. EPA June 10, 2010 at page 5.

¹⁶ Ibid. at page 4.

¹⁷http://baydeltaconservationplan.com/Libraries/EIR_EIS_Public_Comments/California_State_Water_Resources_Control_Board.sflb.ashx pg 2.

¹⁸ http://www.nmfs.noaa.gov/pr/pdfs/laws/hcp_handbook.pdf "Thus, the HCP process is designed to address non-Federal land or water use or development activities that do not involve a Federal action that is subject to section 7 consultation..... A section 10(a)(1)(B) permit only authorizes take that is incidental to otherwise lawful activities. In this context, "otherwise lawful activities" means economic development or land or water use activities that, while they may result in take of federally listed species, are consistent with other Federal, state, and local laws." Pgs 1-4 to 1-5.

(compared to the historical record) due to changes in Trinity River Diversions into the Sacramento River system and due to upstream water resource development by senior water rights holders.”¹⁹ Tribes whose heritage and livelihood are dependent on these diverted water supplies have not been consulted nor included in the planning, project definitions or in the discussions with affected communities.

In conclusion, we strongly urge you to revise the Notice of Intent for the proposed BDCP so that it is consistent with California’s Delta Reform Act and the Sustainable Water Use and Demand Reduction Act. It appears the provisions of the NOI were added to benefit specific water contractors rather than the interests of the state or the nation as a whole. Specifically our organizations request is that the following phrase be deleted from the NOI:

“Restore and protect the ability of the [State Water Project and Central Valley Project] to deliver up to full contract amounts, when hydrologic conditions result in the availability of sufficient water, consistent with the requirements of state and Federal laws and the terms and conditions of water delivery contracts held by SWP contractors and certain members of SLDMWA.”

Thank you for your consideration of this request.

Respectfully submitted,



Jim Metropulos
Senior Advocate
Sierra Club California
jim.metropulos@sierraclub.org



E. Robert Wright
Senior Counsel
Friends of the River
bwright@friendsoftheriver.org



Adam Lazar
Staff Attorney
Center for Biological Diversity
alazar@biologicaldiversity.org



Mark Franco
Headman
WINNEMEM WINTU TRIBE
winnemem@gmail.com

¹⁹http://209.210.252.50/Libraries/EIR_EIS_Public_Comments/US_Environmental_Protection_Agency.sflb.ashx May 14, 2009 correspondence to Lori Rinek. Page 6.



Barbara Barrigan-Parrilla, Ex. Director
Restore the Delta
Barbara@restorethedelta.org



Larry Collins President
Crab Boat Owners Association Inc.
lcollins@sfcrabboat.com



Carolee Krieger
Board President and Executive Director
California Water Impact Network
caroleekrieger@cox.net



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@aol.com



Bruce Tokars, Co-Founder
Salmon Water Now
btokars@salmonwaternow.org



Jonas Minton, Senior Policy Advisor
Planning and Conservation League
jminton@pcl.org



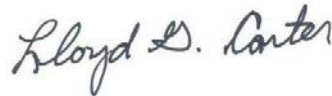
Conner Everts, Executive Director
Southern California Watershed Alliance
Co-Chair Desal Response Group
Environment Now
connere@west.net



Zeke Grader, Executive Director
Pacific Coast Federation of Fisherman's
Associations Inc
zgrader@ifrfish.org



Byron Leydecker Chair
Friends of Trinity River
bw13@comcast.net



Lloyd Carter, President,
California Save Our Streams Council
lcarter0i@comcast.net



Dr. C. Mark Rockwell, VP Conservation
Northern California Council
Federation of Fly Fishers
summerhillfarmvp@aol.com



Barbara Vlamis, Executive Director
AquAlliance
barbarav28@gmail.com

Warren V. Truitt, President
Save the American River Association
warrenpa@comcast.net

Frank Egger, President
North Coast Rivers Alliance
fegger@pacbell.net

Cc:

John Laird, California Secretary of Resources
Phillip Isenberg, Chair, Delta Stewardship Council
Senator Dianne Feinstein
Senator Barbara Boxer
California Congressional Delegation

Interested Parties



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180



NORTH

COAST

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ALLIANCE



March 25, 2011

Michelle Banonis
Mid Pacific Region
U.S. Bureau of Reclamation, MP-170
2800 Cottage Way
Sacramento, CA 95828-1898

Subject: Comments on Draft EA/FONSI for Recirculation of Recaptured Water Year 2011 San Joaquin River Restoration Program Interim Flows EA

Dear Ms. Banonis:

It is our understanding that Reclamation proposes to recirculate and recapture up to 260,000 AF of San Joaquin River Restoration Program Interim Flows released from Millerton Dam for consumptive water use.

We find that the Draft EA and FONSI do not provide sufficient information to arrive at an informed decision regarding the environmental impacts of such a complex project. In particular, Sec 16(a) (1) of the San Joaquin River Settlement states: *“The Plan shall... (1) ensure that any recirculation, recapture, reuse, exchange or transfer of the Interim Flows and Restoration Flows shall have no adverse impact on the Restoration Goal, downstream water quality or fisheries”*

However, the Draft EA contains no analysis whatsoever of water quality or downstream fishery issues, such as meeting salinity requirements of SWRCB Order D-1641, the operational requirements of the various downstream Biological Opinions including Delta smelt and salmon, as well as, other water quality requirements for selenium, boron and nutrients. We point out that Reclamation and the California Department of Water Resources have been issued a Cease and Desist Order regarding ongoing violation of D-1641 water quality requirements. The Draft EA should disclose how implementation of the project will not adversely affect downstream water quality and how all downstream regulatory requirements will be met.

We also note that SWRCB Water Right Order 2010-0029-DWR modifying Reclamation’s water rights for this project specifically states: *“Any San Joaquin River water temporarily stored or routed through San Luis Reservoir shall not be delivered to south-of-Delta contractors other than Friant Division Contractors. The water need not be directly delivered, but can be made available through transfers and exchanges. Reclamation shall document that it has taken all practicable measures to provide contract water to the Friant Division Contractors, while complying with all other conditions of this Order.”*

We understand this language to mean no one but Friant Division Contractors have a claim on the recirculation water "stored" in San Luis Reservoir, but provided all state laws and federal laws are met perhaps Friant Division Contractors can sell it to others. Any sales, leases or exchanges should be fully disclosed. All impacts including delivering this water to toxic soils on the west side of the San Joaquin Valley should be analyzed for water quality impacts to ground water supplies, drinking water supplies and the beneficial uses of the San Joaquin River harmed by increasing these toxic drainage discharges. The Draft EA needs to disclose in plain English the reality of this reading of the statutes and let the public know specifically what Friant Division Contractors are entitled to do with the water and the resulting associated impacts.

The present Draft EA is confusing. The relationship with other or existing water sales, exchanges and transfers is not provided. Further confusing is how to reconcile the SWRCB order with this proposal. The Draft EA explains on page (6) that *“Friant contractors may transfer or exchange their water to other Friant or non-Friant CVP or SWP contractors, not in excess of the existing non-Friant contractor’s CVP contract allocation.”* The SWRCB Order prohibits any increase in non-Friant SOD water supplies, not a prohibition on increasing water above existing contract amounts. The Draft EA needs to fully disclose how to reconcile these state and federal actions. For example Reclamation has approved sales and exchanges to Westlands Water District of surface water supplies from Friant contractors, whereby these Friant contractors would use substitute supplies or groundwater supplies. Are there associated transfers made possible by the recirculation of the San Joaquin River water that will change surface or

groundwater uses? The impacts to surrounding groundwater users, increased pollution from the importation of water to irrigate toxic soils and other cumulative impacts on downstream users' fish, and wildlife needs to be disclosed and addressed.

It is also our understanding that every one of the 28 long term Friant Division contractors must decline to receive any Section 215 surplus water before that water can be delivered to non-Friant contractors. The Reclamation has provided notice, that Section 215 surplus supplies are likely to be available in water year 2011. This condition is not disclosed and explained to the public. This is a long term contract provision guaranteeing Friant contractors a "first right of refusal" to such periodic surplus flows out of Friant Dam. Reclamation should capture and make publicly available documentation demonstrating that all 28 Friant districts have formally declined the 'surplus flows' in question before authorizing any transfer of the water to non-Friant SOD contractors.

Specifically further disclosure and clarification is also needed at:

1. Page 38: The document should indicate conveyance capacity of the California Aqueduct.
2. Page 41: It is not clear how recirculated San Joaquin River water will end up in San Luis Reservoir if recirculation does not occur under the No Action Alternative. Wouldn't the water flow to the Delta instead? If there is a chance for "spilling" at San Luis Reservoir under No Action, wouldn't this result in reduced Delta exports and improved water quality in the South Delta, a beneficial impact?

Land Use: Given that the project could result in increased deliveries to saline, seleniferous lands such as San Luis Unit contractors, the document fails to disclose the impact of increasing these pollutants and metals such as selenium discharges to surface and/or groundwater. The amount of salt, boron and selenium created by irrigation of an acre of such land can be calculated from the Broadview Contract Assignment EA in 2004 (Reclamation), which calculated reductions in those pollutants as a result of retiring the Broadview Water District. The savings estimated from the Broadview Contract Assignment by acre are as follows: Salt- 1.57 tons/acre; Boron- 4.81 pounds/acre; Selenium- .139 pounds/acre. The EA should assume that increased water deliveries to similar soils will result in the creation of similar amounts of pollution discharged either to groundwater or surface waters. The EA and FONSI should disclose these impacts if water is transferred from Friant contractors to non-Friant contractors that have soils containing salts, metals such as selenium, boron and other contaminants.

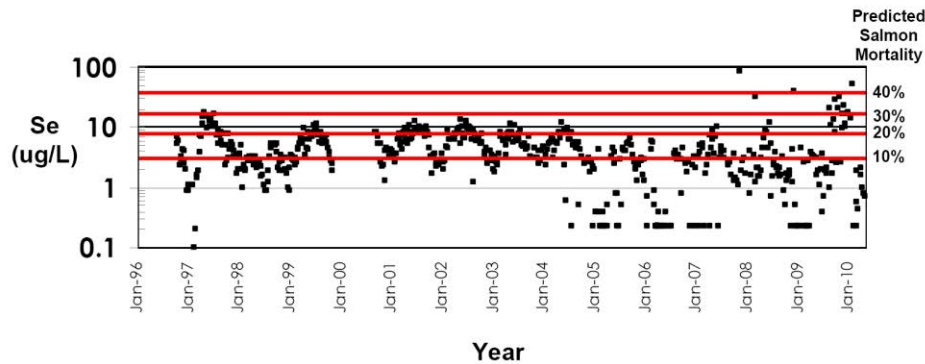
Biological Resources: The Draft EA should consider an alternative using some of the recirculated water to provide full Level 2 and/or Level 4 Refuge Water supplies.

If the project provides water to seleniferous saline lands that drain into Mud Slough, Salt Slough or the Grasslands Bypass Project, or result in ponding, there could be impacts to species covered by the Migratory Bird Treaty Act. The Grasslands Bypass Project has documented selenium mortality and elevated levels of selenium in birds covered by the MBTA.

Air Quality and Global Climate Change: Under the Proposed Action, the statement that electric motors do not emit greenhouse gases or air pollutants is completely misleading. While it is true that electric pumps don't discharge air pollutants, the energy sources for those pumps either uses greenhouse gases, or the increased energy use causes more fossil fuels to be burned. The document cannot claim that there are no impacts from the Proposed Action due to increased use of electric pumps. Electric pumps are also used for groundwater pumping, which is claimed to be a significant air quality impact of No Action. This type of analysis is not adequate. In order to make an adequate analysis and conclusion, there would have to be a comparison of the amount of electricity used for increased groundwater pumping as compared to increased pumping from recirculation. The analysis would also have to determine the amount of increased groundwater pumping, which is currently not disclosed.

Cumulative Impacts The Draft EA does not address cumulative impacts of irrigating seleniferous lands and the negative impact on the San Joaquin River Restoration Program. Selenium concentrations at Hills Ferry averaged over 15.6 ppb from Aug 11, 2009 to Jan 20, 2010. In 2009, selenium exceeded public drinking water standards measuring 52 ppb. See the charts below for impacts to juvenile salmonids from selenium exposure (Beckon, Pers Comm).

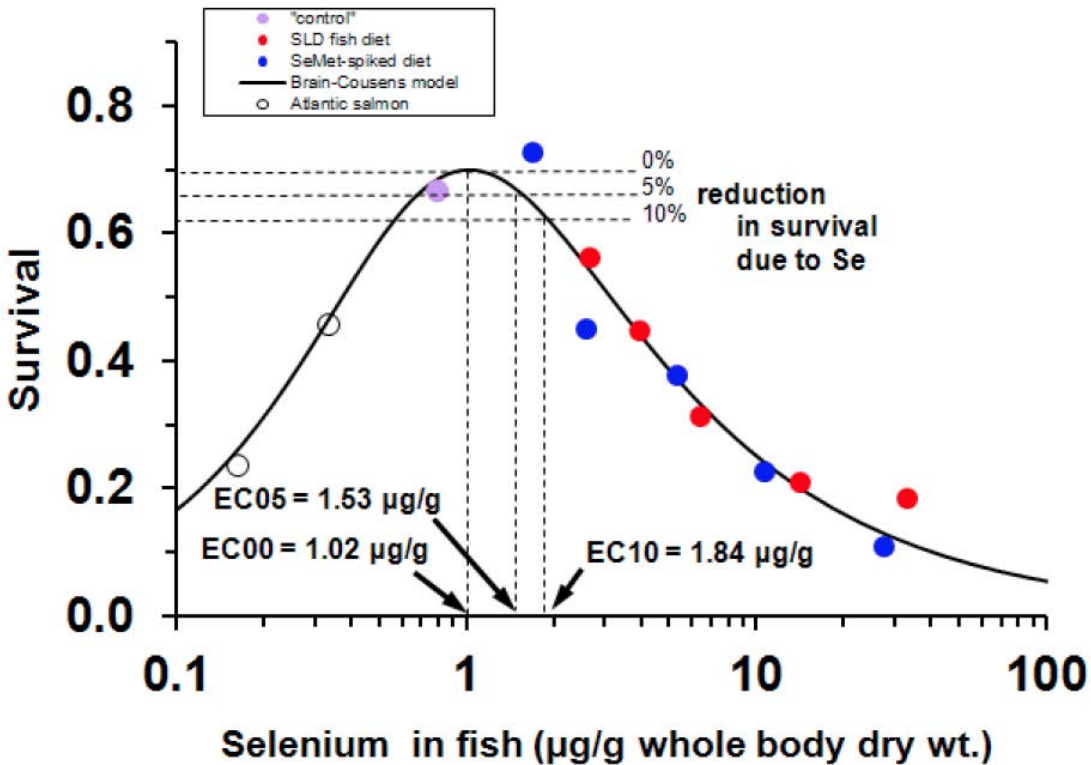
Selenium Levels and Predicted Salmon Mortality in the San Joaquin River



Selenium concentrations measured in the San Joaquin River at Hills Ferry (data from the U.S. Bureau of Reclamation)

Mortality	Tissue selenium	Water selenium
Percent	µg/g whole body dry wt.	µg/L
5%	1.531	1.92
10%	1.844	3.31
20%	2.486	7.98
30%	3.273	17.92
40%	4.336	41.01
50%	5.901	101.57
60%	8.447	291.87

These data are based on the following relationship and on Mike Saiki's data for juvenile salmon bioaccumulation in the SJ River. Depending on what model you use, and how you round off, you get slight variations from these numbers.



The Draft EA does not include any of the mitigation measures identified in SWRCB WRO 2010-0029 (DWR). All of those mitigation measures should be included.

We urge the Reclamation to either prepare a full Environmental Impact Statement or reissue the Draft EA and FONSI with additional analyses of downstream water quality effects, clarification of the apparent discrepancy between SWRCB WRO 2010-0029 (DWR), full disclosure of the biological and water quality impacts of applying additional water on saline, selenium soils, as well as an adequate analysis on air quality and greenhouse gases. Alternately, if the required analyses are complete and there are significant environmental impacts, Reclamation should complete a full environmental statement of this proposed transfer where up the amounts of water, the timing of transfer and the acreage and locations

are clearly defined for the benefit of the public understanding along with the impacts to areas of origin, ground water aquifers, and the local areas transferring out "surplus" supplies. This Draft EA proposes up to 260,000 acre feet of water can be diverted before reaching the Delta estuary without harm to the San Joaquin River restoration effort and the estuary. Insufficient analysis is provided to scientifically support this conclusion.

Thank you for the opportunity to comment. Please add us to your notification list for this project.

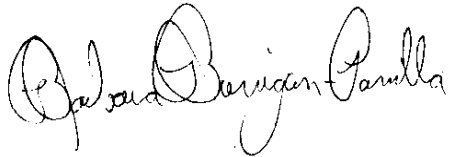
Respectfully submitted,



Jim Metropulos
Senior Advocate
Sierra Club California
jim.metropulos@sierraclub.org



Steven L. Evans
Conservation Director
Friends of the River
sevans@friendsoftheriver.org



Barbara Barrigan-Parrilla
President
Restore the Delta
Barbara@restorethedelta.org



Larry Collins
President
Crab Boat Owners Association Inc.
lcollins@sfcraabboat.com



Carolee Krieger
Board President and Executive Director
California Water Impact Network
caroleekrieger@cox.net



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@aol.com



Bruce Tokars,
Co-Founder
Salmon Water Now
btokars@salmonwaternow.org



Jonas Minton
Senior Policy Advisor
Planning and Conservation League
jminton@pcl.org



Conner Everts
Executive Director
Southern California Watershed Alliance
Co-Chair Desal Response Group
Environment Now
connere@west.net



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's
Associations Inc
zgrader@ifrfish.org



Byron Leydecker Chair
Friends of Trinity River
bwl3@comcast.net

Warren V. Truitt President
Save the American River Association
warrenpa@comcast.net

Frank Egger, President
North Coast Rivers Alliance
fegger@pacbell.net

Cc:

Phillip Isenberg, Chair, Delta Stewardship Council
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California Congressional Delegation

Interested Parties



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180

WINNEMEM
WINTU TRIBE



NORTH
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February 28, 2011

Mr. Brad Hubbard
United States Bureau of Reclamation
2800 Cottage Way, MP-410
Sacramento, CA 95825
bhubbard@usbr.gov

Dean Messer, Chief Water Transfers Office
Department of Water Resources
1416 9th Street Sacramento, CA 95814
dmesser@water.ca.gov

Ms. Frances Mizuno
Assistant Executive Director
San Luis & Delta-Mendota Water Authority (SLDMWA)
frances.mizuno@sldmwa.org

Re: Scoping Comments Proposed Ten Year North to South Water Transfer of CVP and Non CVP Water Using State Water Project (SWP) and Central Valley Water Project (CVP) Facilities

Dear Mr. Brad Hubbard, Ms. Frances Mizuno & Dean Messer:

Thank you for the opportunity to comment on the proposed long term transfer of water from north of the Delta to areas south of the San Francisco Bay Delta using federal and state facilities from 2012 through 2022, from willing sellers and buyers.

1. The Department of Water Resources Not the SLMWA Joint Powers Authority Should Be the Lead State Agency:

The Department of the Interior, Bureau of Reclamation (Bureau) and the San Luis & Delta-Mendota Water Authority (SLDMWA) propose to prepare a joint EIS/EIR to analyze the effects of water transfers from water agencies in northern California to water agencies south of the Sacramento-San Joaquin Delta (Delta) and in the San Francisco Bay Area. The EIS/EIR is to address transfers of Central Valley Project (CVP) and non-CVP water Transfers of supplies that require use of CVP or State Water Project (SWP) facilities to convey the transferred water.

The courts have held DWR, not a joint powers authority such as SLDWA, has the statutory duty to serve as lead agency in assessing the environmental consequences of projects involving the SWP.¹ The proposed water sales from one basin to another will potentially have broad statewide and national impacts to groundwater supplies, State and federal San Francisco Bay-Delta estuary ecosystem through-flow and outflow responsibilities under the Clean Water Act and Porter-Cologne Water Quality Control Act.² Any transfers or sales also could have significant impacts on Bay Delta flow criteria and need to be analyzed.³

Despite assurances in the scoping documents that proposed additional diversions from the Delta would not have an impact on federal or state endangered species, the complexity of the estuary ecosystem and the national and statewide importance of these public trust resources to the entire state demand State analysis of local, regional and statewide impacts from the proposed water transfer project. Further the environmental review needs to analyze the local and statewide impacts from the proposed water transfers on energy consumption and greenhouse gas emissions due to increased groundwater pumping programs, transport through

¹ <http://ceres.ca.gov/ceqa/cases/2000/PCLvDWR-2000.html>

84 Cal.App.4th 315A, 100 Cal.Rptr.2d 173, 00 Cal. Daily Op. Serv. 7782, 2000 Daily Journal D.A.R. 10,331

² http://www.swrcb.ca.gov/laws_regulations/docs/portercologne.pdf

³ http://www.swrcb.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/final_rpt.shtml

the federal and state systems and needed energy to deliver the water some 200 to 300 miles away.

2. **It is not clear there is a viable federal project without identified willing buyers and sellers given State and federal legal constraints on further diversions from the Bay-Delta estuary.**

No willing sellers or buyers have been identified in the scoping documents. Without this information the proposed project is purely speculative, making the nature of the project and potential scope of its impacts indeterminable. Pursuant to the 1992 Central Valley Project Improvement Act (CVPIA) federal contractors are required to meet specific fish and wildlife restoration goals. To date these goals have not been met.⁴ Further, Tribal trust responsibilities and area of origin requirements on diversions of water from the Trinity River have not been met. Any additional transfers of water out of the Bay-Delta estuary from north to southern basins need to comply with these explicit provisions of law prior to transferring additional supplies from the estuary. Further as noted in the scoping document the CVPIA places specific constraints on the transfer of CVP water including requirements that water be consumptively used as a prior condition to its transfer in order to avoid third party impacts and to encourage water conservation.

Given the highly speculative and ill-defined nature of the project it is difficult for the public to comment on whether the important constraints on any such project will be sufficiently analyzed and reviewed. In addition, with the undefined nature of the project, it is unclear that the Bureau has an authorized project to use federal facilities. As stated by the author of the federal legislation, “The purpose of the CVPIA was not to create a permanent annuity for a few contractors who become re-sale agents of a public resource, with the profit going into private pockets...The resale authority was intended for the short term, and should not be abused.”⁵

⁴ The timing of required Environmental Water Account (EWA) water flows is to enhance and protect fish populations and the water is to flow in Delta channels to San Francisco Bay and the Pacific Ocean to meet water quality requirements under federal and state law for outflows. Previous short term water transfer programs under the Drought Water Bank have released water from storage facilities to be exported for deliveries in the July through September period. Compliance with EWA provisions require water at critical time periods and year-round depending on the specific needs to protect fish. Potential conflicts with the proposed transfer of more water out of the Delta need to carefully examine the conflicts with the EWA, where water purchases are to provide instream flows in the Delta, rather than water to serve consumptive uses outside of the Delta.

⁵ <http://www.fotr.org/comments/MillerReewalComnts083104.pdf>

3. CEQA and NEPA Require An Accurate Baseline Description in order to Analyze Impacts & Integration with other Planning and Environmental Procedures.

According to the scoping notice, “the water transfer provisions would occur through various methods, including, but not limited to, groundwater substitution and cropland idling, and would include individual and multiyear transfers from 2012 through 2022. Further the transfer of these water supplies would require use of CVP or State Water Project (SWP) facilities to convey the transferred water.” The locations, amounts, place of use, purpose and point of diversion are not identified either for the sellers or buyers of the water proposed to be diverted from the San Francisco Bay-Delta. Without this basic information the scope of the project is unknowable. Extensive planning at both the State and federal levels are underway to ensure Bay-Delta estuary ecosystem restoration and reliable water supplies. Any long term water sale transfer project would need to fit into this ongoing planning effort.

At the heart of any adequate CEQA analysis is an accurate description or baseline of the environment conditions such that the public and decision makers are sufficiently informed regarding the impacts of the project and necessary mitigation measures. Due to the complexity of groundwater withdrawals on surrounding wells and potential injury to other water users the project needs to accurately reflect the elevation, hydrology and conditions of existing groundwater basins from which the proposed substitutions or extractions are proposed. The record is replete with examples where groundwater storage projects have overestimated the amounts of groundwater that can be safely withdrawn without injury to domestic wells and other water users.⁶

⁶ See: Incorporated here by reference,

http://www.aqualliance.net/sitebuildercontent/sitebuilderfiles/coalitionwatertransfersea_fonsi_011910final.pdf

Subject: Comments on the Draft Environmental Assessment and Findings of No Significant Impact for the 2010-2011 Water Transfer Program

“The Bureau’s 2009 DWB EA elaborated on this point regarding Natomas Central Mutual Water Company (p. 39) stating that, —*Shallow domestic wells would be most susceptible to adverse effects. Fifty percent of the domestic wells are 150 feet deep or less. Increased groundwater pumping could cause localized declines of groundwater levels, or cones of depression, near pumping wells, possibly causing effects to wells within the cone of depression.*”

Also see: http://www.c-win.org/webfm_send/119

Rosedale Rio-Bravo Storage District complaint

Without identified buyers it is difficult for the public to comment on the proposed scope of water transfers and the potential for increased pollution and discharges of selenium, contaminants and salt to the San Joaquin River and Bay-Delta estuary. Westlands Water District (Westlands) largely controls the SLDMWA through membership and acquisition of other member districts. Exporting water from the Sacramento watershed to irrigate toxic selenium lands on the Westside of the San Joaquin Valley will result in additional polluted runoff and groundwater supplies. These contaminants are discharged to the San Joaquin River and Bay-Delta estuary causing additional impacts to endangered species, water pollution and long term cumulative impacts to the estuary ecosystem in terms of public health concerns, mortality and reproductive failure in aquatic systems and wildlife.⁷

Thus any environmental analysis must provide an accurate baseline so that decision-makers can understand one of the most important causes and effects of such water sales: Potential long term damage to the groundwater resources in the Sacramento Valley and the production of additional pollutants and contaminants from irrigating toxic soils in the western San Joaquin Valley, where many of the prospective buyers are likely located, with the resultant discharge of

Also see: <http://www.bakersfield.com/news/columnist/henry/x2120045792/LOIS-HENRY-More-wells-go-dry-in-Rosedale>

⁷ The source of much of the saline discharge to the San Joaquin River is from lands on the west side of the San Joaquin Valley which are irrigated with water provided from the Delta by the CVP, primarily through the Delta-Mendota Canal and the San Luis Unit." (D-1641, p. 83 .)

See: EPA testimony <http://www.cal-span.org/cgi-bin/archive.php?owner=DSC&date=2011-02-24> Testimony of Erin Foresman: 'Primary sources of selenium contamination to the Delta are from oil refinery point sources and irrigation return flows from the Westside discharges into the San Joaquin River and Delta.'

and CVRWQCB January 2002 Technical Report, p. 11: Surface and subsurface agricultural drainage represent the largest sources of salt, selenium and boron loading to the Lower San Joaquin River (LSJR). The vast majority of this agriculturally derived salt and boron loading to the river originates from lands on the west side of the LSJR watershed. Soils on the west side of the San Joaquin Valley are derived from rocks of marine origin in the Coast Range that are high in salts, selenium and boron. Dry conditions make irrigation necessary for nearly all crops grown commercially in the watershed. Salt and boron are leached from these west side soils when irrigation water is applied. ...The discharge of subsurface drainage has resulted in elevated salt and boron concentrations in the Lower San Joaquin River and certain tributaries.... Groundwater accretions to the river are another significant source of salt and boron loading to the LSJR as ongoing irrigation practices have led to accumulation of salts and contaminants in the unconfined and semi-confined aquifer that underlies most of the west side of the San Joaquin Valley and lands on the east side of the San Joaquin Valley directly adjacent to the river.

these contaminants to the San Joaquin River and the San Francisco Bay-Delta estuary. The environmental costs, economic burden of this pollution on society, and the damage to groundwater supplies from this chain of prospective actions must be fully disclosed and analyzed.

4. The alternative analysis needs to examine intra-basin transfers that would result in less environmental impacts—such as water transfers from irrigated toxic soils to other SLDMWA water users.

Absent identified sellers and buyers, it is difficult to determine if this is a water transfer program designed specifically to deliver more water to Westlands or to other users with the SLDMWA. Millions of taxpayer dollars have been spent in loans and direct payments to assist in water efficiency measures, to support subsidized crops and to treat the resultant contaminated ground and surface drainage water in the SLDMWA districts of the authority. Flood irrigation is still used within some of the districts where water rates are low. Subsidized crops are also grown. Retiring at least 300,000 acres⁸ of toxic lands could result in substantial water savings making more water available for transfer within the SLDMWA boundaries. Prior to advancing additional transfers of water from the Bay-Delta estuary with the resulting polluted return flows, project alternatives must consider in-basin transfers resulting from water conservation measures and land fallowing of toxic selenium soils on the west side of the San Joaquin Valley. This type of alternative would also provide significant energy savings that needs to be analyzed.

Thank you for the opportunity to comment. Please include the undersigned organizations on the mailing list for this or similar projects.

Regards,



Adam Lazar
Staff Attorney
Center for Biological Diversity
alazar@biologicaldiversity.org



Steven L. Evans
Conservation Director
Friends of the River
sevans@friendsoftheriver.org

⁸ The Bureau's Feasibility Report for the San Luis Drainage Feature Re-evaluation (SLDFRE), March 2008, makes a clear case that neither the technology nor the funding are available to meet the SLDMWA contractors' desired to handle the toxic drainage problem through a fully reimbursable program or funded by taxpayer subsidies. The National Economic Development (NED) Report Summary for the San Luis Drainage Feature Re-evaluation Record of Decision (SLDFRE ROD) concluded that any alternative with less than 300,000 acres of land retirement would be a net economic loss.



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's
Associations Inc
zgrader@ifrfish.org



Larry Collins
President
Crab Boat Owners Association Inc.
lcollins@sfcraabboat.com



Mark Franco
Headman
WINNEMEM WINTU TRIBE
winnemem@gmail.com



Jonas Minton
Senior Policy Advisor
Planning and Conservation League
jminton@pcl.org



Conner Everts
Executive Director
Southern California Watershed Alliance
Co-Chair Desal Response Group,
Environment Now-- connere@west.net



Byron Leydecker
Chair
Friends of Trinity River
bwl3@comcast.net

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North Coast Rivers Alliance
fegger@pacbell.net

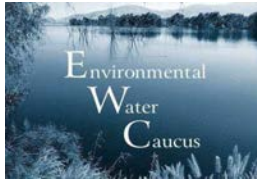


Bruce Tokars, Co-Founder
Salmon Water Now
btokars@pacbell.net

IV. Enforcing Environmental Mitigation, Restoration and Enhancement Laws



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS



CA Save Our Streams Council



May 6, 2022
Updated May 9, 2022

Governor Gavin Newsom
1021 O Street, Suite 9000
Sacramento, CA 95814

Toni Atkins, President pro Tempore
California State Senate
State Capitol
Sacramento, CA 95814

Anthony Rendon, Speaker
California State Assembly
State Capitol
Sacramento, CA 95814

Re: Drought-Driven Voluntary Agreements and Legal Loopholes Threaten our Salmon Heritage, the Environment, and Community Health.

Dear Governor Newsom:

We are gravely concerned about the environmental and socio-economic impacts of the Voluntary Agreements and the growing lack of compliance with CEQA and other water protections. These actions implemented under the guise of the drought emergency will increase risks of irreversible damage to our natural heritage and our communities.

Voluntary Agreements Fail to Follow Federal and State Law: Using Taxpayer Dollars to Fund this Undertaking is Unconscionable

We object to any taxpayer funding for the proposed Voluntary Agreements (VAs). These back-room VAs do not meet legal protections for the environment, fail to protect the health of the Bay-Delta estuary, its native fish and wildlife, and the jobs and communities that depend on its health and exacerbate economic inequality.¹

Unless action is taken to enforce existing law, your legacy will likely be the destruction of California's salmon heritage for your children and generations to come. There is still time to stop investing taxpayer dollars in more dry holes and, instead, improve protections of our environment and the communities that rely upon healthy water flows through improved adherence to our environmental protections, including a greater focus on monitoring and enforcement.

We agree with you that, "*We need more tools in the damn tool kit.*" We urge you to not implement archaic solutions promoted by David Bernhardt, Westlands' former lobbyist, and by the Trump administration.² Instead, your leadership is needed to invest in real water solutions that produce water at a reasonable cost to ratepayers, while still meeting federal and state water quality and environmental protections. Your leadership is also needed to preserve the heritage and way of life of the tribes who depend on rivers and fisheries and who have for centuries lived with a balanced relationship between oceans, rivers, creeks, lakes springs, marshes and the flora, fauna and wildlife that depend on them. We cannot continue to take more and more water and with every drought merely pump more groundwater, which damages aquifers, harms third-parties, causes subsidence, and alters rights to groundwater when artificial recharge is used.³

The Pacific Institute in April 2022 reported that urban water-use efficiency improvements could reduce statewide urban water use by 2.0 million to 3.1 million acre-feet per year (AFY). The reuse potential of municipal wastewater is 1.8 million to 2.1 million AFY, and the stormwater capture potential is 580,000 AFY in a dry year to as much as 3.0 million AFY in a wet year.⁴

¹ See: <https://www.latimes.com/california/story/2022-04-01/a-2-6-billion-drought-deal-is-drawing-fire-in-california> And: <https://resources.ca.gov/-/media/CNRA-Website/Files/NewsRoom/Voluntary-Agreement-Package-March-29-2022.pdf>

² <https://www.latimes.com/business/story/2019-11-15/interior-secretary-westlands-water-deal> "*Is the department's award of a lucrative permanent water contract to Westlands, Bernhardt's former client, just a coincidence? Let's examine just how influential Westlands is in Washington and what benefits it gains from the contract — which is facilitated by a law that Bernhardt helped to write as a Westlands lobbyist.*" Also See Trump, Scottsdale, USA - 19 Oct 2018 Donald Trump, Kevin McCarthy, Devin Nunes, Jeff Denham, Tom McClintock. President Donald Trump signs a "Presidential Memorandum Promoting the Reliable Supply and Delivery of Water in the West," during a ceremony, in Scottsdale, Arizona.

³ Gosselin, Paul, and Valerie Kincaid, 2020. Memo for the Vina Groundwater Sustainability Agency, Legal Implications of Potential Projects, and Management Actions." A project proponent maintains the right to water that is recharged whether it results from recharge projects or groundwater demand reduction projects (e.g., conservation, recycling). If a project uses or obtains a surface water supply and recharges into the aquifer, the project proponent would have a legal right to the recharged water. Water does not legally become "common" or "native" supply available to overlying groundwater right holders unless it is abandoned by the project proponent. (Los Angeles v. Glendale (1943) 23 Cal.2d 68, 76-78; Los Angeles v. San Fernando (1975) 14 Cal.3d 199, 258-60; Stevens v. Oakdale Irrigation District (1939) 13 Cal.2d 343, 352-43; Crane v. Stevinson (1936) 5 Cal. 2d 387, 398.)"

⁴ ***Ibid.*** California's Untapped Urban Water Potential 2022

Metropolitan Water District of Southern California, one of the largest water districts taking Northern California water supplies, has other less costly alternatives to water supplies as documented in the Pacific Institute’s report. And using tax dollars to further subsidize Westlands Water District (Westlands), the nation’s largest federal irrigation district—which is already boasting about how taxpayers are paying their water bills—is unconscionable.⁵ Your VA with the largest water exporters to “manage” recurring droughts merely entrenches the status quo: please do not merely declare an emergency and then violate water quality standards and environmental protections. Rather we urge you to invest in real water solutions like those reported in April 2022, by the Pacific Institute,⁶ instead of recklessly spending more taxpayer dollars on building empty dams and other damaging diversions.⁷

Please correct the inequities created by this lopsided water agreement. Residents of South-Central Los Angeles already pay much of the Beverly Hills’ water bills, and now if implemented, the VAs would ensure that all state taxpayers will pay for Westlands’ and MWD’s environmental damage rather than pay these costs, as they are supposed to under existing federal and state law.⁸ Furthermore, the proposed VAs fail to comply with the Central Valley Project Improvement Act, which requires the federal contractors to pay for their environmental damages rather than shift these costs to taxpayers. We urge you to seek repayment of more than \$400 million dollars in fish and wildlife mitigation costs owed by Westlands and other federal contractors rather than give them even more taxpayer subsidies for the damages caused.⁹

Environmental Protection Loopholes Put the Environment and Communities at Risk

Besides the failure of the so-called Voluntary Agreements to meet federal and state law, we also want to discuss environmental protection loopholes that benefit a few of the richest irrigators in the nation.¹⁰ For example, the recent Executive Drought Declarations have created loopholes to California Environmental

⁵ Letter Westlands’ President Ryan Ferguson (#668), April 28, 2022, <https://wwd.ca.gov/wwd-notice/letter-from-president-ryan-ferguson-668/>

⁶ <https://pacinst.org/publication/california-urban-water-supply-potential-2022/> *The Untapped Potential of California’s Urban Water Supply: Water Efficiency, Water Reuse, and Stormwater Capture*, April 2022.

⁷ <https://www.mercurynews.com/2022/04/29/newsom-desalination-project-should-be-approved-we-need-more-damn-tools-in-the-toolkit/>

⁸<https://apnews.com/article/business-environment-and-nature-california-environment-fresno-02194469a3b70dbcee20e00802804819> “This was an effort to basically steal public resources and put them into private pockets,” said Stephan Volker, an attorney for the Winnemem Wintu Tribe, the North Coast Rivers Alliance and several other groups. See also <https://www.hcn.org/articles/south-water-judge-rejects-trump-era-water-contract-in-a-win-for-tribes> <https://calsport.org/news/innews/fresno-judge-rejects-westlands-water-districts-proposed-permanent-water-contract/>

⁹ https://calsport.org/news/wp-content/uploads/PCFFA-CSPA-2021-02-16-CVPIA-BERNHARDT_RESCISSION_REQUEST-Haaland-Biden.pdf &

¹⁰ Letter from President Ryan Ferguson (#668), April 28, 2022. <https://wwd.ca.gov/wwd-notice/letter-from-president-ryan-ferguson-668/>

Additionally, in March 2022, Westlands signed the Memorandum of Understanding to advance voluntary agreements as an alternative to the unimpaired flow standard proposed for amendment of the Bay-Delta Water Quality Control Plan. These voluntary agreements represent our best hope of maintaining water supplies restored by the 2019 biological opinions, and they represent a paradigm shift in how water resources will be managed.... Westlands was a leader in negotiating the voluntary agreements and is committed to advancing them as envisioned.

Quality Act (CEQA) review that arbitrarily benefit Westlands while harming other beneficial uses. We outline two projects below where these CEQA exemptions have been used and could have significant adverse consequences to the environment and public health. The two projects described below are examples of projects that should be required to conduct thorough environmental reviews and include adequate mitigation, monitoring, and enforcement.

1. California Aqueduct Pump-Ins Discharge Contaminants to Downstream Uses.

On February 24, 2022, Westlands Water District (Westlands) filed a Notice of Exemption from CEQA for a 1-year groundwater pump-in project into the California Aqueduct (pump-in project)¹¹, which in previous drought years had significant impacts on downstream beneficial uses, including fish and wildlife, refuge water supplies and human health.¹² Selenium and arsenic are contaminants of particular concern. Additional potential contaminants are 1,2,3-Trichloropropane (TCP), and perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).¹³ Westlands justifies exempting themselves from these environmental protection laws citing your May 10, 2021, Proclamation of a State Drought Emergency¹⁴ and the subsequent approval from the Department of Water Resources (DWR). The CEQA exemption for the Westlands pump-in project for 2022 is not appropriate without additional assurances, monitoring, and enforcement actions to protect the public and fish and wildlife resources that rely upon water from the Aqueduct downstream of Westlands. This includes the ratepayers throughout the MWD service area and low-income communities in the Central Valley who rely upon this water.

We asked that the current federal Warren Act Contract (including an Exhibit D), and a current agreement between DWR and Westlands for introduction of local groundwater into the Aqueduct (that includes an Attachment 1) be provided to the public. We received a copy of the signed Agreement between DWR and Westlands via a Public Records Request on April 29, 2022. This Agreement covers the pump-in project thru May 31, 2022. A new Agreement and Warren Act Contract are required to authorize these groundwater inputs into the Aqueduct starting June 1, 2022. We ask that this Agreement and the Warren Act Contract be made available to the public for comment prior to completion. Westlands should not be allowed to discharge their contaminated groundwater into the Aqueduct and thereby send these contaminants downstream. Furthermore, Westlands anticipates 630,000 acre-feet of groundwater will be

¹¹ See: <https://ceqanet.opr.ca.gov/2022020570>

¹² See Coalition comments on Westlands pump-in project, 9.30.2020: https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-9-30-2020_WWD-SLC-Pump-in-2020-IS_ND_-Cal-Aqueduct-Corrected.pdf

¹³ Ibid.

¹⁴ See: <https://www.gov.ca.gov/2021/05/10/governor-newsom-expands-drought-emergency-to-klamath-river-sacramento-san-joaquin-delta-and-tulare-lake-watershed-counties/>

On April 21, 2021, May 10, 2021, July 8, 2021, and October 19, 2021, Governor Gavin Newsom issued State of Emergency Proclamations (Governor's Proclamations) in response to severe drought conditions across California, including the Central Valley. The Governor's Proclamations require DWR to expeditiously consider requests to convey water to areas of need where hydrology and other conditions allow. As of current, the Governor's Proclamations are still in place and remain in effect. Government Code section 8571 authorizes the Governor to suspend certain regulatory requirements, including CEQA, under emergency conditions. The Governor's Proclamations order the State "to expeditiously consider requests to move water to areas of need, including requests involving voluntary water transfers, forbearance agreements, water exchanges, or other means," and suspends CEQA for purposes of carrying out or approving this and other directives.

pumped and the subbasin could experience an average groundwater level decline of 40 feet.¹⁵ The resulting subsidence impacts on others needs to be disclosed.

We are encouraged to see some additional terms and conditions in the current Agreement between DWR and Westlands. Those additions include:

- Only wells further than 2 miles away from the Aqueduct can participate in the program (to reduce impacts of subsidence).
- Groundwater inputs into the Aqueduct cannot exceed flow in the Aqueduct.
- Rapid turnaround of water quality sampling for Table 5 and Lateral 7 sampling (one week but no greater than 14 days).

These are a start, but additional monitoring, mitigation and enforcement actions are needed to ensure that downstream beneficial uses are protected. Those measures were highlighted in our May 25, 2021, letter to your office and linked below.¹⁶

Further, the CEQA exemption loopholes create avenues to evade water quality protections with the Federal Clean Water Act (CWA) and State Porter Cologne Water Quality Control Act. The USEPA (EPA) noted in comments submitted for the Westlands groundwater pump-ins in 2010 that the discharge of contaminated groundwater from Westlands with potentially high salt, boron, chromium, arsenic, selenium, and other metals would be subject to the National Pollution Discharged Elimination System (NPDES) permitting requirements, pursuant to the federal Clean Water Act. Further, EPA noted that “Permits will need to be designed to ensure the discharges do not cause or contribute to exceedances of applicable State water quality standards or degradation of designated beneficial uses.”¹⁷

In addition, we note that no Waste Discharge Requirements (WDRs) have been issued for these projects. WDRs established pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13263) permit discharges that “could affect the quality of waters of the state” – both surface and groundwater. These permits shall take into consideration beneficial uses to be protected, water quality objectives required for that purpose, other waste discharges, and the need to prevent nuisance. Some WDRs can also serve as a CWA NPDES permit (Wat. Code, § 13377; Chapter 5.5, Wat. Code, § 13370 et seq.).¹⁸

Without the necessary permits, the public is precluded from analyzing the permit and conditions to ensure protection and non-degradation of water supplies under the NPDES or WDR permit and potential mitigation measures. We note that almost 40% of the discharge points identified in Table 1 of the September 2020 IS/ND for the pump-in project¹⁹ had at least one well sample that exceeded drinking water MCLs identified in the previous Water Quality Monitoring Plans for the constituents Arsenic, Selenium, or salts. This information is summarized in Appendix A to our September 30, 2020, comments

¹⁵ See WWD April Notice <https://wwd.ca.gov/wwd-notice/april-monthly-notice-667/> April 21, 2022.

¹⁶ Ibid.

¹⁷ See: <http://calsport.org/news/wp-content/uploads/EPA-comments-Westlands-WD-EIR-NOP-3-4-10.pdf>

¹⁸ See: https://www.waterboards.ca.gov/board_reference/docs/wq_law.pdf

¹⁹ See: <https://ceqanet.opr.ca.gov/2020090040/2>

on the IS/ND for the pump-in project.²⁰ Constituents such as selenium bioaccumulate in the food chain and thus have amplifying the impacts on the environment (DWR 2016, 2017).²¹

2. Westlands Injection of Water into Contaminated Aquifers Likely Spreads Contaminants to Surface Waters Impacting Fish and Wildlife.

Our organizations wrote DWR and others on October 18, 2021, regarding the failure of Westlands' Agricultural Aquifer Storage and Recovery (ASR) Project in Broadview Water District to comply with State and Federal environmental laws as required prior to providing taxpayer funded grants. Subsequently, the Planning and Conservation League contracted with Hydrofocus Inc. to assess the adequacy of hydrologic analysis of the Broadview ASR Project and its potential to mobilize contaminated shallow groundwater. Hydrofocus provided a copy of their report to DWR and others on March 16, 2022.²² The report concluded Westlands had not complied with CEQA and, *"Based on our review of substantial data and analysis conducted in the western San Joaquin Valley, we conclude that if the Broadview ASR project proceeds with injection and pumping cycles as planned, there can be hydrologic and water-quality impacts which include discharges of groundwater and drain water with selenium concentrations to surface waters."* We have received no response from DWR since the Hydrofocus report was submitted.

Conclusion

Cumulative Impacts have not been considered and no alternatives to these VAs and CEQA Exemptions were considered. The CEQA Exemptions fail to consider a reduction in exports, land fallowing and land retirement, issues of irrigability of lands in Westlands, expansion of the Place of Use boundary for the State Water Project and Central Valley Project south of the Delta, the cumulative effects of groundwater pump-ins, exchanges and transfers, and impacts of applying water to drainage-impaired lands.

CEQA loopholes also obscure the impacts to third parties and the environment from groundwater elevation decline, subsidence, well stranding, and stream depletion. In addition, without CEQA mitigation and monitoring affected third parties are left on their own to demonstrate harm that may be caused by additional groundwater pumping projects. Added extraction of groundwater also fails the Legislative directives contained in the Sustainable Groundwater Management Act (SGMA).

With climate changes the droughts of the last 10 to 15 years have been more persistent and more severe. Scientists predict droughts will even be more likely in the future. We have dammed, diverted, and disconnected or altered the majority of our rivers in the State, but especially our largest rivers, the Sacramento and San Joaquin Rivers, which feed the Delta Estuary and San Francisco Bay. Rather than

²⁰ https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-9-30-2020_WWD-SLC-Pump-in-2020-IS_ND_-_Cal-Aqueduct-Corrected.pdf

²¹ DWR Groundwater Data from WWD 2008 Pump Ins at: <https://wdl.water.ca.gov/waterdatalibrary/WaterQualityDataLib.aspx>
And the following DWR Groundwater Data from WWD Pump-ins: <https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2016.pdf>
<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2014.pdf>
<https://calsport.org/news/wp-content/uploads/Water-Quality-Assessment-of-Non-Project-Turn-ins-to-the-California-Aqueduct-2015.pdf>

²² See: <https://calsport.org/news/wp-content/uploads/HydroFocus-BWD-ACR-report-03182022.pdf>

subsidizing the grossly inadequate VAs, we urge your administration to provide additional funding and strong policy support to the State Water Resources Control Board to complete its update of the Bay-Delta Plan based on peer-reviewed science and open hearings. Further we urge you to:

1. Rescind the CEQA Exemption loopholes for these environmentally destructive projects and ensure CEQA and NEPA reviews are completed. This will ensure that sufficient water quality monitoring and mitigation and enforcement mechanisms are established.
2. Provide and make available for public review the federal Warren Act Contract (including an Exhibit D), and the Agreement between DWR and Westlands that would allow the discharge of groundwater into the California Aqueduct effective June 1, 2022.
3. Intervene to ensure such discharges into the California Aqueduct have adequate monitoring and safeguards to protect downstream beneficial uses, including the drinking water for California residents and ratepayers. The drought emergency declaration loophole should not allow the transfer of these pollution costs to downstream ratepayers without adequate payment and mitigations.

Thank you for your timely consideration of this matter. We would appreciate a meeting with you to discuss these critical issues and concerns. We all acknowledge and agree that this is a critical time for California, and urgent action must be taken to secure a resilient water future—especially as this prolonged drought continues. Unfortunately, the most recent actions taken by your administration, and recent comments reported in the media, are very concerning and if carried out will leave a devastating environmental and economic legacy.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](#)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](#)
mike@ifrfish.org



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Director
Sierra Club California
brandon.dawson@sierraclub.org



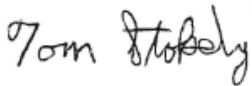
Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](#)
caleenwintu@gmail.com



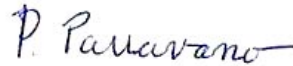
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



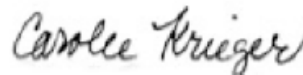
Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](mailto:EnvironmentalWaterCaucus@gmail.com)
connere@gmail.com



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



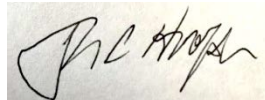
Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com

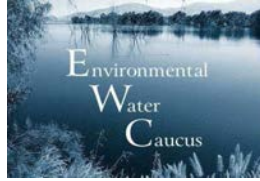


John Hooper
Chair
Protecting Our Water
Preserving San Francisco Bay Delta Estuary
hooparb@aol.com



Susan Harvey
President
North County Watch
ifsusan@tcsn.net

Lynne Plambeck
Executive Director
Santa Clarita for Planning & the Environment
lynneplambeck@access4less.net



CA Save Our Streams Council



November 15, 2021

Ryan Ferguson
Board President
Westlands Water District
3130 N. Fresno Street
Fresno, CA 93703

Cc: Westlands Board of Directors
Tom Birmingham, General Manager
Russ Freeman, Deputy General Manager – Resources

Dear Mr. Ferguson:

We write to object to the following items scheduled for committee and the Board of Directors' action on Tuesday, November 16, 2021:

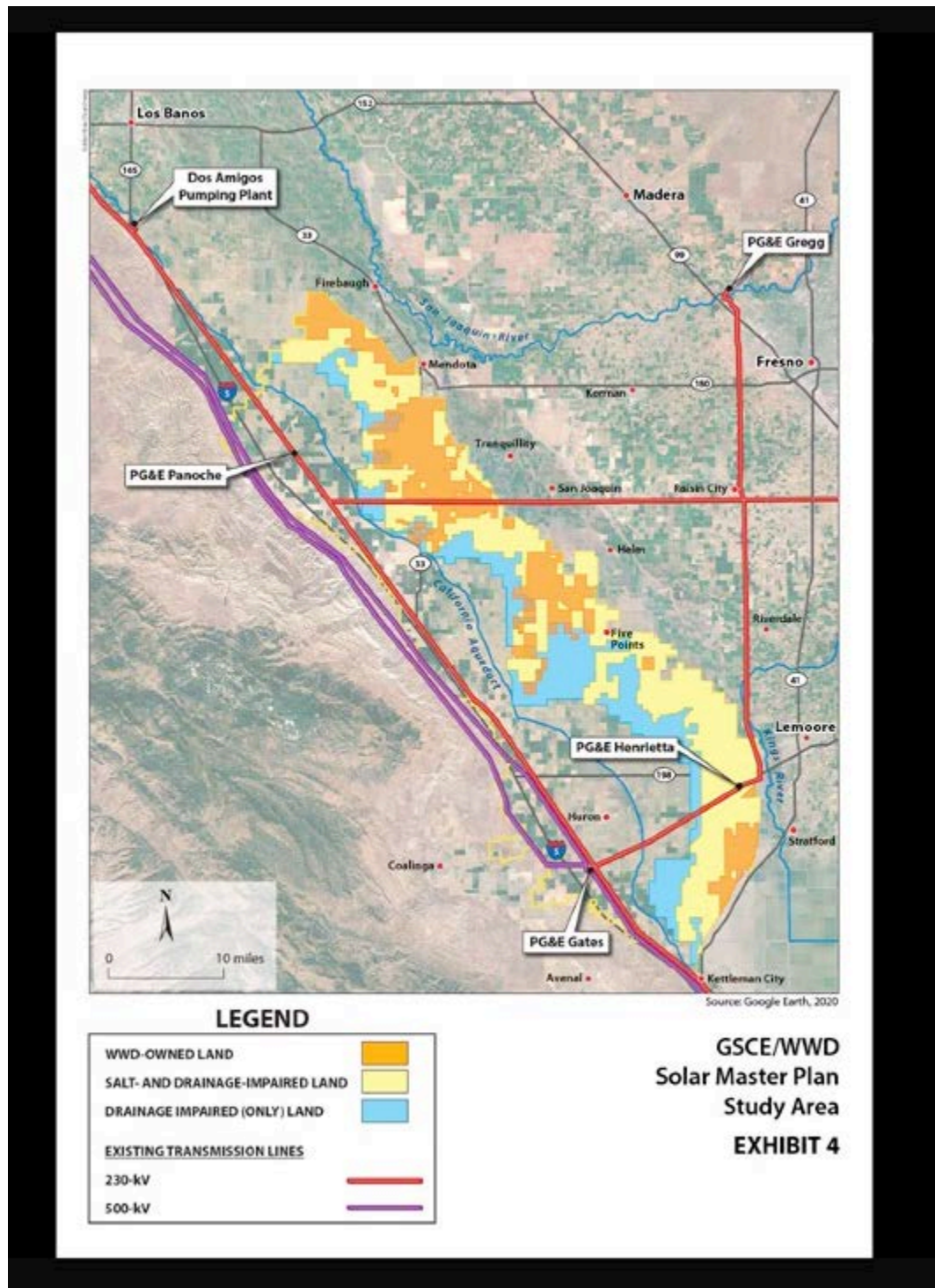
1. Board of Director's Agenda Item 18: Consider a Recommendation that the Board of Directors Authorizes Execution of an Addendum to the Westlands Solar Park Purchase and Sale Agreement to Provide for Grants of Utility Easements to Pacific Gas and Electric, consisting of approximately 6 acres in the SW ¼ Section 22 and W ¼ Section 27 in T.20S., R.19E., M.D.B.&M.

2. Closed Session Negotiation for Utility Easement Property: 30' wide utility easement in W 1/2 of Sections 22 and 27 in T.20s., R.19., (Howe)Westlake Farms, M.D.B.&M Agency Negotiator: General Manager or designee Negotiating Parties: Pacific Gas and Electric / Westlands Solar Park, LLC. Under Negotiation: Price and terms of payment.
3. Water Policy Committee Agenda Item 11 Authorization of Committee to Recommend that the Board of Directors Authorizes the General Manager or Designee to Execute an Option Agreement with Longroad Land Holdings II, LLC., on up to 1,100 acres of District Owned Land for Purchase in Sections 23 and 24 in T.16S., R.16E., M.D.B.&M
4. Water Policy Committee Closed Session item 1) Property: Up to 1,100 acres of District owned land, described as follows: a. Section 23 and 24 in T.16S., R.16E., M.D.B.&M Agency Negotiator: General Manager or designee Negotiating Parties: Longroad Land Holdings II, LLC. Under Negotiation: Price and terms of payment

We object to Westlands' Board of Directors and/or Water Policy Committee taking these actions because, collectively, they would result in the conversion of agricultural lands to municipal and industrial development while also keeping the federal water allocation associated with these lands as if they continued in agriculture. These actions if adopted would violate both state and federal law. We understand if approved the executed agreement for the option to sell 1,100 acres to Longroad Land Holdings would eventually comply with CEQA. We also understand that the proposal to amend the Westlands Solar Park Purchase and Sale Agreement to Provide for Grants of Utility Easements to Pacific Gas and Electric through the Howe's Westlake Farm properties is within the footprint of the Westland Solar Park project, as described in the January 16, 2018, Programmatic EIR for the project. However, no specific utility corridor was identified and the impacts of removing the vegetation were not considered.¹

Further compounding the environmental impacts of converting agricultural lands to municipal and industrial development are the unaddressed cumulative impacts of the proposal presented to the Westlands Water District Water Policy Committee September 2021, entitled the *Grand Development Plan for Renewable Energy Build-Out in Westlands Water District* by Golden State Clean Energy. This development plan would further build out from the original 20,000 acres of Westlands Solar Park to expand the municipal and industrial development to include more than 200,000 acres. This map depicts the Westlands/GSCE build out proposal presented September 2021:

¹ There is a generalized map of the project and Gen-Ties in Appendix A of the DEIR which is available here: https://cs.westlandswater.org/resources/resources_files/misc/Environmental_Docs/201710/WSP-DraftPEIR-App-A-MasterPlan-Oct-2017.pdf



On October 27, 2021, Westlands' permanent 9(d) contract validation was rejected by the court for failing to provide a complete contract due to material deficiencies. The material deficiencies included the lack of contract exhibits. The undersigned groups have commented that, contrary to federal statute including the WIIN Act and CVPIA, the now non-validated Westlands' water contract also has failed to provide for payment of all obligations owed including Westlands' obligation for its portion of the \$100 million owed by contractors for the CVPIA fish and

wildlife mitigation costs incurred for these CVP project purposes.² As you know, under federal statute this water contract and its conditions are no longer binding. Thus, the Westlands' failure to provide accurate up to date information regarding the amount of irrigable land within the district must be remedied as required by federal statute.³ For example, in contract negotiations with Interior, Westlands claimed irrigation water for more than 603,000 acres. And yet, Westlands failed to disclose it had entered into option agreements to convert lands to municipal and industrial uses.⁴ The undersigned have previously objected to the execution of these 9 (d) contracts under the WIIN Act without CEQA, NEPA and ESA compliance.⁵ Mapping and land use analysis is a federal requirement under the biological opinions of the USFWS 2000 CVPIA Implementation Biological Opinion.⁶ Accurate maps depicting up-to-date land use changes have not been provided in the water contract exhibits to the public or regulatory agencies as required as part of water contract negotiations. These include the more than 20,000 acres that have been converted to municipal and industrial use.⁷

² <https://www.hcn.org/articles/south-water-judge-rejects-trump-era-water-contract-in-a-win-for-tribes> *Judge rejects a Trump-era water contract in a win for tribes in California. A bid to benefit agribusiness has stalled again, leaving the Hoopa Valley Tribe hopeful that the next contract follows the law.*

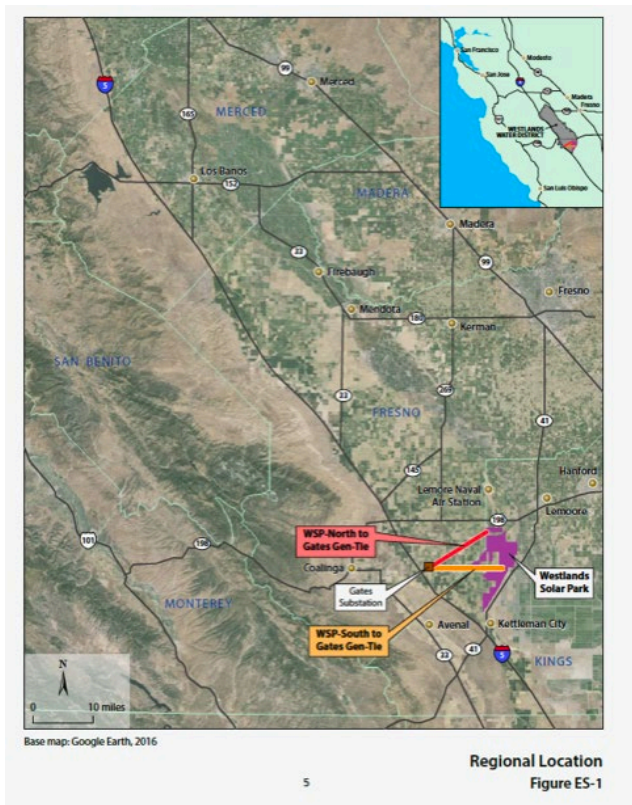
³ Congress under the 1960 San Luis Act authorized only 395,000 acres in WWD's to be irrigated. [<https://link.zixcentral.com/u/87ac383c/A9tHHgh7BGvo2i6hns0Mg?u=https%3A%2F%2Fwww.govinfo.gov%2Fcontent%2Fpkg%2FSTATUTE-74%2Fpdf%2FSTATUTE-74-Pg156.pdf>]

⁴ See Westlands' Board of Directors and Water Policy Committee meeting agendas for November 2020 and December 2020; October 2021, November 2021, and the Golden State Clean Energy Proposed Master Plan for Solar Development in Westlands Water District presentation September 21, 2021. And Kings County Conditional Use Permit No. 19-02 (Westlands Solar- BLUE) July 2019. And see the Little Bear Solar Project August 2018.

⁵ <https://calsport.org/news/wp-content/uploads/8-20-20-cmt-ltr-Reclamation-more-Ks-final-for-pdf.pdf>
<https://calsport.org/news/wp-content/uploads/1-7-20-O-cmts-Reclamation-Westlands-k.pdf>
https://calsport.org/news/wp-content/uploads/PCL_PCFFA-et-al_Comments-on-Final-Westlands-Permanent-Contract_4-27_-202....pdf

⁶ See: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/LAND/part2rebuttal/land_301.pdf

⁷ <https://wwd.ca.gov/wp-content/uploads/2017/12/westlands-solar-park.pdf>



Federal laws require an active farming use for the water allocation, as well as, required environmental reviews. More than 200,000 acres has been identified by industrial users and Westlands for conversion to industrial use. If this land is not suitable for agricultural use due to problems such as selenium or other contamination of the soil, then Westlands must forfeit the federal CVP water allocation for this land so the water may be used elsewhere for appropriate agricultural use or other purposes of the Central Valley Project defined purposes such as fish and wildlife.

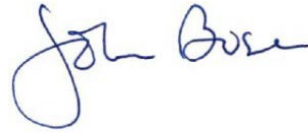
Conversion to municipal and industrial solar is not a temporary use. It is a long-term industrial use that prevents agricultural use of the land for the foreseeable future. It also has additional impacts to fish and wildlife habitat and the environment that must be considered. For example, remote industrial-scale solar poses wildfire risks due to its dependence on long-distance transmission of power through remote, arid, wind-swept and fire-prone landscapes. It preempts the development of less-impactful and more efficient roof-top solar in the urban energy demand centers. While the conversion of these contaminant and drainage-impaired lands to solar development could be warranted after careful assessment of these issues, keeping the agricultural water allocations is not warranted. An EIR is required for conversion of farmland to industrial use. No EIR has yet been completed for the contemplated 1,100 acre sale of land to Longroad Land Holdings for solar development. And the WSP 2018 Programmatic EIR failed to include the specific and cumulative impacts from the proposed addendum to include the Westlake Farm utility corridor conversion. See PRC section 21095(a); CEQA Guidelines Appendix G.

Thank you for the opportunity to comment. As requested previously, please notify the undersigned of any proposed scoping, NEPA, CEQA, ESA and CESA actions proposed by Westlands Water District.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](#)
jminton@pcl.org



John Buse
Executive Director
Center for Biological Diversity
jbuse@biologicaldiversity.org



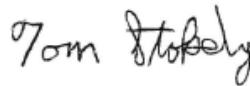
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



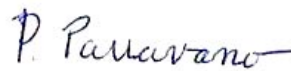
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](#)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Susan Harvey
President
North County Watch
ifsusan@tcsn.net



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



Mike Conroy
Executive Director
Pacific Coast Federation of Fishermen's Asso.
mike@ifrfish.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



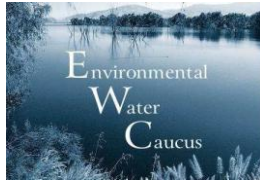
Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Dr. C. Mark Rockwell, D.C.
President & Conservation VP
Northern California Council, Fly Fishers Int.
mrockwell1945@gmail.com



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS



CA Save Our Streams Council



August 18, 2021

Camille Calimlim Touton
Deputy Commissioner,
External and Intergovernmental Affairs
U.S. Bureau of Reclamation
1849 C Street NW
Washington DC 20240-0001
Email: mtouton@usbr.gov

cc: Erma Leal
Repayment Specialist - SCCAO-445
Dept. of Interior | Bureau of Reclamation
Interior Region 10 - California - Great Basin
South-Central California Area Office
1243 N Street, Fresno CA 93721
Email: elead@usbr.gov

Via Email and Regular Mail

Re: Comments on Cross Valley Canal Unit Draft Conversion Contracts under the WIIN Act § 4011--Violate WIIN Act and Reclamation Law.

Dear Deputy Commissioner Touton and Ms. Leal;

The Trump Administration appointed water extractive industry attorneys to key positions of power at the Department of Interior. These key officials like Secretary Bernhardt and Regional Director Ernest Conant ensured permanent water contracts were executed without collecting full repayment as required by federal laws and without compliance with the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Central Valley Project Improvement Act (CVPIA), the WIIN Act and Reclamation law.

And now the Biden administration under Secretary Haaland's watch is following the Trump Administration down this legally fraught road. Listening to Trump administration holdovers, the Biden administration, under the Trump Administration's holdovers, like Regional Director Ernest Conant, are poised to continue the Trump administration path by executing contracts under the WIIN Act that:

- 1) Violate the Central Valley Project Improvement Act's environmental restoration and reimbursement mandates;
- 2) Violate NEPA and ESA mandates;
- 3) Shortchange repayment to the federal taxpayers;
- 4) Fraudulently reduce or fail to collect more than \$400 million in debt owed by water and power contractors for required fish and wildlife mitigation and environmental restoration in California; and,
- 5) Set a course for violating Hoopa's trust interests and destruction of Hoopa's vested property rights in the Trinity River fishery.

Now, with Ernest Conant still acting as Regional Director of the California Great Basin Region of the U.S. Bureau of Reclamation, the wrongdoing will be perpetuated by execution of the Cross Valley permanent water contracts. The Cross Valley contracts will become permanent unless these proposed illegal contracts are voided and the Secretary of the Interior and Attorney General reverse the positions they have taken against conservation, fishing and tribal groups. Specifically, the Cross Valley contracts fail to:

- 1) Provide proper notice to the public as the contracts submitted for public review are incomplete.
- 2) Conduct any NEPA review nor ESA compliance prior to the federal execution of these contracts that will cause significant environmental damages and promise more water than exists under climate changes. No alternatives or mitigation measures are considered.
- 3) Collect CVPIA statutorily required payments for all required mitigation and restoration of environmental damage caused by the project. Rate payments for CVPIA mitigation and restoration are not included in the contract exhibits, precluding public comment.
- 4) Collect WIIN Act obligations to fully pay for CVP capital obligations along with operation, maintenance, and reconstruction. This includes collection of more than \$400 million in CVPIA fishery restoration and mitigation obligations.

- 5) Collect Hoopa Valley Tribe fishery restoration, rights and trust obligations required by Reclamation law and CVPIA statutory requirements.

On July 14, 2021, the U.S. Bureau of Reclamation (Reclamation) made available eight draft repayment contracts (contracts) for the Cross Valley Canal Unit (Cross Valley) contractors for a 60-day public comment period.¹ The Cross Valley contractors include: Hills Valley Irrigation District, Kern-Tulare and Kern-Tulare/Rag Gulch Water Districts, Lower Tule River Irrigation District, Pixley Irrigation District, Tri-Valley Irrigation District, and Fresno and Tulare counties. As denoted on Reclamation’s website, written comments on these contracts must be received by close of business on September 13, 2021.² Our organizations filed comments on the Draft Environmental Assessment (DEA) on the interim contracts for the Cross Valley contractors on December 12, 2019, and we incorporate those comments by reference.³

The eight Cross Valley contracts that are the subject of this comment letter permanently lock-in deliveries from the Sacramento/San Joaquin Delta of about 128,300 acre-feet of water per year. Additionally, the County of Tulare Cross Valley contract includes 10 subcontractors (listed below). Our organizations provide these comments on the draft conversion contracts for:

Contractor Name	Subcontractors	Contract No.	Maximum Contract Quantity (acre-feet/year)
Hills Valley Irrigation District		14-06-200-8466A-IR5-P	3,346
Kern-Tulare Rag Gulch Water District		14-06-200-8367A-IR5-P	13,300
Kern-Tulare Water District		14-06-200-8601A-IR5-P	40,000
Lower Tule River Irrigation District		14-06-200-8237A-IR5-P	31,102
Pixley Irrigation District		14-06-200-8238A-IR5-P	31,102
Tri-Valley Water District		14-06-200-8565A-IR5-P	1,142
City of Fresno		14-06-200-8292A-IR5-P	3,000

¹ See: <https://www.usbr.gov/newsroom/#!/news-release/3914?filterBy=region®ion=California-Great%20Basin>

² Copies of the draft Cross Valley contracts are available here: <https://www.usbr.gov/mp/wiin-act/negotiated-conversion-contracts.html>

³ See Appendix H, Coalition comments starting at pdf page 136: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=42468

County of Tulare	1. Alpaugh ID, 2. Atwell Island WD, 3. City of Lindsey, 4. City of Visalia, 5. Frasinetto Farms LLC, 6. Hills Valley ID, 7. Saucelito ID, 8. Stone Corral ID, 9. Strathmore PUD, 10. Styro-Tek Inc.	14-06-200-8293A-IR5-P	5,308
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The draft Cross Valley contracts also include a provision under Article 5(a) that allows exchanges (Article 5 exchanges) of Cross Valley contract supply with other non-CVP contractors in the Tulare Basin: *“The parties acknowledge that Project Water to be furnished for the Contractor pursuant to this Contract shall be delivered to the Contractor by direct delivery via the Cross Valley Canal and/or by exchange arrangements involving Arvin-Edison Water Storage District or others. The parties further acknowledge that such exchange arrangements are not transfers subject to Section 3405(a) of CVPIA.”* These Article 5 exchanges *“shall be submitted to the Contracting Officer for approval prior to the implementation of the proposed exchange.”*

Failure to Comply with NEPA.

An EIS must be prepared by Reclamation before entering into these permanent Cross Valley contracts. The reason is that execution of these contracts would be a major federal action significantly affecting the quality of the human environment. (42 U.S.C. § 4332(C.) “Actions include new and continuing activities, . . .” (NEPA Regulations § 1508.18(a).)⁴ NEPA requires “that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter [NEPA], . . .” (42 U.S.C. §4332.)

NEPA processes must be integrated with other processes “at the earliest possible time to ensure that planning and decisions reflect environmental values, . . .” (NEPA Regulations § 1501.2.) Reclamation, however, has not prepared an EIS on the proposed contract. Reclamation *has not even prepared an environmental assessment* to determine whether an EIS must be prepared. (NEPA Regulations §§ 1501.3; 1508.9.) Reclamation has not made a “finding of no significant impact” on the action. (NEPA Regulations § 1508.13.) Reclamation has not instituted the required “scoping” process and has not published a notice of intent in the Federal Register. (NEPA Regulations § 1501.7.) Reclamation has not prepared a categorical exclusion or notice thereof on the contract. (NEPA Regulations § 1508.4.) The subject action would not in any event qualify for a categorical exclusion. Consequently, Reclamation has not furnished the public any information whatsoever, by which to evaluate the potential environmental consequences of these contract renewals and the water diversions and deliveries authorized by it. Reclamation also has not furnished the public any information whatsoever, by which to evaluate

⁴ The NEPA Regulations are codified at 40 C.F.R. §1500 et seq.

the *cumulative* environmental impacts of all of the contract conversions in Reclamation’s pipeline and the water diversions and deliveries authorized by them. Reclamation has not prepared a single EIS on the related contract conversions (NEPA Regulations § 1502.4(a) and has not prepared a broad “program” EIS on the contract conversions in its pipeline. (NEPA Regulations § 1502.4(b.) Reclamation has not prepared any “environmental document” on its action. (NEPA Regulations §1508.10.)

We note that the Cross Valley contracts get their water from the Sacramento-San Joaquin Delta and use two major Federal and State water projects both the State Water Project and Federal Central Valley Project –along with local water delivery projects and four counties—Fresno, Tulare, Kings, and Kern with source water impacts from Trinity, Sacramento, Placer, San Joaquin, Merced, and Stanislaus counties, for their water deliveries. Yet the 2019 DEA for Cross Valley interim contracts proclaimed that the renewal of up to 128,300 acre feet of exports from the Delta for two years would have minor impacts to biological resources.⁵ Without analysis or data, the DEA asserted that these eight interim renewal contracts and proposed Article 5 exchanges would not have no more than a “minor” impacts to the environment.⁶ Further, the environmental analysis (DEA) for a 2-year interim contract does not equate to the long-term impacts of these permanent contract conversions.

Failure to Consider a Full Range of Alternatives

An environmental assessment also must include discussion of alternatives. Reclamation must prepare an EIS or first prepare an environmental assessment and then an EIS, which must “Rigorously explore and objectively evaluate all reasonable alternatives, . . .” to the action. (NEPA Regulations § 1502.14(a.) The EIS will necessarily include alternatives that reduce deliveries of project water in order to increase freshwater flows and begin to restore watershed rivers and the Delta.

The Ninth Circuit Court of Appeals reversed a district court decision denying environmental plaintiffs’ summary judgment because the challenged environmental document issued by Reclamation under NEPA, “did not give full and meaningful consideration to the alternative of a reduction in maximum water quantities.” (*Pacific Coast Federation of Fishermen’s Assn’s v.*

⁵ Ibid. @ pdf pg 32 of DEA.

⁶ “Up to 128,300 acre-feet (AF) per year (AF/y) of the Cross Valley Contractors’ contractual CVP water supply from the Delta would be allowed to be transferred under the exchange arrangements for Friant Division CVP supplies and other sources (other sources of water include rivers, streams, creeks, previously banked surface water, and State Water Project [SWP] water). The Cross Valley Contractors and potential exchange partners (CVP contractors and non-CVP contractors) are all located within Fresno, Tulare, Kings, and Kern counties. This EA covers the broadest flexibility for Article 5 exchange arrangements known at this time.” [DEA @pdf pg 13]. All of the Cross Valley Contractors are currently on their seventeenth interim renewal contract. The Proposed Action would be their eighteenth. The Proposed Action also includes Reclamation’s transfer approvals associated with the Cross Valley Contractors exchange arrangements with individually proposed exchange partners for the same time period as the interim renewal contracts for up to the full Cross Valley Contractors’ CVP contract supply (up to 128,300 AF/y). In addition, the Proposed Action would include the continued transfers associated with the historical exchanges between the Cross Valley Contractors and Arvin-Edison Water Storage District (Arvin-Edison). [DEA @pdf pg17].

U.S. Dept. of the Interior, 655 Fed.Appx. 595, 2016 WL 3974183*3 (9th. Cir., No. 14-15514, July 25, 2016) (Not selected for publication.) “Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion and the agency did not adequately explain why it eliminated this alternative from detailed study.” (*Id.* at *2.) Reclamation’s “reasoning in large part reflects a policy decision to promote the economic security of agricultural users, rather than an explanation of why reducing maximum contract quantities was so infeasible as to preclude study of its environmental impacts.” (*Id.* at *3.)

The requirement under NEPA to consider the alternative of reducing exports to increase flows through the Delta is so obvious that the Ninth Circuit’s decision was not selected for publication because no new legal analysis was required to reach the decision. The decision pertained to interim two-year contract renewals. If the alternative of reducing exports must be considered during renewal of two-year interim contracts, it most assuredly must be considered before entering into permanent contracts. Moreover, “an alternative may be reasonable, and therefore required by NEPA to be discussed in the EIS, even though it requires legislative action to put it into effect.” *Kilroy v. Ruckelshaus*, 738 F.2d 1448, 1454 (9thCir. 1984.)

Failure to Consider Cumulative Impacts

Cumulative impacts are ignored. Reclamation is in the process of converting virtually all CVP water service contracts, about 77 of them, into permanent water repayment 9(d) contracts similar to these draft contracts.⁷ Pursuant to NEPA, “cumulative impact” “is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. . . .” (NEPA Regulations § 1508.7.) The cumulative environmental impacts of converting all of Reclamation’s contracts into permanent contracts will be enormous and adverse, but have not been considered.

Examples of actions that should be reviewed in an EIS Cumulative Effects Analysis include:

- Groundwater pump-ins into the Friant-Kern Canal⁸
- Water transfers and exchanges (including Article 5 exchanges)
- Groundwater banking projects

Examples of Environmental Issues Ignored by Reclamation’s Failure to Prepare an EIS or even an Environmental Assessment for Cross Valley contracts:

The NEPA Regulations give guidance on whether an action “significantly” affects the quality of the human environment. “‘Significantly’ as used in NEPA requires considerations of both

⁷ On December 20, 2019, Reclamation gave public notice on its web site that 77 contractors had requested contract conversions. The same notice said that 14 of the contract conversions had already been negotiated and the public comment period on those contract conversions would close on February 19, 2020. The subject contracts were spread among the Central, Northern, and South Central California Area Offices.

See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=69044>

⁸ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=49768

context and intensity:” (NEPA Regulations § 1508.27.) Ten factors are listed in § 1508.27(b) 1-10 in evaluating intensity meaning severity of the impact.

1508.27(b)(2) The degree to which the proposed action affects public health or safety

The water deliveries to Cross Valley contractors diminishes freshwater flows through the Delta which decreases water supplies and water quality and worsens the amount and frequency of toxic algal blooms in the Delta. That is one of the ways by which the action affects public health and safety.

(3) Unique characteristics of the geographic area

The Delta already fails to meet established water quality standards and is an ecologically critical area. The water deliveries to Cross Valley contractors exacerbate the decline of the Delta. Water quality standards are not being met, temperatures are being exceeded, pulse flows are not being provided and species are in fact facing deteriorating habitat and extirpation.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of the contract will be highly controversial because of the worsening water supply and water quality crisis in the Delta. The controversy is evidenced by the recent article in the Los Angeles Times entitled *Feds set to lock-in huge water contract for well-connected Westlands Water District* (Bettina Boxall, Los Angeles Times November 11, 2019)⁹.

These new contracts do not include the water reductions. Nor does it contain water needs assessments to assess delivery amounts to the Cross Valley contractors.

The Cross Valley contract conversions are highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks

Because Reclamation has failed to engage in any NEPA environmental analysis whatsoever, the impacts of the contract are highly uncertain.

(6) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The Cross Valley contract conversions are related to other WIIN Act contract conversions in the pipeline that would have cumulatively significant impacts.

⁹ See: <https://www.latimes.com/environment/story/2019-11-11/westlands-water-district-federal-water-contract>

(9) *The degree to which the action may adversely affect an endangered or threatened species or its habitat*

Endangered winter-run Chinook salmon, threatened spring-run Chinook salmon, Central Valley steelhead, green sturgeon, and Delta and longfin smelt continue to decline because of the reductions in water quality and flows resulting in rising temperatures, increased salinity, and sedimentation. CVP water deliveries harm the fish by reducing water flows and worsen the contamination of San Joaquin Valley surface waters.

Reclamation's Action is Discretionary.

Our organizations have not seen any communication from Reclamation explaining why these Cross Valley contracts are being finalized without completing any NEPA review. Reclamation does refer in “whereas” clauses in the draft contract to the Water Infrastructure Improvements for the Nation Act (Pub. L.) 114-322, 130 Stat. 1628), Section 4011 (a-d) and (f) (WINN Act.) The contract recites,

WHEREAS, 4011(a)(1) provides that ‘upon request of the contractor, the Secretary of the Interior *shall* convert any water service contract in effect on the date of enactment of this subtitle and between the United States and a water users’ Association [Contractor] to allow for prepayment of the repayment contract pursuant to paragraph (2) *under mutually agreeable terms and conditions.*’ (Draft Contract, 8th Whereas clause, p. 4; also, 20th Whereas clause, p. 8.) (Emphasis added.)

Reclamation may contend that the WINN Act including use of the word “shall” makes entry into the conversion contracts non-discretionary and thus not subject to NEPA. As provided by WINN Act section 4011(a)(1), however, the terms and conditions *must be mutually agreeable* meaning they must be agreeable to the Secretary of the Interior, as well as to the contractor. That means under the plain language of the Act, the Secretary of the Interior retains discretion because the terms and conditions of the contracts must be agreeable to him. In *Aluminum Co. of America v. Central Lincoln Util. Dist.*, 467 U.S. 380, 397 (1984), the Supreme Court held,

Because the Regional Act does not comprehensively establish the terms on which power is to be supplied to DSIs [direct-service industrial customers] under the new contracts, it is our view that the Administrator has broad discretion to negotiate them.

NEPA cases have rejected efforts by agencies to avoid complying with NEPA by contending their actions are non-discretionary, when there is some discretion.¹⁰ The Secretary of the Interior has discretion to determine contract terms and conditions that are agreeable to her.

¹⁰ Such cases include *Forelaws on Board v. Johnson*, 743 F.2d 677 (9th Cir. 1984.)

The Draft Contracts Fail to Comply with CVPIA § 3404(c)(2).

NEPA Compliance is also required by the Central Valley Project Improvement Act (CVPIA) before entering into long-term contracts.¹¹ Savings language in the WINN Act (section 4012(a)(2) requires, “This subtitle shall not be interpreted or implemented in a manner that— [omitted] (2) affects or modifies any obligation under the Central Valley Project Improvement Act [CVPIA] (Public Law 102-575; 106 Stat. 4706), except for the savings provisions for the Stanislaus River predator management program expressly established by section 11 (d) and provisions in section 11(g); [omitted]”

CVPIA Section 3404(c)(2) states: “*Upon renewal of any long-term repayment or water service contract providing for the delivery of water from the Central Valley Project, the Secretary shall incorporate all requirements imposed by existing law, including provisions of this title, within such renewed contracts. The Secretary shall also administer all existing, new, and renewed contracts in conformance with the requirements and goals of this title.*” The draft contract does not contain within the *contract terms* explicit language that is enforceable between the parties as required by CVPIA Section 3404(c)(2). This section requires that provisions of law be written as contract terms enforceable between the parties. Exhibit C of the draft contract (Unpaid Construction Cost), provides no repayment for required Trinity River Division (TRD) facilities or CVPIA restoration activities. Enforceable contract provisions of law that by law must be written as contract terms enforceable between the parties include for example:

- *Section 3406(b)(2), which authorizes and directs the dedication of up to 800 thousand AF (TAF) of CVP water for environmental purposes.*
- *Section 3406(b)(23), which addresses restoration efforts for the Trinity River Division (TRD).*
- *Section 3406(d), which requires firm CVP water supplies amounting to 480 TAF to be delivered to federal, state and some private wildlife refuges.*

The Draft Contracts Fail to Comply with the Coordinated Operations Act of 1986.¹²

These draft contracts omit the obligation of the Cross Valley contractors and the United States to deliver Project water in accordance with water quality standards specified in PL 99-546. This language was omitted from these draft contracts: "water quality standards specified

¹¹ Section 3404(c) of the CVPIA requires that an EIS be completed before Reclamation can renew any long-term repayment or water service contract for a period of 25 years. Reclamation defines "long term contract" as a "contract with a term of more than 10 years." See <https://www.usbr.gov/recman/pec/pec-p05.pdf> By these definitions any contract term longer than 10 years is by Reclamation's own definition 'a long-term contract.' A conversion to a permanent contract fits the definition of a long-term contract. Thus, federal law requires a full EIS before entering into permanent repayment contracts. Congress determined that long-term contracts would have a significant effect on the environment such that an EIS is required.

¹² See Section 101 and Section 102: <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg3050.pdf>

in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or other existing Federal laws." Instead, the quality of water and operations are left to the Contracting Officer instead of specific reference to required water quality protection levels. Congress directed that the United States and its Contractors operate the CVP in conformity with State water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta and Estuary and to operate the CVP so that water supplied at the intake of the Contra Costa Canal is of a quality equal to the water quality standards contained in the Water Right Decision 1485 of the State of California Water Resources Control Board, dated August 16, 1978, except under limited conditions. We know of no law that authorizes Reclamation to change this Congressional direction in a contract. This substantially changes the terms of the contract and obligations to meet state water quality standards. Changing the water quality protection standards to some undefined term as "what is feasible" also has significant environmental impact and has not been analyzed nor the endangered species impacts considered.

Also required under Section 102 of Public Law 99-546—OCT. 27, 1986 100 STAT. 3051, the contract needs to provide for repayment of D-1485 salinity costs and complying with State water quality standards. The modified Final contract does not include these reimbursements and repayment of these costs.

Failure to Comply with the Endangered Species Act (ESA) and California Endangered Species Act (CESA).

Excess water exports from the Trinity, Sacramento and San Joaquin Rivers and Delta associated with operations of the Central Valley Project have led to dozens of species being listed as threatened or endangered.¹³ The evidence before Reclamation and the Services demonstrates that these diversions from the Delta to the Cross Valley contractors may appreciably reduce the likelihood of survival and recovery of at least four species under NMFS jurisdiction (Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, and green sturgeon) and at least three species of fish under USFWS jurisdiction (the Delta smelt, longfin smelt and Sacramento splittail). The evidence also demonstrates that these Delta diversions do adversely modify the critical habitat for these species. Continued operation of the CVP and SWP is likely to jeopardize the continued existence of endangered species in the Delta, and cumulative effects from stormwater runoff and subsurface agricultural drainage from other CVP-irrigated lands contaminates the San Joaquin River and hence the Delta with selenium and other toxic constituents. See testimony from Restore the Delta on Salinity and Selenium Science and Modeling for the Bay/Delta Estuary.¹⁴

¹³ See USFWS, 2000, CVPIA biological opinion, appendix B.

¹⁴ Testimony on Recent Salinity and Selenium Science and Modeling for the Bay/Delta Estuary Submitted by Tim Strohshane Senior Research Associate California Water Impact Network (CWIN) August 17, 2012 https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/RestoretheDelta/part2/RTD_161.pdf

Reclamation concluded in the DEA for Cross Valley interim contracts without analysis or information that the “*Effects to Delta species and critical habitats, such as the Delta smelt, salmonids, and green sturgeon which are the result of CVP operations, are addressed in the CVP/SWP Coordinated Operations consultation. As such, Reclamation has determined that there would be no effects to species and critical habitats for the Proposed Action under the jurisdiction of NMFS that have not already been addressed.*” [DEA @pdf pg 42]. Further, the DEA claimed, there is no need for consultation the National Marine and Fishery Service and cites the CVP/SWP Coordinated Operations consultation (@ pg 42).¹⁵ These claims are not supported by fact. The 2019 Biological Opinions on CVP/SWP Operations identified in the DEA have been challenged in court¹⁶, and the specific impacts of the tiered actions have not been disclosed or analyzed. Nor have the impacts from operational changes. The exchanges when added to the Article 55 provision in the SWP contracts could result in more frequency of DWR pumping and conveying the 128,300 af/y of water. This fails to consider violations of temperature, salinity and flow requirements of D-1641. There have been repeated violations of the Clean Water Act standards¹⁷ and Endangered Species Act requirements under the Reasonable and Prudent Alternatives. CVP operations and the exports of water pursuant to this interim contract have consistently violated the Coordinated Operation Act of 1986 requiring adherence to Delta Water Quality Standards contained in D-1485 and subsequent water quality standards.

Some of the Cross Valley and Article 5 Exchange service areas include designated critical habitat for federally listed species. As denoted in the DEA for Cross Valley interim contracts (@ pdf pg 25), Critical habitat exists in the affected environment for the following species: Buena Vista Lake shrew, California condor, California tiger salamander, Hoover’s spurge, San Joaquin Valley Orcutt grass, succulent owl’s-clover, vernal pool fairy shrimp, and vernal pool tadpole shrimp. The proposed actions could cause direct adverse modification to critical habitat, which will be compounded by the interrelated export of substitute water from the Delta to the Exchange Contractors.¹⁸ These previously identified impacts are now further compounded by permanent contract conversions and yet, no compliance with the CESA or the Federal ESA have been provided. Further, Senator Feinstein noted with the passage of the WIIN Act, ..” the bill’s savings clause that prevents the legislation from violating state or federal environmental laws including the *Endangered Species Act* and biological opinions...”¹⁹

¹⁵ DEA @pdf pg 42: “Reclamation has determined that there would be no effects to species and critical habitats for the Proposed Action under the jurisdiction of NMFS that have not already been addressed.”

¹⁶ See: <http://www.courthousenews.com/wp-content/uploads/2019/12/Bay-Delta-Complaint.pdf>

¹⁷ Of particular note, the SWRCB, referencing WR Order 90-05, stated in WR 92-02 at page 9: The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery. SWRCB warned against USBR decisions to maximize water deliveries in the initial years of a drought and failing to maintain sufficient carryover storage to protect fisheries and public trust resources.

¹⁸ NRDC v. Rodgers, No. S-88-1658 LKK, Order at 19-20 (May 31, 1995).

¹⁹ See: <https://www.feinstein.senate.gov/public/index.cfm/pressreleases?ID=FF5C94EB-667A-4DEC-A0A4-296AB5027BE4>

A Complete Set of the Contract Exhibits has not been provided, thus public comment is precluded.

We note that no draft contract exhibits were made available at USBR's website for Pixley Irrigation District.²⁰ Further, draft contract exhibits provided online for all the remaining Cross Valley contracts are incomplete and fully informed public comment has thus, been precluded. Problems with the exhibits include:

- 1. Exhibit B – Rates and Charges** [*--rate components are available on the Internet at: <https://www.usbr.gov/mp/cvpwaterrates/ratebooks/index.html>*] Two DOI Inspector General Reports have indicated the amounts being charged are insufficient to repay the capital costs.²¹ Reclamation law and policy require a contract to ensure that sufficient rates are charged to repay federal taxpayers. The undersigned have provided comment on how the proposed cost allocation will impact environmental protections and take additional money from the federal treasury without adequate repayment, as required.²² We adopt those comments by reference.
- 2. Exhibit C – Repayment Obligation**—We find there is no evidence in either the direct contract language or exhibit C's that all of the CVPIA cost obligations for fish and wildlife restoration and mitigation have been collected or will be paid under the proposed contracts.
- 3. Water Needs Assessments are not Included** -- We note that other contracts (e.g., Westlands) have included an **Exhibit C - Central Valley Project Water Needs Assessments**. No such exhibits including water needs assessments for the Cross Valley contractors was provided for public review. Reclamation is contractually required to conduct a proper water needs assessment, and without a current water needs assessment, there is no way of knowing if the needs of the Cross Valley contractors equal the current total contract quantity.²³

²⁰ See Pixley ID contract but no exhibits provided at: <https://www.usbr.gov/mp/wiin-act/negotiated-conversion-contracts.html>

²¹ https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/land.html & 2004 DOIG *Central Valley Contract Renewal Process August 2004* [OIG Report No W-IN-BOR-0016-2004]

²² <http://calsport.org/news/wp-content/uploads/Conservation-Fishing-and-Tribe-Cmts-RE-CVP-Cost-AllocationStudy-Burman-1-2-2020-.pdf>

²³ See: https://www.usbr.gov/mp/cvpia/3404c/process_info/cont_policies/3_cvp_policies/01_02-22-99.pdf and <https://pcffa.org/wp-content/uploads/2016/07/102-7-25-16-Amended-Memorandum.pdf> pg 7

Conclusion.

We urge you to rescind these Cross Valley permanent contract conversions and instead restart the process with proper public transparency, following established legal requirements including a full EIS review under NEPA. We request public contract negotiations be held with adequate notice provided, especially in the counties and areas from which the proposed irrigation water is taken. Furthermore, these negotiations should not be held until a full environmental impact statement is completed, and endangered species consultations, and complete draft contracts and exhibits (including a water needs assessments) are provided.

Thank you for considering these comments. Please make sure the undersigned are included in any future actions with regard to CVP contract renewals and/or conversion of CVP contracts pursuant to Section 4011 of the WIIN Act.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



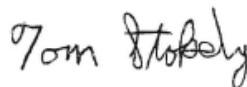
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



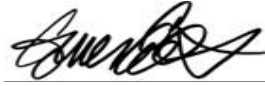
Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](#)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



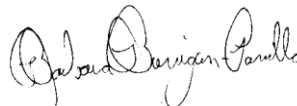
Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



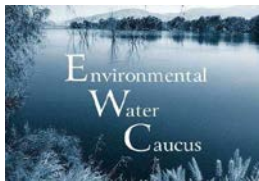
Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



CA Save Our Streams Council



March 1, 2021

Ernest Conant,
Regional Director
Dept. of Interior | U.S. Bureau of Reclamation
California-Great Basin Regional Office
2800 Cottage Way,
Sacramento, CA 95825-1898

Erma Leal,
Repayment Specialist – SCCAO-445
Dept. of Interior | Bureau of Reclamation
South-Central California Area Office
1243 N Street, Fresno CA 93721
eal@usbr.gov

Re: Written Comments on WIIN Act Final Repayment Contracts between the U.S. Bureau of Reclamation (Reclamation) and 11 Central Valley Project Contractors: Failure to Comply with the National Environmental Policy Act (NEPA), the Central Valley Project Improvement Act (CVPIA), California Environmental Quality Act (CEQA), and the and state and federal Endangered Species Acts (CESA and ESA).

The U.S. Bureau of Reclamation issued a press release on February 1, 2021¹ announcing the completion and execution of WIIN Act Final repayment contracts for 11 Central Valley Project (CVP) contractors as

¹ See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=73651>

follows: City of Avenal, City of Coalinga, City of Huron, Clear Creek Water District, Contra Costa Water District, County of Colusa, El Dorado Irrigation District, Pacheco Water District, Panoche Water District, San Benito County Water District, and San Luis Water District. Table 1. provides a summary of these contracts (from North to South), the Divisions/Units of the CVP where they are located, the contract #s and contract quantities, the year of expiration of the previous contract, and the effective date of the Final WIIN Act repayment contracts. Five of these contracts are covered by interim contracts of 2-year duration. The remaining contracts are covered by long-term contracts with various expiration dates. Table 1. CVP Contractors included in Reclamation’s February 1, 2021 press release².

Contractor Name	CVP Division/Unit	Previous Contract #	Maximum Contract Qty.	Original Contract Expiration (Yr.)	WIIN Act Contract Effective Date
Clear Creek CSD	Trinity River Division/Shasta Trinity Unit	14-06-200-489-A-LTR1	15,300	2030	December 1, 2020
County of Colusa	Sacramento River Division/Tehama Colusa Canal Unit	14-06-200-8310A-LTR1	20,000	2030	February 1, 2021
El Dorado ID	American River Division/Folsom Dam Unit	14-06-200-1357A-LTR1	7,550	2045	March 1, 2021
Contra Costa WD	Delta Division/Contra Costa Canal Unit	175r-3401A-LTR1	195,000	2045	January 1, 2021
San Benito County WD	San Felipe Division/ San Felipe Unit	8-07-20-W0130	43,800	2027	February 1, 2021
City of Avenal	W San Joaquin Div/ San Luis Unit	14-06-200-4619A-IR7	3,500	2-Year Interim Contracts, to be renewed March 1, 2021	February 1, 2021
City of Coalinga	W San Joaquin Div/ San Luis Unit	14-06-200-4173A-IR7	10,000	2-Year Interim Contracts, to be renewed March 1, 2021	February 1, 2021
City of Huron	W San Joaquin Div/ San Luis Unit	14-06-200-7081A-IR7	3,000	2-Year Interim Contracts, to be renewed March 1, 2021	February 1, 2021

² Ibid.

Pacheco WD	W San Joaquin Div/ San Luis Unit	6-07-20-W0469-BA	10,080	2024	January 1, 2021
Panoche WD	W San Joaquin Div/ San Luis Unit	14-06-200-7864A-IR7	94,000	2-Year Interim Contracts, to be renewed March 1, 2021	July 1, 2021
San Luis WD	W San Joaquin Div/ San Luis Unit	14-06-200-7773A-IR7	125,080	2-Year Interim Contracts, to be renewed March 1, 2021	January 1, 2021
Total Contract Quantity			527,310		

Our organizations have recently submitted comments to Reclamation on the WIIN Act Draft Repayment Contracts between Reclamation and Pacheco, Panoche and San Luis WDs on October 5 and 6, 2020. Further, our organizations also recently submitted comments to Reclamation on the Draft EA/FONSI for the CVP Interim Renewal Contracts for Panoche Water District and San Luis Water District, 2021-2023³ on January 11, 2021, and the draft interim contracts for six San Luis Unit contracts including Cities of Avenal, Coalinga, and Huron, and Panoche and San Luis WDs⁴ on February 16, 2021. We also refer Reclamation to our October 5, and October 6, 2020, August 31, 2020, August 20, 2020, August 7, 2020, April 27, 2020, April 22, 2020, February 15, 2020, January 7, 2020, and January 6, 2020 comments on CVP contract conversions. We incorporate those comments here by reference.

These Final contracts are riddled with gaps and undisclosed provisions, as detailed in our attached comments. Millions of dollars to be repaid by these contractors are deleted without explanation. The true amount of water to be provided is not disclosed to water users in the Delta, North of the Delta, South of the Delta, the San Joaquin Valley and Southern California. True costs and subsidies are misrepresented or just omitted. Key examples include:

- Congressionally mandated water quality standards and protections are removed and instead left to the discretion of the functionary contracting officer and the contractors to the *"extent feasible."*
- Congressionally mandated limits on the water service area in the San Luis Unit of the CVP are left to the discretion of the functionary contracting officer and contractors to modify. We know of no Reclamation regulation or law that grants such authority to a contracting officer to deliver water outside of the Congressionally designated service area. Further, this

³ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=47665

⁴ See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=73314>

provision of the Contract directly contradicts the specific acreage specified for delivery to the San Luis Unit.⁵

- The modified Final contracts fail to comply with (1) the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq., (2) the Endangered Species Act (ESA), 16 U.S.C. §1531 et seq., (3) Federal Reclamation law, (4) CEQA Public Resources Code 21000-21189 and CESA Cal. Fish & Game Code §§2050-2106.5, and (5) CVPIA in general and specifically Section 3404(c)(2) which requires that provisions of *law* be written as *contract terms* enforceable between the parties. These enforceable provisions of law required by the CVPIA are absent from the contracts.
- The Final contracts evade water quality requirements specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) Federal Coordination Act⁶ or other existing Federal laws, by omitting these water quality obligations and the obligation to meet repayment by 2030.
- Article 10 should have been removed from the Final contracts as was highlighted by recommendations from the DOI Inspector General (IG) in 2013.⁷ The DOI IG found that provisions in Article 10 of the long-term and interim CVP contracts limit and adversely affect repayment of CVP capital costs and O&M deficits. Yet, the Final Contracts still include the refund language in Article 10.
- New cost allocation formulas adopted in January 2020 and other Reclamation actions reduce the amount these contractors owe for repayment. We note that two DOI Inspector General Reports have indicated the amounts being charged are insufficient to repay the capital costs.⁸
- Water Needs Assessments should be included for each contract/contractor. No such exhibits were included with these contracts. Reclamation is contractually required to conduct a proper water needs assessment, and without a current water needs assessments, there is no way of knowing if the Contractors' needs equal the current total contract quantity.⁹
- Reclamation law and regulations requiring public notification, recirculation, and public comment on the Modified Final Contract were ignored.

⁵ See PL 86-488: *Be it enacted by the Senate and House of Representatives of the United States of America in Congress That (a) for the principal purpose of furnishing water for the irrigation of approximately five hundred thousand acres of land in Merced, Fresno, and Kings Counties, California, hereinafter referred to as the Federal San Luis unit service area.* emphasis added.

⁶ <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg3050.pdf> See Section 101 Project Operation and Section 102 Reimbursable costs for salinity control.

⁷ See @ pg 10 DOI IG recommendation that Reclamation, “*Renegotiate the terms of irrigation water service contracts to eliminate the refund language of Article 10 at the earliest opportunity.*”
<https://www.doi.gov/sites/doi.gov/files/WR-EV-BOR-0003-2012Public.pdf>

⁸ See:
https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/land.html & 2004 DOIG Central Valley Contract Renewal Process August 2004 [OIG Report No W-IN-BOR-0016-2004]

⁹ See: https://www.usbr.gov/mp/cvpia/3404c/process_info/cont_policies/3_cvp_policies/01_02-22-99.pdf and <https://pcffa.org/wp-content/uploads/2016/07/102-7-25-16-Amended-Memorandum.pdf> pg 7

- Cumulative impacts are ignored. Reclamation is in the process of converting virtually all CVP water service contracts, about 77 of them, into permanent water repayment 9(d) contracts.¹⁰ Pursuant to NEPA, “cumulative impact” “is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. . . .” (NEPA Regulations § 1508.7.) The cumulative environmental impacts of converting all of Reclamation’s contracts into permanent contracts will be enormous and adverse, but have not been considered.

Pursuant to these Final Contracts, Reclamation will be obligated to deliver up to 527,310 acre-feet of Project Water to these contractors each year. Such deliveries have many adverse environmental impacts on the watershed, including the Trinity, Sacramento and San Joaquin rivers and the San Francisco-San Joaquin Bay-Delta estuary. Adverse impacts range from reducing freshwater flows and worsening already degraded Delta water quality; to further endangering and destroying endangered fish and wildlife species and critical habitat; to reducing freshwater flows worsening dangerous toxic algal blooms in the Delta; to adverse impacts on public health and safety in the Delta region; and to adverse impacts on agriculture in the Delta.

Moreover, Reclamation is in the process of converting virtually all CVP contracts. The February 1, 2021 press release stated that “...*these [contractors] and more than 90 other contractors requested conversions.*”¹¹ Pursuant to NEPA, “cumulative impact” “is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. . . .” (NEPA Regulations § 1508.7.) The cumulative environmental impacts of converting all of Reclamation’s contracts into permanent contracts will be enormous and adverse.

The public interest in these contracts has been significant (see exhibit 1). Press reports of the secrecy, unexplained financial changes, and lack of public notification have been extensive. Given the extensive public interest, public review is required by Reclamation policy.¹² At a minimum, according to Reclamation policy and regulation, the Regional Director is to furnish revised contracts to all parties who requested the contract in response to the initial public notice. This did not occur.

In view of the above shortcomings, these Final WIIN Act Contracts should be withdrawn and the public negotiation process started over with transparency and proper public notice. We note that all of these contracts are either covered by a previous long-term contract, or are covered by interim contracts. Rescinding the WIIN Act contracts until appropriate environmental review under NEPA,

¹⁰ On December 20, 2019, Reclamation gave public notice on its web site that 77 contractors had requested contract conversions. The same notice said that 14 of the contract conversions had already been negotiated and the public comment period on those contract conversions would close on February 19, 2020. The subject contracts were spread among the Central, Northern, and South-Central California Area Offices. See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=69044>

¹¹ See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=73651>

¹² <https://www.law.cornell.edu/cfr/text/43/426.22> See also: <https://www.federalregister.gov/documents/2019/03/14/2019-04703/quarterly-status-report-of-water-servicerepayment-and-other-water-related-contract-actions> *At a minimum, the regional director will furnish revised contracts to all parties who requested the contract in response to the initial public notice.* emphasis added.

ESA, CEQA and CESA is completed will not harm these contractors and will not interrupt water deliveries.

Thank you for considering these comments. Please make sure the undersigned are included in any future actions with regard to CVP contract renewals and/or conversion of CVP contracts pursuant to Section 4011 of the WIIN Act. Please find our detailed comments attached.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League
jminton@pcl.org



Mike Conroy
Executive Director
Pacific Coast Federation of Fishermen's Asso.
mike@ifrfish.org



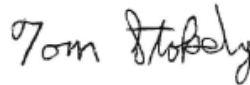
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Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



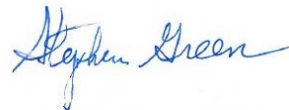
Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



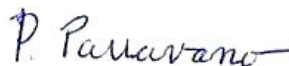
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



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President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



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caleenwintu@gmail.com



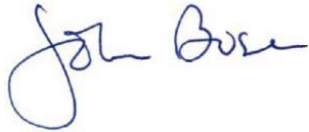
Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



John McManus
President
Golden State Salmon Association
john@goldengatesalmon.org

DETAILED COMMENTS ON THESE FINAL REPAYMENT CONTRACTS

Comments pertaining to all of the WIIN Act Repayment Contracts

Refund of Overpayment Language of the Final contracts Should be Removed.

This Article in the Final contracts refers to refund for overpayment. We note that for many of the contracts this language is found in Article 10 of the Final contracts, but for some contracts it is found in Article 9(a) or 11(a). The office of the DOI Inspector General (IG) released a report in 2013 titled, *Central Valley Project, California: Repayment Status and Payoff*.¹³ The IG report @ pg 5 notes that provisions in Article 10 of the long-term and interim CVP contracts limit and adversely affect repayment of CVP capital costs and O&M deficits. The report further notes that, “USBR officials believe that, absent the contract language in Article 10, the CVP ratesetting methodology would be sufficient to recover CVP construction costs because overpayments in high water years would offset underpayments in low water years. These officials acknowledged that the refund language of Article 10 defeats the design of the CVP ratesetting methodology and adversely impacts repayment of CVP construction costs.” The IG recommended @ pg 10 that Reclamation, “Renegotiate the terms of irrigation water service contracts to eliminate the refund language of Article 10 at the earliest opportunity.” Yet 2021 WIIN Act repayment contracts still include the refund language in Article 10. Reclamation has failed to eliminate this refund language in Article 10 from these Final contracts, even though the execution of these repayment contracts provides the opportunity to do so. We recommend that Reclamation revise these Final contracts by removing the repayment language from these contracts.

Failure to Comply with NEPA.

An EIS must be prepared by Reclamation before executing long-term or repayment contracts. The reason is that the contract would be a major federal action significantly affecting the quality of the human environment. (42 U.S.C. § 4332(C.) “Actions include new and continuing activities, . . .” (NEPA Regulations § 1508.18(a).¹⁴ NEPA requires “that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter [NEPA], . . .” (42 U.S.C. §4332.)

NEPA processes must be integrated with other processes “at the earliest possible time to ensure that planning and decisions reflect environmental values, . . .” (NEPA Regulations § 1501.2.) Reclamation, however, has not prepared an EIS on these permanent contracts. Reclamation *has not even prepared an environmental assessment* to determine whether an EIS must be prepared. (NEPA Regulations §§ 1501.3; 1508.9.) Reclamation has not made a “finding of no significant impact” on the action. (NEPA Regulations § 1508.13.) Reclamation has not instituted the required “scoping” process and has not published a notice of intent in the Federal Register. (NEPA Regulations § 1501.7.) Reclamation has not prepared a categorical exclusion or notice thereof on the contract. (NEPA Regulations § 1508.4.) The subject action would not in any event qualify for a categorical exclusion. Consequently, Reclamation has not furnished the public any information whatsoever, by which to evaluate the potential environmental consequences of the contract and the water diversions and deliveries authorized by it.

¹³ See: <https://www.doioig.gov/sites/doioig.gov/files/WR-EV-BOR-0003-2012Public.pdf>

¹⁴ The NEPA Regulations are codified at 40 C.F.R. §1500 et seq.

Reclamation also has not furnished the public any information whatsoever, by which to evaluate the *cumulative* environmental impacts of all of the contract conversions in Reclamation's pipeline and the water diversions and deliveries authorized by them. Reclamation has not prepared a single EIS on the related contract conversions (NEPA Regulations § 1502.4(a) and has not prepared a broad "program" EIS on the contract conversions in its pipeline. (NEPA Regulations § 1502.4(b.) Reclamation has not prepared any "environmental document" on its action. (NEPA Regulations §1508.10.)

The EIS section on "alternatives" "is the heart of the environmental impact statement." (NEPA Regulations § 1502.14.) The alternatives section, should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public. (NEPA Regulations § 1502.14.)

An environmental assessment also must include discussion of alternatives. Reclamation must prepare an EIS or first prepare an environmental assessment and then an EIS, which must "Rigorously explore and objectively evaluate all reasonable alternatives, . . ." to the action. (NEPA Regulations § 1502.14(a.) The EIS will necessarily include alternatives that reduce deliveries of project water in order to increase freshwater flows and begin to restore watershed rivers and the Delta.

The Ninth Circuit Court of Appeals reversed a district court decision denying environmental plaintiffs' summary judgment because the challenged environmental document issued by Reclamation under NEPA, "did not give full and meaningful consideration to the alternative of a reduction in maximum water quantities." (*Pacific Coast Federation of Fishermen's Assn's v. U.S. Dept. of the Interior*, 655 Fed. Appx. 595, 2016 WL 3974183*3 (9th. Cir., No. 14-15514, July 25, 2016) (Not selected for publication).) "Reclamation's decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion and the agency did not adequately explain why it eliminated this alternative from detailed study." (*Id.* at *2.) Reclamation's "reasoning in large part reflects a policy decision to promote the economic security of agricultural users, rather than an explanation of why reducing maximum contract quantities was so infeasible as to preclude study of its environmental impacts." (*Id.* at *3.)

The requirement under NEPA to consider the alternative of reducing exports to increase flows through the Delta is so obvious that the Ninth Circuit's decision was not selected for publication because no new legal analysis was required to reach the decision. The decision pertained to interim two-year contract renewals. If the alternative of reducing exports must be considered during renewal of two-year interim contracts, it most assuredly must be considered before entering into permanent contracts. Moreover, "an alternative may be reasonable, and therefore required by NEPA to be discussed in the EIS, even though it requires legislative action to put it into effect." *Kilroy v. Ruckelshaus*, 738 F.2d 1448, 1454 (9thCir. 1984.)

Reclamation has failed to proceed in the manner required by NEPA with this contract conversion. Reclamation proceeded with FINAL contract agreements with Westlands to convert the contract renewal contracts to permanent repayment contracts without having first prepared and issued an EIS.

Examples of Environmental Issues Ignored by Reclamation's Failure to Prepare an EIS or even an Environmental Assessment.

The NEPA Regulations give guidance on whether an action "significantly" affects the quality of the human environment. "' Significantly' as used in NEPA requires considerations of both context and intensity:" (NEPA Regulations § 1508.27.) Ten factors are listed in § 1508.27(b) 110 in evaluating intensity meaning severity of the impact.

1508.27(b)(2) The degree to which the proposed action affects public health or safety

The water deliveries to these contractors diminish freshwater flows in the Trinity River and through the Sacramento-San Joaquin Delta (Delta) which decreases water supplies and water quality, can increase water temperature, and worsen the amount and frequency of toxic algal blooms. That is one of the ways by which the action affects public health and safety.

(3) Unique characteristics of the geographic area

The Delta already fails to meet established water quality standards and is an ecologically critical area. These contracts' water deliveries exacerbate the decline of the Delta.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of the contract will be highly controversial because of the worsening water supply and water quality crisis in the Delta. The controversy is evidenced by the recent article in the Los Angeles Times entitled *Feds set to lock-in huge water contract for well-connected Westlands Water District* (Bettina Boxall, Los Angeles Times November 11, 2019)¹⁵.

These contract conversions are highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks

Because Reclamation has failed to engage in any NEPA environmental analysis whatsoever, the impacts of the contract are highly uncertain.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

More than 90 CVP contractors started negotiations to convert their contracts.¹⁶ Converting these 11 contracts would, therefore, establish a precedent for future actions with significant effects.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

These contract conversions are related to other contract conversions in the pipeline that would have cumulatively significant impacts.

¹⁵ See: <https://www.latimes.com/environment/story/2019-11-11/westlands-water-district-federal-water-contract>

¹⁶ As denoted in the February 1, 2021 press release:
<https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=73651>

(9) *The degree to which the action may adversely affect an endangered or threatened species or its habitat*

Endangered winter-run Chinook salmon, threatened spring-run Chinook salmon, Central Valley steelhead, green sturgeon, Delta smelt, longfin smelt (State listed as threatened), and giant garter snake, and State species of special concern including Pacific lamprey, white sturgeon, and Sacramento splittail continue to decline because of the reductions in water quality and flows resulting in rising temperatures, increased salinity, and sedimentation. CVP water deliveries harm the fish and wildlife by reducing water flows and worsening the contamination of the Trinity River and Sacramento and San Joaquin Valley surface waters, groundwater, and soils with pollutants including selenium.

(10) *Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment*

For the agricultural contracts in the San Luis Unit, these Final Contracts violate Reclamation Law by enlarging the service area and water quantities beyond the limits authorized by Congress. Reclamation's refusal to prepare an EIS appears designed to facilitate the violation of reclamation law by not providing any information whatsoever by which the public can evaluate how much land will remain in production for how long and how much land will be retired from agricultural production and when. And how much land will be converted to municipal and industrial uses.

Reclamation's Action is Discretionary.

Our organizations have not seen any communication from Reclamation explaining why these contracts were finalized without completing any NEPA review. Reclamation does refer in "whereas" clauses in the draft contract to the Water Infrastructure Improvements for the Nation Act (Pub. L.) 114-322, 130 Stat. 1628), Section 4011 (a-d) and (f) (WIIN Act.) The contract recites,

WHEREAS, 4011(a)(1) provides that 'upon request of the contractor, the Secretary of the Interior *shall* convert any water service contract in effect on the date of enactment of this subtitle and between the United States and a water users' Association [Contractor] to allow for prepayment of the repayment contract pursuant to paragraph (2) *under mutually agreeable terms and conditions.*' (Draft Contract, 8th Whereas clause, p. 4; also, 20th Whereas clause, p. 8.) (Emphasis added.)

Reclamation may contend that the WIIN Act including use of the word "shall" makes entry into the conversion contracts non-discretionary and thus not subject to NEPA. As provided by WIIN Act section 4011(a)(1), however, the terms and conditions *must be mutually agreeable* meaning they must be agreeable to the Secretary of the Interior, as well as to the contractor. That means under the plain language of the Act, the Secretary of the Interior retains discretion because the terms and conditions of the contracts must be agreeable to him. In *Aluminum Co. of America v. Central Lincoln Util. Dist.*, 467 U.S. 380, 397 (1984), the Supreme Court held,

Because the Regional Act does not comprehensively establish the terms on which power is to be supplied to DSIs [direct-service industrial customers] under the new contracts, it is our view that the Administrator has broad discretion to negotiate them.

NEPA cases have rejected efforts by agencies to avoid complying with NEPA by contending their actions are non-discretionary, when there is some discretion.¹⁷ The Secretary of the Interior has discretion to determine contract terms and conditions that are agreeable to him. That being the case, Reclamation has failed to comply with NEPA by converting these water contracts without completing environmental review before the contracts were finalized.

Failure to Comply with CVPIA.

NEPA Compliance is also Required by the Central Valley Project Improvement Act (CVPIA) before entering into Conversion Contracts.¹⁸ Savings language in the WIIN Act (section 4012(a)(2)) requires, “This subtitle shall not be interpreted or implemented in a manner that— [omitted] (2) affects or modifies any obligation under the Central Valley Project Improvement Act [CVPIA] (Public Law 102-575; 106 Stat. 4706), except for the savings provisions for the Stanislaus River predator management program expressly established by section 11 (d) and provisions in section 11(g); [omitted]”

The CVPIA was enacted in 1992 to reduce adverse environmental impacts of Central Valley Project (CVP) operations and to modify State water right permits to included fish and wildlife as a purpose of the project. The CVPIA requires preparation of an EIS before Reclamation renews any long-term water service contract. (CVPIA §§ 3402(a), 3404(c)(1.) That requirement has not been eliminated by the WIIN Act.

Further the contract does not contain within the contract terms explicit language that is enforceable between the parties as required by CVPIA Section 3404(c)(2). This section requires that provisions of *law* be written as *contract terms* enforceable between the parties.

Enforceable contract provisions of *law* that by law must be written as *contract terms* enforceable between the parties include for example:

- *Section 3406 (b)(1) requiring restoration and mitigation of anadromous fishery.*
- *Section 3406(b)(2), which authorizes and directs the dedication of up to 800 thousand AF (TAF) of CVP water for environmental purposes.*
- *Section 3406(b)(23), which addresses restoration efforts for the Trinity River Division (TRD).*
- *Section 3406(d), which requires firm CVP water supplies amounting to 480 TAF to be delivered to federal, state and some private wildlife refuges.*

Most of the CVP project elements necessary to provide water to these 11 contractors has been omitted from repayment contrary to Reclamation law:

¹⁷ Such cases include *Forelaws on Board v. Johnson*, 743 F.2d 677 (9th Cir. 1984.)

¹⁸ Section 3404(c) of the CVPIA requires that an EIS be completed before Reclamation can renew any long-term repayment or water service contract for a period of 25 years. Reclamation defines "long term contract" as a "contract with a term of more than 10 years." See <https://www.usbr.gov/recman/pec/pec-p05.pdf> By these definitions any contract term longer than 10 years is by Reclamation's own definition 'a long-term contract.' A conversion to a permanent contract fits the definition of a long-term contract. Thus, federal law requires a full EIS before entering into permanent repayment contracts. Congress determined that long-term contracts would have a significant effect on the environment such that an EIS is required.

- What about repayment for the capital costs of the Trinity River Division (TRD) and other CVP facilities that convey water to these contractors?
- Has the TRD's capital cost been fully retired?
- If not, then why is there no repayment allocated to these contractors for their share of the remaining capital costs of the TRD and other conveyance facilities?
- Why aren't those construction costs that are "not reflected in such schedules"(see section 4011(a)(2)) pursuant to WIIN Act paragraphs A and B required to be repaid and thus included in exhibit B?

In addition, Reclamation has failed to prepare an EIS before finalizing and executing these WIIN Act contracts. CVPIA Section 3404(a), precludes the issuance of any new, short-term, temporary, or long term CVP contracts for any purpose other than fish and wildlife without NEPA compliance.¹⁹

Judicial Confirmation of the Contract Amendments is Required.

Reclamation law and the Omnibus Adjustment Act of 1926 requires the judicial confirmation of contracts with irrigation districts. It is unclear which of these contractors have obtained from State Court a ruling with regard to the validity of these contracts. To protect the United States, Reclamation law²⁰ and specifically the Act of May 15, 1922, requires state court to validate the contract. Section 1 of the Act of May 15, 1922, which states in part:

"..that no contract with an irrigation district under this act shall be binding on the United States until the proceedings on the part of the district for the authorization of the execution of the contract with the United States shall have been confirmed by decree of a court of competent jurisdiction, or pending appellate action if ground for appeal be laid."

Failure to Comply with the Coordinated Operations Act of 1986²¹

These modified Final Contracts omit the obligation of the contractors and the United States to deliver Project water in accordance with water quality standards specified in PL 99-546. This language was omitted from the Final Contracts: " *water quality standards specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or other existing Federal laws.*" Instead, the quality of water and operations are left to the Contracting Officer in place of specific reference to required water quality protection levels. Congress directed that the United States and its Contractors to operate the CVP *in conformity with State water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta and Estuary* and to operate the CVP *so that water supplied at the intake of the Contra Costa Canal is of a quality equal to the water quality standards*

¹⁹ See: <https://www.usbr.gov/mp/cvpia/docs/public-law-102-575.pdf>

²⁰ See Section 1 of the Act of May 15, 1922 and 43 U.S.C §511(1976) Section 46 of the Omnibus Adjustment Act of 1926 and 43 U.S.C. §423 (1976). See https://www.google.com/books/edition/Federal_Reclamation_and_Related_Laws_Ann/Eh-T43rf7YAC?hl=en&gbpv=1&dq=court+confirmation+of+amendments+to+repayment+and+water+service+contract+s+July+9,+1984&pg=PA1&printsec=frontcover

²¹ <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg3050.pdf> See Section 101 and Section 102.

contained in the Water Right Decision 1485 of the State of California Water Resources Control Board, dated August 16, 1978, except under limited conditions. We know of no law that authorizes Reclamation to change this Congressional direction in a contract. This substantially changes the terms of the contract and obligations to meet state water quality standards. Changing the water quality protection standards to some undefined term as "what is feasible" also has significant environmental impact and has not been analyzed nor the endangered species impacts considered. This is a significant change in these WIIN Act final contracts.

This is from the Article 15 of the Final modified contracts:

PROTECTION OF WATER AND AIR QUALITY

- (a) The Contractor, without expense to the United States, will care for, operate and maintain transferred works in a manner that preserves the quality of the water at the highest feasible level as determined by the Contracting Officer.
- (b) The United States will care for, operate and maintain reserved works in a manner that preserves the quality of the water at the highest level possible as determined by the Contracting Officer. (emphasis added)

Also required under Section 102 of Public Law 99-546—OCT. 27, 1986 100 STAT. 3051, the contract needs to provide for repayment of D-1485 salinity costs and complying with State water quality standards. The modified Final contracts do not include these reimbursements and repayment of these costs.

Failure to Comply with CEQA.

Public Resources Code Section 21151, which provides that EIRs are required for certain projects, notes that a Categorical Exclusion is not allowed when:

1. The project site is environmentally sensitive as defined by the project's location. A project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant.
2. The project and successive projects of the same type in the same place will result in cumulative impacts;
3. There are "unusual circumstances" creating the reasonable possibility of significant effects.

These Final Contracts contain significant changes to compliance with State water quality standards, the amount of land disturbance and water exports that were not previously disclosed in the draft contract that was made available for public comment. Our previous comments on the San Luis Unit ag contracts have also described significant groundwater contamination and downstream cumulative impacts. The toxic runoff, drainage, and effects of drainage treatment and disposal, including but not limited to, fish, wildlife, air emissions, transportation and other impacts, have not been disclosed. The Final Contracts are also silent with regard to paying for these water quality costs and protections. Without a proven drainage solution, water quality impacts from irrigation of toxic soils in the San Luis Unit have far reaching impacts outside of the district and in downstream waters.²² Therefore, there clearly are significant effects to the environment associated with the

²² The Department of Interior's Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant. The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational

issuance of permanent water contracts and, therefore, a full EIR under CEQA needs to be completed along with compliance with federal and state endangered species laws.

Further any full EIR for long term contracts should include information on the relationships between irrigation in the San Luis Unit and groundwater movement downslope, in terms of flow and water quality. The USEPA has noted previously that such an environmental review should provide information on the San Luis Unit's role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife.²³ Absent this information, the public and decision makers are left in the dark as to significant impacts and required mitigation measures, such as "*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*" The effects of toxic pollution from ag districts in the San Luis Unit caused by irrigation enabled by these permanent water contracts are significant and complex and must be addressed in a comprehensive EIR.

Finally, consideration and analysis of a full range of project alternatives is needed to prevent significant impacts. We have raised these issues in the past, and they are even more pertinent today. They include first the failure to study "the alternative of a reduction in maximum interim contract water quantities. By failing to study this alternative, these permanent contracts defy the *PCFFA* Court's instruction that Reclamation must "give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities." *PCFFA*, 655 Fed. Appx. at 599. Second, the CEQA exemptions filed for these contracts fail to disclose – let alone analyze as required – the massive environmental impacts of diverting this water from the Trinity and Sacramento Rivers, to the Delta and in the case of San Luis Unit ag contractors, applying to contaminated soils within those districts. Third, accurate maps of the land uses that will be receiving water under these contracts is needed to determine the impacts of converting these agricultural areas to other uses, including utilities, municipal and industrial, such as Vega Solar in San Luis WD.²⁴ And, fourth, there needs to be an assessment of the ability of existing agricultural users to pay the significant amounts of debt required under the contract conversion process. This required debt load predictably will change land uses and the likely shift to industrial uses must be disclosed and analyzed. Lastly, no information is provided as to how this debt will be repaid and the impacts on existing agricultural and industrial operations, especially during severe prolonged droughts and climate change, will be managed. These critical shortcomings leave decision-makers and the public in the dark.

performance criteria. In addition, the USBR was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, USBR spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals.[see <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luisdemonstrationtreatmentplant>

²³ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

²⁴ See: http://web2.co.merced.ca.us/pdfs/commissionarchive/2013/11-20/final_eir_vega_solar.pdf

Failure to comply with California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA).

As has been highlighted in our previous comments on CVP Interim Contracts, and WIIN Act Repayment contract conversions, CVP water deliveries have significant impacts on State and Federally protected species. The USFWS in their 2000 biological opinion on CVPIA stated that ESA consultations would be completed before executing long-term contracts @ pg 2-29 (emphasis added): *“Once the long-term contract renewal negotiations are completed, the renewals will be subject to a separate, tiered analysis that is consistent with the NEPA tiering in the PEIS. No contracts will be renewed until the appropriate environmental review has been completed. Reclamation will consult either formally or informally with the Service before executing a contract. The site specific, tiered analysis will address direct and indirect effects of contract renewal.”*²⁵ Yet, Reclamation has failed to proceed in the manner required by ESA (16 U.S.C. § 1531 et seq.) and the contractors have failed to proceed in the manner required by CESA with these contract conversions. Reclamation has failed to complete ESA consultations with the USFWS and the contractors have failed to consult with CDFW under CESA before these contracts were finalized. Further, Senator Feinstein noted with the passage of the WIIN Act, “... the bill’s savings clause that prevents the legislation from violating state or federal environmental laws including the *Endangered Species Act* and biological opinions...”²⁶

ESA Compliance is a Mirage--the Draft Contract References Compliance with ESA Consultation Requirements that is Absent.

The Final contracts state under Article 3(e) (Article 3(c) for Pacheco WD) that the Contractor shall *“comply with requirements applicable to the Contractor in biological opinion(s) prepared as a result of a consultation regarding the execution of any water service contract between the Contracting Officer and the Contractor in effect immediately prior to the Effective Date of this Contract undertaken pursuant to Section 7 of the Endangered Species Act of 1973 (ESA)...”* Yet no ESA consultation has been completed on these final contracts nor has there been a consultation that identifies any of these contractors as an Applicant under the ESA. As denoted on page 2-12 of the USFWS ESA Section 7 Handbook,²⁷

“For purposes of this discussion, the Federal action involves the approval of a permit or license sought by the applicant, together with the activities resulting from such permission. The action agency determines applicant status, including requests arising from prospective applicants in early consultations. The action agency also determines how the applicants are to be involved in the consultation, consistent with provisions of section 7(a)(3), (b) and (c) of the Act and the section 7 regulations.”

Even language in the Final contracts suggest that ESA consultations would be completed and that the contractors would comply with applicable provisions of biological opinions. Without Applicant status,

²⁵ See:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/LA_ND/part2rebuttal/land_301.pdf

²⁶ See: <https://www.feinstein.senate.gov/public/index.cfm/pressreleases?ID=FF5C94EB-667A-4DEC-A0A4296AB5027BE4>

²⁷ See: https://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf

there are no applicable provisions in an ESA consultation that applies to these contractors. This contract provision is a mirage designed to evade federal ESA requirements. Reclamation failed to request Applicant status for any of these contractors, so the language in the Final Contracts suggesting that there are applicable provisions in biological opinions is inappropriate and misleading.

In addition, we note that for Pacheco and San Benito WDs, there has never been an ESA consultation completed for water deliveries to these districts. That is because Pacheco is still operating under their original long-term contract which will not expire until 2024 and San Benito is still operating under their original long-term contract which will not expire until 2027.

Cumulative Impacts of Project Water Deliveries are Significant.

Reclamation has failed to consider the effects of other past, present, and reasonably foreseeable future actions that could result in cumulative impacts on the biological resources of the study area(s) before finalizing these permanent contracts. Reclamation had concluded, for previous interim contract renewals that there would only be minimal cumulative impacts to biological resources over a 2-year period.²⁸ However, that rationale does not extend to a contract executed permanently. Further, these conclusions of finding minimal cumulative impacts to biological resources are dependent on the timely implementation of future agricultural drainage service, habitat restoration, land acquisition and retirement, water conservation, and CVPIA programs including implementation of Fish and Wildlife Habitat Restoration Programs under Sections 3406 b(2), b(3) and 3406 d(1) and d(2).

The Programmatic EIS for CVPIA identified these restoration programs were necessary to remediate adverse impacts of water contract renewals.²⁹ Yet, some important ecosystem restoration provisions of CVPIA, such as acquisition of full Level 4 refuge water supplies, have lacked funding for adequate implementation. Purchase of environmental water under the CVPIA b(3) program has also fallen substantially short of targeted needs due to inadequate funding mechanisms. This unmet need may increase in the future as market prices for water continue to rise with demand. Further, past and present efforts to meet water quality standards in the San Joaquin Basin have been significantly hampered by the lack of adequate fresh water supplies. The USEPA recommended, in their comments on the DEIS and Supplemental Information for San Luis Unit Long Term Contracts (@ pg 6 of Attachment A) that, “The cumulative impacts analysis in the FEIS should be based on the past and present trends of supplies available for redirection to meet restoration and refuge needs in the area, including Trinity River Restoration needs. Where information is available, the analysis should reflect the actual implementation status of CVPIA restoration actions.”³⁰ Further as noted previously, the portion of these costs as well as, the obligation for payment need to be included in the contract as an enforceable provision.

Environmental Impacts Go Beyond Water Districts’ Boundaries.

Impacts of the execution of these permanent water contracts go far beyond the districts’ boundaries. The impacted area includes the zones of export including the Trinity and Sacramento and San Joaquin Rivers

²⁸ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41301

²⁹ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41303

³⁰ <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

and the Sacramento-San Joaquin Delta Estuary and Bay. The effects to these areas outside of the districts' boundaries can be profound and significant.

Effects to Trinity River

Since 1964, Reclamation has been diverting Trinity River water 400 miles south to the San Luis Unit. These diversions have had a profound effect on fisheries, including a 90% decline in Trinity River fish populations. In the authorizing legislation for the Trinity River Division (TRD) of the CVP in 1955 (Pub. L. 84-386, 69 Stat. 719), Congress conditioned out-of-basin diversions on preservation and propagation of fish and wildlife in the Trinity River Basin as well as on a separate provision for the annual release of not less than 50,000 acre-feet from Trinity Reservoir to be made available to Humboldt County and downstream water users including Hoopa.³¹ In 1984, Congress passed the Trinity River Basin Fish and Wildlife Management Act (Pub. L. No. 98-541) which recognized that Trinity River Division (TRD) operations substantially reduced instream flows in the Trinity River, resulting in degraded fish habitat and consequently a drastic reduction in anadromous fish populations. The 1984 Act directed the Secretary to develop a management program to restore fish and wildlife populations in the Basin to levels approximating those that existed immediately before TRD construction began. In the CVPIA Section 3406(b)(23),³² Congress required the Secretary to take specific actions “*in order to meet Federal trust responsibilities to protect the fishery resources of the Hoopa Valley Tribe, and to meet the fishery restoration goals of the [1984 Act].*” In 2000, the USDI signed a Record of Decision for the Trinity River Restoration Program (TRRP). The TRRP ROD noted that “*Amendments to the 1984 Act redefined its restoration goals so that the fishery restoration would be measured not only by returning anadromous fish spawners, but also by the ability of dependent tribal and non-tribal fishers to participate fully in the benefits of restoration through meaningful harvest opportunities. (These restoration goals were reaffirmed through enactment of the Trinity River Fish and Wildlife Management Reauthorization Act of 1995, Pub. L. No. 104-143, May 15, 1996).*”³³

Contrary to the intent of Congress, the TRD development, operations, and resulting out-of-basin water diversions decimated fish populations including those required to fulfill Hoopa Tribe reserved fishing rights. The TRD diverted an average of 88% of the annual inflow out of the Trinity River and into the Sacramento River Basin during its first ten years of operation. The TRD also permanently eliminated fish access to 109 miles of habitat upstream of Lewiston Dam previously used by anadromous fish for holding, spawning, and rearing. Within a decade of the TRD's completion, salmonid populations dramatically decreased. In 1980, the U.S. Fish and Wildlife Service estimated that the Trinity River fish population suffered a reduction of 60% to 80% and fishery habitat loss of 80% to 90%.³⁴ Today, even with the implementation of the TRRP ROD, fish populations are not at pre-project levels nor anything close to them. The Southern Oregon/Northern California Coast Evolutionarily Significant Unit (SONCC) of Coho salmon, a population that includes Klamath and Trinity River Coho, was estimated in 1940 to range between 150,000 and 400,000 naturally spawning fish annually.³⁵ In 1997, NMFS concluded that

³¹ 1955 Trinity River Division Central Valley Project Act (the “1955 Act”), Pub. L. No. 84-386, 69 Stat. 719, § 2.

³² See: https://www.usbr.gov/mp/cvpia/title_34/public_law_complete.html

³³ See: <https://www.trrp.net/DataPort/doc.php?id=227>

³⁴ Westlands Water Dist. v. U.S. Dep't of the Interior, 376 F.3d 853, 861 (9th Cir. 2004).

³⁵ See: Threatened Status for SONCC ESU of Coho Salmon, 62 Fed. Reg. 24588, 24588 (May 6, 1997) (“Listing Notice”).

“Coho populations in this ESU are very depressed, currently numbering approximately 10,000 naturally produced adults.” The perilous situation of the SONCC Coho salmon prompted NMFS in 1997 to list the fish under the ESA as threatened. In listing the Coho, NMFS noted that “water diversions” and “water withdrawals” for irrigation were “major activities responsible for the decline of Coho salmon in Oregon and California.”³⁶ SONCC Coho remain listed as threatened under the ESA due to their continued depressed populations. Reclamation has failed to fulfill the mandates of the 1984 Act to modernize and increase the effectiveness of the TRH (Public Law 98-541 §2(a)(1)(C)) or require CVP contractors to pay the cost pursuant to CVPIA section 3406(b)(23). Average returns of hatchery fish to Trinity River above Willow Creek in recently completed brood cycles (run years 2015-2018) fall far short of the 1983 goals for all species (which goals still less than the estimated pre-project escapement levels).

Effects to Bay-Delta Ecosystem

The San Francisco Bay and Delta ecosystem is also at significant risk due to environmental degradation. Adverse impacts range from reducing freshwater flows and worsening already degraded Delta water quality including impacts from elevated levels of selenium; to further endangering and destroying endangered fish species and critical habitat; to reducing freshwater flows worsening dangerous toxic algal blooms in the Delta; to adverse impacts on public health and safety in the Delta region; to adverse impacts on agriculture in the Delta. Waterways in the North Bay and Delta including Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta are listed as impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).³⁷ Sources of selenium contamination include agricultural drainage from the San Luis Unit in the Central Valley (Linares et al 2015; Presser and Luoma 2010).³⁸

Specific Comments on WIIN Act Repayment Contracts to San Luis Unit Contractors

The Secretary is Required to Contract for the Delivery of Project Irrigation Water Only to Lands with Characteristics that Allow Delivery--this draft contract Violates that Mandate.

CVP water is being provided to the service areas of the San Luis Unit agricultural districts even though no updated irrigable lands map have been provided. Public Law 99-546, 100 Stat. 3050. (Coordinated Operations Act) Sec. 305. § 4(c) of the Act requires, among other things, that the Secretary must show that lands receiving project water are capable of *"successful irrigability of those lands and their susceptibility to sustained production of agricultural crops by means of irrigation has been demonstrated in practice. Such proposal shall also include an investigation of soil characteristics which might result in toxic or hazardous irrigation return flows."* No such documentation and evidence has been provided in support of these proposed permanent water contracts to irrigate the lands referenced in Exhibit A of each proposed contract. In fact, government documents show that roughly 46,000 acres of the lands in Pacheco (4,100 acres), Panoche (38,000 acres) and San Luis WDs (3,882 acres) proposed for irrigation under this contract will generate "toxic or hazardous irrigation return flows" to ground or surface waters.³⁹ Indeed, current practices result in some of these toxic flows being discharged without proper

³⁶ Ibid. at 24,592.

³⁷ See:

https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

³⁸ See: <https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/etc.2775> & See: <https://pubs.usgs.gov/pp/p1646/>

³⁹ As described on page 38 of FEA for Panoche and San Luis WD CVP interim renewal contracts:

Clean Water Act permits or consideration of hazardous conditions for fish and wildlife.^{40,41}

These permanent contracts will deliver water to lands that are unsuitable for irrigation. Delivery of water to these lands could obligate the federal government to furnish something that has been unattainable for decades—drainage service. The drainage service obligation does not exist, however, if water service to these lands is cut off because of the impracticability of irrigation. This alternative—cessation of irrigation water from unsuitable lands—is mandated by law and regulation.⁴² The toxic drainage, groundwater pollution, and surface water pollution is created in large part by the Bureau’s [of Reclamation] deliveries of CVP water to these drainage-impaired lands. Reducing water service instead of expanding it is the obvious solution. Controlling or eliminating the supply of drainage water by eliminating deliveries to these identified toxic soils will control the demand for drainage and the enormous costs estimated at \$2.7 billion.⁴³ The unauthorized financial obligation inferred by issuing the proposed permanent water contract must be addressed.⁴⁴

In our comments on the draft WIIN Act Repayment contracts for Panoche, Pacheco, and San Luis WDs, we noted that the Exhibit A maps are not consistent with Congressional authorization and the map contained in the San Luis Unit Feasibility Study.⁴⁵ The required updated irrigation suitability land

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=37785

⁴⁰ <http://calsport.org/news/wp-content/uploads/Conant-Burman-Ltr-Re-Extension-of-Cmt-Re-SLD-Discharges-UseAgreement-12-10-19.pdf>

⁴¹ http://calsport.org/news/wp-content/uploads/PCL-et-al_Comments-on-DEA-for-GBP-Stormwater-Plan_1223_2019-.pdf

⁴² Continuing to provide project water to these toxic soils would require approval from Congress to increase the authorized appropriation cap under the San Luis Act. Also see Reclamation Directives and Standards PEC P12 for required continuing investigations into land classification and suitability for irrigation for the delivery of project water.

⁴³ The estimated cost to implement the San Luis Drainage Feature Re-evaluation Record of Decision (SLDFR) was \$2.7 billion in 2008: <https://www.usbr.gov/mp/mpr-news/docs/factsheets/san-luis-drainage.pdf>

⁴⁴ The SLDFR 2008 Feasibility Report sent to Congress explained that “Federal interest is established either by legislation or through an evaluation of a proposed action relative to the agency’s mission” and that, to be federally implementable, an action “must be feasible as defined by the Economic and Environmental Principles and Guidelines (Principles and Guidelines). The Principles and Guidelines require Federal actions contribute to the national economic development (NED).” The 2008 Feasibility Report continued: The San Luis Act of 1960 as amended establishes the Reclamation’s Federal interest in the proposed action. However, the requirement for a net positive contribution to the Nation’s economy cannot be met by either of the two action alternatives. The 2008 Feasibility Report concluded the action alternative selected by the Bureau was not appropriate for implementation according to the government’s own accepted standards.

⁴⁵ In 1956, the Bureau of Reclamation delivered to the United States Congress, “A Report on Feasibility of Water Supply Development” for the San Luis Unit (the 1956 Feasibility Report), which recommended constructing a group of water management facilities, called the San Luis Unit, as an addition to the Central Valley Project, in order to bring irrigation waters to an area of approximately 496,000 acres in the San Joaquin Valley. In 1960,

classification maps for Pacheco, Panoche and San Luis WDs and the systematic evaluation of lands with respect to suitability for agricultural production under irrigation was not provided in these Final WIIN Act contracts. Further, we note that a non-irrigation covenant for 178.3 acres within San Luis WD was recorded with the County of Merced for the Vega Solar Project in 2011,⁴⁶ yet these acres are still included within the CVP contract service area boundary for San Luis WD (Exhibit A map to the San Luis WD contract).

Obligation to Provide Drainage Service, Article 15(e).

Article 15(e) of the Final Contracts for Panoche and San Luis WDs states, “*The Contracting Officer shall notify the Contractor in writing when drainage service becomes available. Thereafter, the Contracting Officer shall provide drainage service to the Contractor at rates established pursuant to the then-existing ratesetting policy for Irrigation Water...*” Federal and State law prohibit degradation of the waters of the State and Nation. The Final Contracts for Pacheco, Panoche and San Luis WDs would allow the continued delivery of CVP water to lands known to create pollution when applied to irrigate these soils without data or substantive environmental analysis of the effects of drainage contamination from these districts. This drainage pollution can deform fish and wildlife, impair reproduction, and reduce survival. These adverse impacts affect trust resources including migratory birds, anadromous fish, and federally and state listed species. Continued delivery of water to these soils, thru the execution of these Final Contracts, will degrade the waters of the State and Nation. The USEPA in their comment letter on the Draft EIS and Supplemental Information for Renewal of Long-Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006) recommended that the FEIS for San Luis Unit Long Term Contracts should include information on the relationships between irrigation in the San Luis Unit and groundwater movement downslope, in terms of flow and water quality. EPA further noted that Reclamation should provide information on the San Luis Unit’s role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as “*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*”⁴⁷ Yet these Final contracts maintain the status quo and do nothing to reduce drainage production and selenium mobilization.

We further note that the Final contract for Pacheco WD does not include this Article 15(e) language on drainage service. Yet, as identified in Table 4-8 of the Grassland Bypass Project (GBP) 2009 Final EIS/R,⁴⁸ approximately 2,900 acres of Pacheco WD are currently drainage-impaired and these lands discharge drainage to the Grassland Bypass Project. And the San Luis Drainage Feature Re-evaluation

Congress passed the San Luis Act, Pub. L. No. 86-488, 74 Stat. 156 (1960) authorizing water deliveries to 500,000 acres for the entire unit consistent with the Feasibility Report, see § 1(a). Also see LAND Exhibit 299: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/land.htm

⁴⁶ See: http://web2.co.merced.ca.us/pdfs/commissionarchive/2013/11-20/final_eir_vega_solar.pdf

⁴⁷ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁴⁸ See Table 4-8 on pg 4-14 of 2009 Final GBP EIS/R: : https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=3513

(SLDFR) FEIS Technical Appendices Table C1-3 @pg C-3 projected that Pacheco WD's area needing drainage service would be 5,000 acres in the future.⁴⁹

No Feasible Treatment Methods

The 2006 EIS for the⁵⁰ (SLDFR) and the 2009 EIR/EIS for the GBP⁵¹ included treatment as a significant component of the plan to reduce selenium in discharges to the San Luis Drain. Yet, the GBP treatment plant has yet to become operational.⁵² A Drainage Management Plan dated December 2020, developed by the GBP drainers, and made available by the Central Valley Regional Water Board for public comment notes @ page 19, "...no feasible treatment method has yet been developed." More than thirty million dollars has been invested in a demonstration treatment plant that still is not functioning and about which a federal audit found questionable expenditures.⁵³

Long Term Viability of Drainage Management Actions.

The SLDFR FEIS included a suite of management actions, including drainage reuse (to reduce the volume of drainage that would need to be treated), treatment, and disposal. Pilot studies conducted for SLDFR failed to meet specified objectives, putting doubt into effective implementation of any of these approaches at full-scale.

Reuse of polluted drainage in reuse areas does not eliminate the loading of wastes. It simply stockpiles contaminants on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into saline and toxic wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to permanent fallowing of more and more land, leaving hazardous conditions.

A Drainage Plan is required by law.

Federal courts and reclamation law require a drainage plan for the San Luis Unit. There is no plan. The drainage management laid out in the schematics of the preferred alternatives in the SLDFR FEIS and ROD have failed during pilot studies, and treatment has not proven viable or cost effective.⁵⁴ Moving forward with contract conversions that authorize full contract quantities in perpetuity without acknowledging drainage problems and technological and economic limitations is negligent and in violation of the law. This 'head in the sand' approach continues the delivery of CVP water to drainage-impaired lands in the San Luis Unit and creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River and the Bay-Delta estuary, especially in

⁴⁹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=61

⁵⁰ Ibid.

⁵¹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=3513

⁵² Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.

⁵³ Available at <https://www.doi.gov/reports/bureau-reclamation%E2%80%99s-cooperative-agreementno-r16ac00087panoche-drainage-district>

⁵⁴ These important scientific reports were removed from USBR's website but can be found here: http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppE-Se-BiotreatmentPerformance_2008.pdf Also see http://calsport.org/news/wp-content/uploads/USBR_SLDFRFeasibilityRpt_AppD-RO-Treatmt-Performance_2008.pdf

wetter years. And yet, the Final permanent contracts for these San Luis Unit ag contractors obligates delivery of water to these lands that are unsuitable for irrigation and to other lands that would receive project water that are, however, outside of Congressional authorization⁵⁵, but could obligate the federal government to furnish something that has been unattainable for decades—drainage.

The drainage obligation would not exist, however, if CVP water deliveries to drainage-impaired lands in the San Luis Unit are cut off because of the impracticability of irrigation. Cessation of irrigation water from unsuitable lands is mandated by law and regulation.⁵⁶ The toxic drainage, groundwater pollution, and surface water pollution is created in large part by the Reclamation's deliveries of CVP water to these non-irrigable lands. Reducing water service instead of expanding it is the obvious and rational solution. Controlling or eliminating the supply of drainage water by eliminating deliveries to these identified toxic soils will control the demand for drainage and the enormous costs estimated at \$2.7 billion. The unauthorized financial obligation inferred by issuing these permanent water contracts has not been addressed.⁵⁷

Curtailing Contract Deliveries to Drainage-Impaired Lands.

There is nothing presented in the record that precludes the Secretary of Interior from considering curtailing contract deliveries to drainage-impaired lands in the San Luis Unit. There is no legal obligation to operate a project once it was built if experience reveals to the Secretary that the project is not "practicable" under reclamation law without drainage (which of course both Reclamation and Congress knew to be the case beforehand) and is harmful to public and environmental health. At the time the San Luis Unit was authorized in 1960, vast portions of the Unit were understood by Congress, the Bureau of Reclamation and the State of California not to be "practicable" for irrigation without drainage. *See* Reclamation Act of 1902 § 4 (43 USC 419) "*Upon the determination by the Secretary of the Interior that any irrigation project is practicable, he may cause to be let contracts for the construction of the same...*" The statutory premise and requirement of practicable irrigability remains under Reclamation law. Based on Reclamation's own studies: (1) over 45,000 acres under the Pacheco, Panoche and San Luis WDs' Final contracts are not practicable of irrigation due to

⁵⁵ See San Luis Act of 1960 Section 1(a) *for the principal purpose of furnishing water for the irrigation of approximately five hundred thousand acres of land in Merced, Fresno, and Kings Counties, California, hereinafter referred to as the Federal San Luis unit service area.*

<https://www.govinfo.gov/content/pkg/STATUTE74/pdf/STATUTE-74-Pg156.pdf>

⁵⁶ Continuing to provide project water to these toxic soils would require approval from Congress to increase the authorized appropriation cap under the San Luis Act. Also see Reclamation Directives and Standards PEC P12 for required continuing investigations into land classification and suitability for irrigation for the delivery of project water.

⁵⁷ The 2008 Feasibility Report sent to Congress explained that "Federal interest is established either by legislation or through an evaluation of a proposed action relative to the agency's mission" and that, to be federally implementable, an action "must be feasible as defined by the Economic and Environmental Principles and Guidelines (Principles and Guidelines). The Principles and Guidelines require Federal actions contribute to the national economic development (NED)." The 2008 Feasibility Report continued: The San Luis Act of 1960 as amended establishes the Reclamation's Federal interest in the proposed action. However, the requirement for a net positive contribution to the Nation's economy cannot be met by either of the two action alternatives. The 2008 Feasibility Report concluded the action alternative selected by the Bureau was not appropriate for implementation according to the government's own accepted standards.

drainage problems;⁵⁸ and (2) it is not a beneficial use to apply water to these lands that are not practicable of irrigation.

The Final contracts to Pacheco, Panoche and San Luis WDs would renew up to full contract quantities permanently. These contract quantities are justified by outdated, inaccurate data, and bias that renders the Water Needs Assessments (WNA)⁵⁹ insufficient in addressing shortcomings identified by the 9th Circuit Court. Further, the 9th Circuit Court ruled in their July 25, 2016 Amended Memorandum that *“Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion, and the agency did not adequately explain why it eliminated this alternative from detailed study... On remand, the district court shall direct Reclamation consider such an alternative in any future EA for an interim contract renewal.”*⁶⁰

Curtailling deliveries of CVP water to drainage-impaired lands could have significant benefits to the environment, including: reducing diversions from the Trinity River and pumping in the Delta, reduction of drainage production and selenium contamination of the environment, freeing up water to meet CVPIA fish and wildlife obligations including water for fisheries restoration and improvement as established in CVPIA Sections 3406 b(2) and b(3) and for refuge water management needs as established in 3406(d).⁶¹

Water Needs Assessments are not Included as an Exhibit to these Contracts

Reclamation is contractually required to conduct a proper water needs assessment, and without a current water needs assessments, there is no way of knowing if the Contractors’ needs equal the current total contract quantity.⁶² A current water needs assessment should be included with the San Luis WD’s contract that identifies those lands within District that are no longer using CVP water (e.g., Charleston Drainage District, Vega Solar Project), and the contract quantity should be revised accordingly. We also note that we have not seen a current WNA completed for Pacheco WD as they were operating under their original CVP contract that was due to expire in 2023. As a result, there has not been any NEPA or ESA review completed for Pacheco WD contract renewals.

Cessation of deliveries to these toxic soils is the most cost effective and proven strategy to manage drainage.

⁵⁸ As described on page 38 of FEA for Panoche and San Luis WD CVP interim renewal contracts: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=37785

⁵⁹ *Ibid.* See Appendix B. FEA for Panoche and San Luis WDs interim contract renewals, CVP Water Needs Assessments.

⁶⁰ See: <https://cdn.ca9.uscourts.gov/datastore/memoranda/2016/07/25/14-15514.pdf>

⁶¹ See: <https://www.usbr.gov/mp/cvpia/docs/public-law-102-575.pdf>

⁶² See: https://www.usbr.gov/mp/cvpia/3404c/process_info/cont_policies/3_cvp_policies/01_02-22-99.pdf and <https://pcffa.org/wp-content/uploads/2016/07/102-7-25-16-Amended-Memorandum.pdf> pg 7

Our organizations have previously submitted comments to the Regional Water Board about the success of land retirement in relation to the GBP's drainage volume load reductions.⁶³ The USBR's 2004 Broadview Water Contract Assignment Draft Environmental Assessment cites Summer's Engineering as predicting a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year from the cessation of irrigation on 9,200 acres of agricultural land in Broadview Water District as per Table 4-1 below (USBR 2004). This amounts to a per acre reduction of 0.28 AF of drainage, 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of boron.

**TABLE 4-1
DRAINAGE AND WATER QUALITY EFFECTS OF PROPOSED ACTION ON THE
SAN JOAQUIN RIVER**

	Existing Conditions	Under Proposed Action Conditions	Estimated Reduction Attributable to Proposed Action
BWD Drainage to San Joaquin River (afy)	3,700	1,100	2,600
BWD Estimated Salt Production (tons/yr)	24,300	7,300	17,000
BWD Estimated Selenium Production (lbs/yr)	2,140	640	1,500
BWD Estimated Boron Production (lbs/yr)	74,000	22,000	52,000

Source: Summers Engineering, 2003

Land retirement likely accounted for most of the reductions in selenium, and the majority of reductions in drainage volume, boron, and salt claimed by the Grasslands Bypass Project in the 2009 EIR/EIS.

The USEPA, in a letter regarding the Bay Delta Conservation Plan,⁶⁴ strongly recommended the USBR's Land Retirement Program be revived to save water and prevent further selenium contamination and impacts to endangered species (page 13):

Recommendations: *To mitigate for the project's impacts to selenium levels in the estuary as a result of the BDCP operations, consider reviving and funding the Bureau of Reclamation's Land Retirement Program¹⁷ to remove from cultivation and irrigation large areas of selenium laden lands on the West side of the San Joaquin Valley. This would save irrigation water, reduce discharges of selenium into the San Joaquin River basin, and advance attainment of selenium reduction targets¹⁸ set by EPA and the Central Valley Regional Water Quality Control Board. Evaluate the extent to which restoration of these "retired" lands to the native plant community could also contribute to the recovery of threatened and endangered plants and animals listed by FWS. Consider analyzing the cost/benefit of implementing treatment technologies vs. land retirement. Although cost/benefit analyses are not required under NEPA, such an analysis may be useful to decision makers and the public in this case."*

⁶³ See: Coalition letter to CVRWQCB on Selenium Basin Plan Amendment, April 26, 2010, p 15-16; http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr and Coalition letter to Karl Longley on Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements: <http://calsport.org/news/wp-content/uploads/Coalition-response-lettertoLongley-re-gbpland-retirement.pdf>

⁶⁴ See: <http://calsport.org/news/wp-content/uploads/bay-delta-conservation-plan-deis.pdf>

Further, Reclamation’s SLDFR Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit. Three land alternatives were evaluated in the SLDFR EIS, 306,000 acres, 194,000 acres and 100,000 acres respectively. The Final EIS found that the only environmentally and economically preferred alternative was to retire 306,000 acres (In-Valley/Drainage Impaired Area Land Retirement).⁶⁵ It’s clear from the NED findings in Table N-10 below that additional land retirement would provide increased net economic benefits.

**Table N-10
Benefit/Cost Summary
Changes Relative to the No Action Alternative (\$/year in 2050)**

Subarea	In-Valley Disposal	Out-of-Valley Disposal	In-Valley/ Groundwater Quality Land Retirement	In-Valley/ Water Needs Land Retirement	In-Valley/ Drainage-Impaired Area Land Retirement
Total NED Benefit	\$37,962,000	\$38,430,000	\$31,164,000	\$20,629,000	\$9,931,000
Total NED Cost	51,225,000	51,370,000	46,767,000	30,778,000	6,288,000
Net NED Benefit	-\$13,263,000	-\$12,940,000	-\$15,603,000	-\$10,149,000	\$3,643,000

Notes:

Values represent net NED benefits relative to No Action.

Values rounded to nearest \$1,000. Totals may not add due to rounding.

Moreover, the US Fish and Wildlife Service (FWS), in their Fish and Wildlife Coordination Act Report (FWCAR) for SLDFR, recommended that all of the northerly area within the San Luis Unit (including all drainage-impaired lands within Pacheco, Panoche and San Luis WDs) be retired as well,⁶⁶ but Reclamation did not consider that alternative. The FWS concluded on page 67 of the FWCAR, “*To avoid and minimize risks and effects to fish and wildlife resources in the San Joaquin Valley and Pacific Flyway, the Service recommends land retirement on all drainage impaired lands in the SLU. This approach would maximize the elimination of drainage at its source, and therefore avoidance of adverse fish and wildlife effects.*”

Violation of Article 16(b)(2)(ii) of the draft Contracts.

The Final contracts for Panoche and San Luis WDs include language under Article 16(b) regarding use of Project facilities for conveyance and/or diversion of non-project water owned or acquired by the contractors. Article 16(b)(2) of these contracts defines the following provisions for non-Project water: “*Delivery of such non-Project water in and through Project facilities shall only be allowed to the extent such deliveries do not:*

- (i) interfere with other Project purposes as determined by the Contracting Officer,*
- (ii) reduce the quantity or quality of water available to other Project Contractors;*
- (iii) interfere with the delivery of contractual water entitlements to any other Project Contractors; or*
- (iv) interfere with the physical maintenance of the Project facilities.”*

⁶⁵ SLDFRE Final EIS, Appendix N, Table N-10, page N-17, accessed at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2240

⁶⁶ SLDFRE Final EIS, Appendix M, USFWS FWCAR accessed at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236

Current projects that involve Pacheco, Panoche and San Luis WDs such as the Grassland Bypass Project⁶⁷ and the Delta Mendota Canal Pump-In Program,⁶⁸ allow degradation of water quality in the Delta Mendota Canal, Mud Slough (North) and the San Joaquin River. This would violate Article 16(b)(2)(ii) of these draft contracts, by reducing the quality of water available to other Project Contractors. We note this language in Article 16(b)(2) is missing from the Pacheco WD Final contract.

Effects of Drainage from the San Luis Unit Caused by Imported Irrigation Water from the CVP are Significant and Complex and Must be Addressed in a Comprehensive EIS.

Federal and State law prohibit degradation of the waters of the State and Nation. These San Luis Unit ag contract conversions would allow the continued delivery of CVP water to lands known to create pollution when applied to irrigate these soils without data or substantive environmental analysis of the effects of drainage contamination. This drainage pollution can deform fish and wildlife, impair reproduction, and reduce survival. These adverse impacts affect trust resources including migratory birds, anadromous fish, and federally and state listed species. Continued delivery of water to these soils, as contemplated by this contract renewal, will degrade the waters of the State and Nation. The USEPA, in their comments on San Luis Unit Long Term Contract Renewals (@ pg 4 of Attachment A), concluded that, “*the Drainage solutions and features relied upon to implement these solutions should not be separated from the implementation of long-term water contracts.*”⁶⁹ Yet that is exactly what Reclamation has done in with these contract conversions for San Luis Unit ag contractors.

The USEPA in their comment letter on the Draft EIS and Supplemental Information for Renewal of Long Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006, @ pg 5 and 6 of Attachment A) found that, “*Subsurface drainage flow comes in part from the Westlands Water District and other water districts upgradient of the northerly [San Luis Unit] districts with high selenium/Total Dissolved Solids (TDS) concentrations ([USBR SLDFR] Plan Formulation Report Addendum, July 2004).*” EPA recommended that the FEIS for San Luis Unit Long Term Contracts should include information on the relationships between irrigation in the San Luis Unit (including Westlands) and groundwater movement downslope, in terms of flow and water quality. EPA further noted that Reclamation should provide information on the San Luis Unit’s role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as “*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*”⁷⁰

The following impacts from Pacheco, Panoche and San Luis WDs’ contract conversions are significant and should be addressed in a full EIS:

⁶⁷ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41544

⁶⁸ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=32781

⁶⁹ Ibid.

⁷⁰ <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

1. Effects to the San Francisco Bay-Sacramento and San Joaquin River Delta Estuary.

There have been repeated violations of the Clean Water Act standards⁷¹ and Endangered Species Act requirements under the Reasonable and Prudent Alternatives. CVP operations and the exports of water pursuant to these WDs' contracts have consistently violated the Coordinated Operation Act of 1986, which requires adherence to Delta Water Quality Standards contained in D-1485 and subsequent water quality standards.

The operations of the Federal Central Valley Project and State Water Project (Water Projects) have caused devastating environmental impacts and have contributed to severe declines in California's native fish species, several of which are now listed as endangered or threatened species under the Endangered Species Act. Specifically, Water Projects operations have been major factors in the decline of the endangered Sacramento River winter-run Chinook salmon ("winter-run Chinook salmon"), threatened Central Valley spring-run Chinook salmon ("spring-run Chinook salmon"), threatened Central Valley steelhead, threatened Green Sturgeon and threatened Delta Smelt, and in the listing of these and other species under the Endangered Species Act. Further, species not currently listed, such as longfin smelt and Sacramento splittail, are also being adversely affected by Water Project operations.

2. Effects to Indian Trust Assets in the Trinity River must be assessed and disclosed.

The Yurok and Hoopa Tribe's fishing and associated water rights in the Trinity River are Indian Trust Assets. Protection of the Indian Trust Assets for the Hoopa, Yurok and Winnemem Wintu people require sufficient water to remain within the Tribe's watershed so that their fishery resources will thrive, not merely survive.⁷² As the Hoopa Tribe commented as far back as 2010, the CVP water diversions to San Luis Unit contractors including Pacheco, Panoche, and San Luis WDs, significantly impact their Indian Trust Assets:

*"...It is irrelevant to the environmental review that the Tribe's reservation is not in the vicinity of the Proposed Action Area. The water to which the Tribe has a right and whose use is essential to its fishery resources is being delivered and will continue to be delivered pursuant to the proposed federal action from the vicinity of the reservation to the contractors' area by CVP facilities that divert water from the Tribe's watershed."*⁷³

3. Effects to Listed Species: the required Endangered Species Consultation has not been completed or made available to the public.

⁷¹ Of particular note, the SWRCB, referencing WR Order 90-05, stated in WR 92-02 at page 9: *The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery.* SWRCB warned against USBR decisions to maximize water deliveries in the initial years of a drought and failing to maintain sufficient carryover storage to protect fisheries and public trust resources.

⁷² *Federal court: Tribal water rights outrank farmers' rights* Associated Press 11/25/2019 See <https://www.cherokeephoenix.org/Article/Index/113786>

⁷³ See: January 29, 2010 Letter to Rain Healer, USBR from Joseph Membrino Re: Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts. pg 3.

For any federal action that may affect a threatened or endangered species or its habitat, the agency contemplating the action, otherwise known as “the action agency “ (here, the Bureau of Reclamation), must consult with the appropriate “consulting agency” (here, the FWS and NMFS), for the purpose of ensuring that the federal action is not likely to: (1) jeopardize “the continued existence of” an endangered or threatened species; and (2) that the federal action will not result in the “destruction or adverse modification” of the designated critical habitat of the listed species. 16 U.S.C. § 1536(a)(2).⁷⁴ For these San Luis Unit contract conversions, Reclamation is required to request both FWS and NMFS to complete a formal Section 7 consultation under the ESA.

Terrestrial federally listed species that could be affected by these San Luis Unit water deliveries and contract conversions include:

Mammals: San Joaquin kit fox, Fresno kangaroo rat, Giant kangaroo rat;
Reptiles: Blunt-nosed leopard lizard;
Plants: San Joaquin woolly-threads.

Threats to these species include loss of habitat to cultivation, conversion of land to other uses, use of rodenticides, herbicides and pesticides, any of which could decimate small, isolated populations.

Supporting documentation for this USEPA Docket for Selenium in California includes 2 reports by USFWS: Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries (includes a list of species considered most at risk for selenium exposure in CA)⁷⁵ and Species at Risk from Selenium Exposure in the San Francisco Estuary.⁷⁶ The species identified as most at risk from selenium exposure from agricultural drainage contamination in the San Joaquin Valley and San Francisco Estuary include:

Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
Reptiles: Giant Garter Snake;
Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

4. Effects of San Luis Unit Drainage Caused by Imported Irrigation Water from the CVP are Significant and Complex and Must be Addressed in a Comprehensive EIS.

Federal and State law prohibit degradation of the waters of the State and Nation. The proposed contract conversions would allow the continued delivery of CVP water to lands known to create pollution when applied to irrigate these soils without data or substantive environmental analysis of

⁷⁴ See: <https://www.fws.gov/endangered/laws-policies/section-7.html>

⁷⁵ See: <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-00560144&contentType=pdf>

⁷⁶ See: <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0265&contentType=pdf>

the effects of drainage contamination from Pacheco, Panoche or San Luis WDs or Reclamation. This drainage pollution can deform fish and wildlife, impair reproduction, and reduce survival. These adverse impacts affect trust resources including migratory birds, anadromous fish, and federally and state listed species. Continued delivery of water to these soils, as contemplated by this contract renewal, will degrade the waters of the State and Nation. The USEPA, in their comments on San Luis Unit Long Term Contract Renewals (@ pg 4 of Attachment A), concluded that, “*the Drainage solutions and features relied upon to implement these solutions should not be separated from the implementation of long-term water contracts.*”⁷⁷ Yet that is exactly what Reclamation has done in with these contract conversions for Pacheco, Panoche and San Luis WDs.

The USEPA in their comment letter on the Draft EIS and Supplemental Information for Renewal of Long-Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006)⁷⁸ recommended that the FEIS for San Luis Unit Long Term Contracts should include information on the relationships between irrigation in the San Luis Unit and groundwater movement downslope, in terms of flow and water quality. EPA further noted that Reclamation should provide information on the San Luis Unit’s role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as “*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*”⁷⁹

5. Drainage Contamination in Grasslands Wetland Channels must be disclosed.

Panoche, Pacheco and San Luis WDs participate in the Grassland Bypass Project (GBP) which manages agricultural drainage from the 97,000 acres in the Grassland Drainage Area. The undersigned organizations have long-standing interests in the GBP because contaminants in agricultural drainage discharges have profound effects to the environment, including effects to downstream waterways, aquatic life, and migratory birds. The Grasslands Wetland Channels are listed as impaired for selenium on the State’s 303(d) list⁸⁰ and elevated selenium in those channels could be harming aquatic-dependent fish and wildlife resources including federally listed species such as the threatened giant garter snake.

We hereby include our previous comments on the 2009 GBP EIR/EIS⁸¹ and Basin Plan Amendment by reference.⁸² We also include our comments submitted to Reclamation December 23, 2019 on the Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis

⁷⁷ See: <https://archive.epa.gov/region9/nepa/web/pdf/sanluis-deis.pdf>

⁷⁸ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁷⁹ Ibid.

⁸⁰ See: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/01657.shtml#34338

⁸¹ See comments on the GBP EIS/R from CWIN and CSPA starting on pdf pg 3: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4417

& Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area (Draft EA-19- 029) by reference.⁸³ And we include our February 1, 2021 comments submitted to the Central Valley Regional Board on the Grassland Bypass Project Drainage Management Plan by reference.⁸⁴

6. The San Francisco Bay/Delta continues to be impacted by selenium from agricultural drainage.

The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta, including Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta, are listed as impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).⁸⁵ Sources of selenium contamination include agricultural drainage from the Central Valley and effluent discharges from oil refineries (Linares et al 2015; Presser and Luoma 2010).⁸⁶ At risk species include federally listed as threatened or endangered, green sturgeon, Chinook salmon, steelhead trout, delta smelt, Sacramento splittail and the California Ridgway's rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters.

Our organizations submitted comments to USEPA on the proposed selenium water quality and tissue criteria for the Bay Delta supporting more protective water quality criteria and hereby incorporate those comments by reference.⁸⁷ The selenium discharges being considered by the Regional Board from the GBP for the next 25 years will affect the Bay-Delta ecosystem and could affect compliance with EPA's proposed water quality criteria for San Francisco Bay and Delta. The 5.0 µg /L Basin Plan selenium objective for Mud Slough and the San Joaquin River is not protective of downstream beneficial uses, will

⁸² See: Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker. June 22, 2015. Available at:

https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015_may/

⁸³ See: Coalition comments on the Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area (Draft EA-19- 029)—A Comprehensive EIS is Required and Compliance with the Clean Water Act starting @ pdf pg 200: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

⁸⁴ See <https://mavensnotebook.com/2020/12/19/opportunity-to-comment-grassland-bypass-project-drainage-management-plan/>

<https://www.restorethedelta.org/2021/02/02/comments-letter-grasslands-bypass-project-drainage-management-plan/>

⁸⁵ See: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

⁸⁶ See: <https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/etc.2775> & See: <https://pubs.usgs.gov/pp/p1646/>

⁸⁷ Coalition comments of environmental, fishing and environmental justice organizations on EPA's Water Quality Standards for the Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta. October 28, 2016. Available at <https://www.regulations.gov/document?D=EPA-HQ-OW-20150392-0246>

result in non-compliance with proposed water quality criteria and will cause deleterious effects to fish and wildlife in the Bay-Delta. Agricultural drainage from Pacheco, Panoche and San Luis WDs and other drainage-impaired lands in the Grasslands Drainage Area contribute to this discharge and therefore must be analyzed in a full EIS for these contract conversions.

New information has been published in 2020 that identifies adverse effects from selenium to Sacramento splittail. Recent publications by the USGS and NMFS have documented elevated levels of selenium in the benthic clam food chain used by the Sacramento splittail and the federally listed green sturgeon in the San Francisco Bay Delta. In the spring of 2011, young-of-year splittail were found to have a high incidence (>80%) of spinal deformities characteristic of selenium toxicity at the site of a water diversion station in the San Joaquin Valley of the Delta (U.S. Department of the Interior, Bureau of Reclamation Tracy Fish Collection Facility) (Johnson et al 2020). This study identified various sources of selenium contamination and points to agricultural drainage as a significant source:

“These data suggest that individuals acquired Se toxicity while feeding in the freshwaters of the San Joaquin River but already started with significantly higher Se burdens from females maturing in the estuary (Figure 3, Table1 and Supporting Information).”⁸⁸



A second publication (Stewart et al 2020) compared splittail tissue concentrations with those proposed by EPA in 2016 for the Bay Delta and found that, “Despite the consistently low muscle Se concentrations across all regions and years and no exceedances, the frequency of exceedance in liver and ovary were high for Pacheco, ranging from 60 to 80% (range for both tissues and years), followed by Suisun in 2011 (33%) and the Confluence in 2010 (17%).” These findings are significant as they document harm in a fish foraging in a benthic clam food web in the Delta, which is also utilized by the federally listed green sturgeon.

⁸⁸ See: <https://dx.doi.org/10.1021/acs.est.9b06419>

Exhibit 1. Documents Adopted by Reference:

Public Interest & Comments Incorporated by Reference [All Documents can be found in the record of earlier contract renewals, earlier NEPA processes and in some cases on the BOR website.]

1. 1-29-10 “ Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts” To Rain Healer from Joseph Membrino for Hoopa Valley Tribe.
2. 1-29-10 “Comments of The Bay Institute and NRDC on Draft Environmental Assessment (EA) and Draft Findings of No Significant Impact (FONSI) for the San Luis Unit interim renewal contracts (Central Valley Project, California)” To Rain Healer from Hamilton Candee
3. 2-18-2010 “Comments Re Two Year Interim Renewal Central Valley Project Water Service Contracts: Westlands Water District [WWD] Contracts 14-06-200-8237AIR13; 14-06-200-8238A-IR13; WWD DD1-Broadview 14-06-200-8092-IR12; WWD DD1 Centinella 7-07-20-W0055-IR12-B; WWD1 Widren 14-06-200-8018-IR12-B; WWD DD2 Mercy Springs 14-06-200-3365A-IR12-C. To Karen Hall, USBR, from 11 Conservation, Fishery and Community Organizations.
4. 3-2-2010 “Final Scoping Comments for Westlands Water District [Westlands] Proposed “Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct”. The project proposes to discharge up to 100,000 acre feet of groundwater into the State Water Project California Aqueduct, a Drinking Water Supply for Approximately 20 Million People”. To Russ Freeman from 14 Conservation, Fishery and Community Organizations.
5. 5-19-10 Letter to Donald Glaser, USBR From David Ortmann, Pacific Coast Management Council
6. 7-30-2010 “San Joaquin River Central Valley Selenium Basin Plan Waiver, 303 (d) Delisting of San Joaquin River for Selenium and the California Toxics Rule” To Jared Blumenfeld, EPA from 16 Conservation, Fishery and Community Organizations.
7. 9-22-2010 USFWS “Comment Letter – San Joaquin River Selenium Control Plan Basin Plan Amendment” To: Ms. Jeanine Townsend, Clerk to the Board from Susan K. Moore.
8. 11-16-2010 “Letter to Senator Feinstein on Long Term Solution to Westlands Drainage Problem” To Commissioner Connor from Environmental Working Group.
9. 12-13-2010 Comments on the Draft Finding of No Significant Impact [FONSI] San Luis

- Water District's [SLD] and Panoche Water District's [PWD] Water Service Interim Renewal Contracts 2011-2013 FONSI-10-070. To Rain Healer, USBR, From 8 Conservation, Fishery and Community Organizations.
10. 2-28-2011 "Scoping Comments Proposed Ten Year North to South Water Transfer of CVP and Non CVP Water Using State Water Project (SWP) and Central Valley Water Project (CVP) Facilities" To Brad Hubbard, USBR et. al from 10 Conservation, Fishery and Community Organizations.
 11. 5-5-11 "Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities" To Deputy Interior Secretary Hayes from 16 Conservation, Fishery and Community Organizations.
 12. 8-11-2011 "Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project." To Michael C. S. Eacock (Chris), Donald R. Glaser, USBR and Ren Lohofener USFWS et. al from 7 Conservation, Fishery and Community Organizations.
 13. 10-17-2011 "Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District's San Joaquin River Improvement Project (SJRIP) FONSI-10-030" To Rain Healer, USBR from 8 Conservation, Fishery and Community Organizations.
 14. 11-15-2011 "Full Environmental Impact Statement Needed for San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District [FONSI-10-030]" To Donald Glaser from 13 Conservation, Fishery and Community Organizations.
 15. 11-16-2011 Notice Inviting Public Comment on BDCP MOA to Hon. Kenneth Salazar, Secretary John Laird, Secretary from 190 Conservation, Fishery and Community Organizations.
 16. 1-5-2012 "Comments on Draft EA/FONSI for Three Delta Division and Five San Luis Unit Water Service interim Renewal Contracts 2012-2014" To Rain Healer from Stephen Volker on behalf of 4 Tribal, Conservation, Fishery and Community Groups.
 17. 1-18-2012 "Comments on Draft EA/FONSI for Oro Loma Water District Partial Assignment of Central Valley Project Water to Westlands Water District FONSI-11-092" To Rain Healer, USBR from 12 Conservation, Fishery and Community Organizations.
 18. 1-20-2012 "Delta Division, San Luis Unite and Cross Valley CVP Interim renewal contracts—Comments of the Hoopa Valley Tribe on draft EA-11-049 and EA-11011 and FONSI 11-049 and FONSI 11-011" To Rain Healer, USBR from Leonard E. Masten Jr. Chairman.

19. 3-26-2012 “Comments on CVP Interim Renewal Contracts for three Delta Division and five San Luis Unit interim water service renewal contracts for: Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District (five contracts) 2012 to 2014 and Environmental Documents.” To Hon. David J. Hayes, Donald R. Glaser, Michael L. Connor, Hilary Tompkins and Michael Jackson from PCFFA et. al [13 Conservation, Fishery and Community Organizations.]
20. November 1, 2013 EWC et. al to Karen Hall Bureau of Reclamation Central Valley Project Interim Contract Renewals: Pajaro Valley Water Management Agency, Westlands Water District Distribution District No. 1, and Santa Clara Valley Water District 14-06-200-3365AIR14-B Tracy, City of (The West Side) 7-07-20-W0045-IR14-B Tracy, City of (Banta-Carbona) 14-06-200-4305A-IR14-B Westlands Water District Distribution District 1 (Widren) 14-06-200-8018-IR14-B Westlands Water District Distribution District 1 (Centinella) 7-07-20-W0055-IR14-B Westlands Water District Distribution District 1 (Broadview) 14-06-200-8092-IR14 Westlands Water District Distribution District 2 (Mercy Springs) 14-06-200-3365A-IR14-C Westlands Water District 14-06-200-495A-IR4 Tracy, City of 14-06-200-7858A-IR1
21. March 29, 2014, "Subject: Final Record of Decision and Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water. Rain Emerson Bureau of Reclamation.
22. January 9, 2014, "The EA for Westlands Water District Central Valley Project Interim Contract Renewals listed below & the Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) Number EA-13-023, *Central Valley Project Interim Renewal Contracts for Westlands Water District, Santa Clara Valley Water District, and Pajaro Valley Water Management Agency 2014 – 2016*. Rain Emerson Bureau of Reclamation."
23. January 13, 2014, "The Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim Contract Renewals" Rain Emerson. Bureau of Reclamation.
24. February 13, 2014 "Coalition Of Environmental, Environmental Justice, Tribal and Fishing Organizations' Comments In Opposition To The Grassland Drainer Proposal To Discharge Selenium And Other Pollutants To Broadview Water District Lands—Another Kesterson In The Making". EWC letter to Sally Jewell, Secretary of Interior; Rod McInnis NMFS Regional Administrator & Jared Blumenfeld, Regional IX Administrator
25. April 2, 2014, PCL et. al. Subject: "Final Record of Decision and Final Environmental Assessment [FEA] for Westlands Water District et. al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water" Rain Emerson Bureau of Reclamation

26. June 4, 2014, Institute for Fisheries Resources (IFR COALITION) Comments on Proposed CVP Cost Allocation Methodology: A recipe for continuing deficits and failure to repay taxpayers, Brooke Miller-Levy Project Manager, Bureau of Reclamation.
27. February 6, 2017, Environmental Advocates et. al. Re: Comments EA-17-021, FONSI-15023A & Renewal of Six Interim Contracts for Westlands, Santa Clara et. al. Brenda Burman Commissioner of Reclamation David Murillo Mid-Pacific Regional Director Michael Jackson, Area Manager, SCC-100 South-Central California Area Office, Paul Souza Pacific Southwest Region Regional Director USFWS.
28. January 12, 2018, PCL et. al. Re: Interim Renewal Contract for Central Valley Project Water Contracts for Westlands Water District (EA17-021& FONSI-15-023A1)--An abuse of discretion and failure to comply with federal law. Brenda Burman, Commissioner Bureau of Reclamation; Quentin Branch, Kate Connor Bureau of Reclamation, David Murillo, Regional Director Mid-Pacific Regional Office.
29. January 16, 2018, Steve Volker, "Comments of PCFFA, SFCBOA, IFR and NCRA on 16 Central Valley Project Interim Renewal Contracts for Cross Valley Canal, Delta Division and American River Division" Brenda Burman, Commissioner Bureau of Reclamation; Quentin Branch, Kate Connor Bureau of Reclamation, David Murillo, Regional Director Mid-Pacific Regional Office.
30. October 29, 2019, PCL et. al. Re: Westlands WD Conversion Contract for 1.15 MAF Exhibits under the WIIN Act § 4011. Ernest Conant, Bureau of Reclamation Regional Director Mid-Pacific Regional Office.
31. December 14, 2019, PCL et. al. Re: Interim Renewal Contract for Central Valley Project Water Contracts for Westlands Water District (Draft EA-19-043)—An abuse of discretion and failure to comply with federal law. Colin Davis, Bureau of Reclamation, South-Central California Area Office.
32. January 6, 2020, PCL et al. Re: Comments Westlands WD Conversion Contract for 1.15 MAF & Exhibits under the WIIN Act § 4011. Brenda Burman, Bureau of Reclamation Commissioner, Ernest Conant, Bureau of Reclamation Regional Director Mid-Pacific Regional Office, and Erma Leal, Repayment Specialist, Bureau of Reclamation.
33. January 7, 2020, PCL et. al. Re: Written Comments on WIIN Act Draft Repayment Contracts between Bureau of Reclamation and Westlands Water District. Ernest Conant, Bureau of Reclamation Regional Director Mid-Pacific Regional Office, and Erma Leal, Repayment Specialist, Bureau of Reclamation.
34. January 21, 2020, CBD et. al. Re: Objection to Adoption of Westlands Water District Board of Directors Distribution District #1 & #2 Resolution Nos. 101-20, 102-20, 103-20 and 104-20 Because of: (1) Insufficient Public Notice and Inadequate Project Description and (2) Failure to Comply with the California Environmental Quality Act (CEQA), the

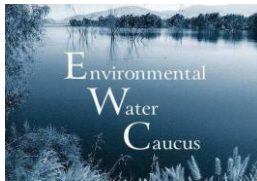
Central Valley Project Improvement Act (CVPIA), and state and federal Endangered Species Acts. Westlands Water District Board of Directors.



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180



CA Save Our Streams Council



February 16, 2021

Mr. Quentin Branch
2800 Cottage Way, CGB-440,
Sacramento, CA 95825-1898
Email: qbranch@usbr.gov

Via Email and Regular Mail

Re: Comments on the draft Central Valley Project interim contracts for six San Luis Unit Contractors.

Our organizations are providing comments to the U.S. Bureau of Reclamation (Reclamation) on six Central Valley Project (CVP) interim renewal water service contracts (contracts) for the following six San Luis Unit contractors: California Department of Fish and Wildlife (Contract No. 14-06-200-8033A-IR7), City of Avenal (Contract No. 14-06-200-4619A-IR7), City of Coalinga (Contract No. 14-06-200-4173A-IR7), City of Huron (Contract No. 14-06-200-7081A-IR7), Panoche Water District (WD) (Contract No. 14-06-200-7864A-IR7), and San Luis WD (Contract No. 14-06-200-7773A-IR7). These contracts were made available for a 60-day public comment period ending on February 16, 2021.¹ These contracts will allow Reclamation to continue providing water service to these contractors until the long-term WIIN Act repayment contracts can be executed. The existing interim renewal water service contracts will expire on February 28, 2021.

¹ See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=73314>

The six contracts that are the subject of this comment letter would provide deliveries of up to 235,590 acre-feet of water per year. As described under Article 3(a) of the 2007 draft interim contracts, water to be furnished to these contractors is: 10 AFY of M&I water for the California Department of Fish and Wildlife Mendota Wildlife Area, 3,500 AFY M&I water for the city of Avenal, 10,000 AFY of M&I water for the city of Coalinga, 3,000 AFY of M&I water for the city of Huron, 94,000 AFY of Ag/M&I water for Panoche WD, and 125,080 AFY of Ag/M&I water for San Luis WD.

Our organizations have provided comments on the NEPA completed on previous interim renewal contracts for Panoche and San Luis WDs, including comments submitted on January 11, 2021, December 13, 2010, and comments filed with Reclamation on behalf of PCFFA et. al. on February 6, 2019, by Steve Volker. We also refer Reclamation to our October 6, 2020, comments on the draft WIIN Act Repayment Contracts for Panoche, Pacheco, and San Luis Water Districts. We incorporate these comments by reference.

A Complete copy of the Final 2007 Interim Contract and Exhibits has not been provided.

The draft contracts currently out for public review are the 7th interim renewal contract for these San Luis Unit CVP contractors. These contracts amend the original 2007 interim contract by changing the effective dates to March 1, 2021 through February 28, 2023. Copies of the draft 2007 interim renewal contracts for these contractors are available on Reclamation's website.² However, Reclamation has failed to provide the Final versions of these interim contracts that would include any changes made to the draft. Further, the relevant Exhibits referenced in the 2007 draft contracts are not provided, including the following:

- 1. Exhibit A – Maps of Contractors' Service Areas**—A copy of this exhibit is not provided with the 2007 draft contracts or the current contract amendment. A copy of this Exhibit was also not provided in the 2020 Draft Environmental Assessments for Panoche and San Luis WDs interim contracts³ nor the San Luis Unit cities.⁴ Copies of these Exhibit A maps were included with the draft WIIN Act repayment contracts.⁵

In our comments on the draft WIIN Act Repayment contracts for Panoche, Pacheco, and San Luis WDs, we noted that the Exhibit A maps are not consistent with Congressional authorization and the map contained in the San Luis Unit Feasibility Study.⁶ The required updated irrigation

² The first draft interim CVP contracts for these contractors are found here: https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2007_int_cts/index.html

³ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=47665

⁴ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=47645

⁵ See: <https://www.usbr.gov/mp/wiin-act/negotiated-conversion-contracts.html>

⁶ In 1956, the Bureau of Reclamation delivered to the United States Congress, "A Report on Feasibility of Water Supply Development" for the San Luis Unit (the 1956 Feasibility Report), which recommended constructing a group of water management facilities, called the San Luis Unit, as an addition to the Central Valley Project, in order to bring irrigation waters to an area of approximately 496,000 acres in the San Joaquin Valley. In 1960, Congress passed the San Luis Act, Pub. L. No. 86-488, 74 Stat. 156 (1960) authorizing water deliveries

suitability land classification maps for Panoche and San Luis WDs and the systematic evaluation of lands with respect to suitability for agricultural production under irrigation was not provided in the WIIN Act contracts nor these interim contracts. Further, we noted that a non-irrigation covenant for 178.3 acres within San Luis WD was recorded with the County of Merced for the Vega Solar Project in 2011,⁷ yet these acres are still included within the CVP contract service area boundary for San Luis WD (Exhibit A map to the San Luis WD contract).

2. **Exhibit B - Rates and Charges**—A copy of this exhibit is not provided with the 2007 draft contracts or the current contract amendment. We note that two DOI Inspector General Reports have indicated the amounts being charged are insufficient to repay the capital costs.⁸ Reclamation law and policy require a contract to ensure that sufficient rates are charged to repay federal taxpayers. The undersigned have provided comment on how the proposed cost allocation will impact environmental protections and take additional money from the federal treasury without adequate repayment, as required.⁹ We adopt those comments by reference.
3. **Water Needs Assessments are not Included as an Exhibit**-- Central Valley Project Water Needs Assessments. No such exhibit including a water needs assessment was provided with the 2007 draft interim contracts or the contract amendments. Reclamation is contractually required to conduct a proper water needs assessment, and without a current water needs assessments, there is no way of knowing if the Contractors' needs equal the current total contract quantity.¹⁰ A current water needs assessment should be included with the San Luis WD's contract that identifies those lands within District that are no longer using CVP water (e.g., Charleston Drainage District, Vega Solar Project), and the contract quantity should be revised accordingly.

Without the previous Final interim contracts including the necessary exhibits, these new interim contracts are incomplete and should be withdrawn until the Final interim contracts with the associated exhibits can be provided for public review.

Article 10 of the draft contract should be removed.

to 500,000 acres for the entire unit consistent with the Feasibility Report, see § 1(a). Also see LAND Exhibit 299:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/land.htm

⁷ See: http://web2.co.merced.ca.us/pdfs/commissionarchive/2013/11-20/final_eir_vega_solar.pdf

⁸ See: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/land.htm & 2004 DOIG *Central Valley Contract Renewal Process August 2004* [OIG Report No W-IN-BOR-0016-2004]

⁹ <http://calsport.org/news/wp-content/uploads/Conservation-Fishing-and-Tribe-Cmts-RE-CVP-Cost-AllocationStudy-Burman-1-2-2020-.pdf>

¹⁰ See: https://www.usbr.gov/mp/cvpia/3404c/process_info/cont_policies/3_cvp_policies/01_02-22-99.pdf and <https://pcffa.org/wp-content/uploads/2016/07/102-7-25-16-Amended-Memorandum.pdf> pg 7

The office of the DOI Inspector General (IG) released a report in 2013 titled, *Central Valley Project, California: Repayment Status and Payoff*.¹¹ The IG report @ pg 5 notes that provisions in Article 10 of the long-term and interim CVP contracts limit and adversely affect repayment of CVP capital costs and O&M deficits. The report further notes that, “USBR officials believe that, absent the contract language in Article 10, the CVP ratesetting methodology would be sufficient to recover CVP construction costs because overpayments in high water years would offset underpayments in low water years. These officials acknowledged that the refund language of Article 10 defeats the design of the CVP ratesetting methodology and adversely impacts repayment of CVP construction costs.” The IG recommended @ pg 10 that Reclamation, “Renegotiate the terms of irrigation water service contracts to eliminate the refund language of Article 10 at the earliest opportunity.” Yet the 2007 draft interim contracts, and the 2021 WIIN Act repayment contracts still include the refund language in Article 10. We provide the Article 10 language from Panoche WD’s 2007 draft interim contract, and 2021 WIIN Act contract below. Reclamation has failed to eliminate this refund language in Article 10 from the interim contracts, even though these interim contract renewals and contract amendments provide the opportunity to do so. We recommend that Reclamation revise the interim contracts for these San Luis Unit contractors by removing the repayment language in Article 10 of these contracts. Panoche WD’s 2007 draft interim contract Article 10.¹²

583 APPLICATION OF PAYMENTS AND ADJUSTMENTS
584 10 (a) The amount of any overpayment by the Contractor of the Contractor’s O&M,
585 capital, and deficit (if any) obligations for the Year shall be applied first to any current liabilities of
586 the Contractor arising out of this Contract then due and payable. Overpayments of more than \$1,000
587 shall be refunded at the Contractor’s request. In lieu of a refund, any amount of such overpayment, at
588 the option of the Contractor, may be credited against amounts to become due to the United States by
589 the Contractor. With respect to overpayment, such refund or adjustment shall constitute the sole
590 remedy of the Contractor or anyone having or claiming to have the right to the use of any of the
591 Project Water supply provided for herein. All credits and refunds of overpayments shall be made
592 within 30 days of the Contracting Officer obtaining direction as to how to credit or refund such
593 overpayment in response to the notice to the Contractor that it has finalized the accounts for the Year
594 in which the overpayment was made.

27

595 (b) All advances for miscellaneous costs incurred for work requested by the
596 Contractor pursuant to Article 25 of this Contract shall be adjusted to reflect the actual costs when
597 the work has been completed. If the advances exceed the actual costs incurred, the difference will be
598 refunded to the Contractor. If the actual costs exceed the Contractor’s advances, the Contractor will
599 be billed for the additional costs pursuant to Article 25 of this Contract.

Panoche WD’s WIIN Act Repayment contract 2021¹³

¹¹ See: <https://www.doioig.gov/sites/doioig.gov/files/WR-EV-BOR-0003-2012Public.pdf>

¹² See: https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2007_int_cts/2007_interim_panoche.pdf

¹³ See: <https://www.usbr.gov/mp/wiin-act/docs/20210114-contract-no14-06-200-7864a-ir1-p-between-the-united-states-and-panoche-water-district.pdf>

732 APPLICATION OF PAYMENTS AND ADJUSTMENTS

733 10. (a) The amount of any overpayment by the Contractor of the Contractor's
734 O&M, capital, and deficit (if any) obligations for the Year shall be applied first to any current
735 liabilities of the Contractor arising out of this Contract then due and payable. Overpayments of
736 more than \$1,000 shall be refunded at the Contractor's request. In lieu of a refund, any amount
737 of such overpayment, at the option of the Contractor, may be credited against amounts to become
738 due to the United States by the Contractor. With respect to overpayment, such refund or
739 adjustment shall constitute the sole remedy of the Contractor or anyone having or claiming to
740 have the right to the use of any of the Project Water supply provided for in this Contract. All
741 credits and refunds of overpayments shall be made within 30 days of the Contracting Officer
742 obtaining direction as to how to credit or refund such overpayment in response to the notice to
743 the Contractor that it has finalized the accounts for the Year in which the overpayment was
744 made.

745 (b) All advances for miscellaneous costs incurred for work requested by the
746 Contractor pursuant to Article 24 of this Contract shall be adjusted to reflect the actual costs
747 when the work has been completed. If the advances exceed the actual costs incurred, the
748 difference will be refunded to the Contractor. If the actual costs exceed the Contractor's
749 advances, the Contractor will be billed for the additional costs pursuant to Article 24 of this
750 Contract.

Repayment of Costs Associated with State Water Quality Compliance and D-1485 Salinity Costs as Required by Coordinated Operations Act of 1986.¹⁴

The draft 2007 interim contracts for Panoche and San Luis WDs do include under Article 16 the obligation of Panoche, and San Luis WDs and the United States to deliver Project water in accordance with water quality standards specified in PL 99-546 as follows: “*water quality standards specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or other existing Federal laws.*” However, these 2007 draft interim contracts do not provide repayment of D-1485 salinity costs and costs associated with compliance with State water quality standards as required under Section 102 of Public Law 99-546—OCT. 27, 1986 100 STAT. 3051. The interim contracts for Panoche and San Luis WDs should be amended to include reimbursements and repayment of these costs.

Obligation to Provide Drainage to Panoche and San Luis WDs, Article 16 (b).

Article 16 (b) of the 2007 draft interim contracts for Panoche and San Luis WDs states, “*The Contracting Officer shall notify the Contractor in writing when drainage service becomes available. Thereafter, the Contracting Officer shall provide drainage service to the Contractor at rates established pursuant to the then-existing ratesetting policy for Irrigation Water...*” Federal and State law prohibit degradation of the waters of the State and Nation. The proposed amendments of the 2007 CVP interim contracts to Panoche

¹⁴ See Section 101 and Section 102: <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg3050.pdf>

and San Luis WDs would allow the continued delivery of CVP water to lands known to create pollution when applied to irrigate these soils without data or substantive environmental analysis of the effects of drainage contamination from Panoche or San Luis WDs or Reclamation. This water pollution can deform fish and wildlife, impair reproduction, and reduce survival. These adverse impacts affect trust resources including migratory birds, anadromous fish, and federally and state listed species. Continued delivery of water to these soils, as contemplated by this contract renewal, will degrade the waters of the State and Nation. The USEPA in their comment letter on the Draft EIS and Supplemental Information for Renewal of Long-Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006) recommended that the FEIS for San Luis Unit Long Term Contracts should include information on the relationships between irrigation in the San Luis Unit and groundwater movement downslope, in terms of flow and water quality. EPA further noted that Reclamation should provide information on the San Luis Unit's role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as "*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*"¹⁵ Yet these interim renewal contracts maintain the status quo and do nothing to reduce drainage production and selenium mobilization.

No Feasible Treatment Methods Identified or Mitigation Required to Reduce Water Pollution from Irrigating Toxic Soils.

The 2006 EIS for the San Luis Drainage Feature Re-evaluation¹⁶ (SLDFR) and the 2009 EIR/EIS for the Grassland Bypass Project¹⁷ (GBP) included treatment as a significant component of the plan to reduce selenium in discharges to the San Luis Drain. Yet, the GBP treatment plant has yet to become operational.¹⁸ A Drainage Management Plan dated December 2020, developed by the GBP drainers, and made available by the Central Valley Regional Water Board for public comment notes @ page 19, "*...no feasible treatment method has yet been developed.*" More than thirty million dollars has been invested in a demonstration treatment plant that still is not functioning and about which a federal audit found questionable expenditures.¹⁹

Long Term Viability of Drainage Management Actions Are Needed Before CVP Water Is Delivered to Toxic Soils.

The SLDFR FEIS included a suite of management actions, including drainage reuse (to reduce the volume of drainage that would need to be treated), treatment, and disposal. Pilot studies conducted for SLDFR failed to meet specified objectives. Thus, there has not been any effective implementation of any of these approaches at full-scale.

¹⁵ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

¹⁶ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=61

¹⁷ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=3513

¹⁸ Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.

¹⁹ Available at <https://www.doioig.gov/reports/bureau-reclamation%E2%80%99s-cooperative-agreementno-r16ac00087panoche-drainage-district>

Reuse of polluted drainage in reuse areas does not eliminate the loading of wastes. It simply stockpiles contaminants on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into saline and toxic wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to permanent fallowing of more and more land, leaving hazardous conditions.

A Drainage Plan is required by law.

Federal courts and reclamation law require a drainage plan for the San Luis Unit. There is no plan. The drainage management laid out in the schematics of the preferred alternatives in the SLDFR FEIS and ROD have failed during pilot studies, and treatment has not proven viable or cost effective.²⁰ Continued interim contract renewals that authorize full contract quantities without acknowledging drainage problems and technological and economic limitations is negligent and in violation of the law. This ‘head in the sand’ approach continues the delivery of CVP water to drainage-impaired lands in the San Luis Unit and creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River and the Bay-Delta estuary, especially in wetter years.

Curtail CVP Water Contract Deliveries to Toxic Lands Within These Districts.

There is nothing presented in the record that precludes the Secretary of Interior from curtailing contract deliveries to drainage-impaired lands in Panoche and San Luis WDs. There is no legal obligation to operate a project once it was built if experience reveals to the Secretary that the project is not “practicable” under reclamation law without drainage (which of course both Reclamation and Congress knew to be the case beforehand) and is harmful to public and environmental health. At the time the San Luis Unit was authorized in 1960, vast portions of the San Luis Unit were understood by Congress, the Bureau of Reclamation and the State of California not to be “practicable” for irrigation without drainage. *See* Reclamation Act of 1902 § 4 (43 USC 419) “*Upon the determination by the Secretary of the Interior that any irrigation project is practicable, he may cause to be let contracts for the construction of the same...*” The statutory premise and requirement of practicable irrigability remains under Reclamation law. Based on Reclamation's own studies: (1) Over 42,100 acres under the proposed Panoche and San Luis WDs interim contract are not practicable of irrigation due to drainage problems;²¹ and (2) it is not a beneficial use to apply water to these lands that are not practicable of irrigation.

The proposed amendments to Panoche and San Luis WDs interim contracts would renew full contract quantities for an additional 2 years. These contract quantities are justified by outdated, inaccurate data, and bias that renders the Water Needs Assessments (WNA)²² insufficient in addressing

²⁰ These important scientific reports were removed from USBR's website but can be found here: http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppE-Se-BiotreatmentPerformance_2008.pdf Also see http://calsport.org/news/wp-content/uploads/USBR_SLDFR-FeasibilityRpt_AppD-RO-Treatmt-Performance_2008.pdf

²¹ As described on page 38 of FEA for Panoche and San Luis WD CVP interim renewal contracts: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=37785

²² *Ibid.* See Appendix B. FEA for Panoche and San Luis WDs interim contract renewals, CVP Water Needs Assessments.

shortcomings identified by the 9th Circuit Court. Further, the 9th Circuit Court ruled in their July 25, 2016 Amended Memorandum that “*Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion, and the agency did not adequately explain why it eliminated this alternative from detailed study... On remand, the district court shall direct Reclamation consider such an alternative in any future EA for an interim contract renewal.*”²³

Curtailing deliveries of CVP water to these toxic lands could have significant benefits to the environment, including: reducing diversions from the Trinity River and pumping from the Delta Estuary, reduction of drainage production and selenium contamination of the environment, freeing up water to meet CVPIA fish and wildlife obligations including water for fisheries restoration and improvement as established in CVPIA Sections 3406 b(2) and b(3) and for refuge water management needs as established in 3406(d).²⁴

Violation of Article 17(b)(2)(ii) of the draft Contracts

All of these draft contracts include language under Article 17(b) regarding use of Project facilities for conveyance and/or diversion of non-project water owned or acquired by the contractors. Article 17(b)(2) of these contracts defines the following provisions for non-Project water:

“*Delivery of such non-Project water in and through Project facilities shall only be allowed to the extent such deliveries do not:*

- (i) interfere with other Project purposes as determined by the Contracting Officer,*
- (ii) reduce the quantity or quality of water available to other Project Contractors;*
- (iii) interfere with the delivery of contractual water entitlements to any other Project Contractors; or*
- (iv) interfere with the physical maintenance of the Project facilities.”*

Current projects that involve Panoche and San Luis WDs such as the Grassland Bypass Project²⁵ and the Delta Mendota Canal Pump-In Program,²⁶ allow degradation of water quality in the Delta Mendota Canal, Mud Slough (North) and the San Joaquin River. This would violate Article 16(b)(2)(ii) of these draft contracts, by reducing the quality of water available to other Project Contractors.

The Draft Interim Contracts Fail to Comply with CVPIA § 3404(c)(1) & (c) (2).

The 2007 draft interim contracts do not contain within the *contract terms* explicit language that is enforceable between the parties as required by CVPIA Section 3404(c)(1) and (c) (2).²⁷ This section requires that provisions of law be written as contract terms enforceable between the parties: “*Contracts which expire prior to the completion of the environmental impact statement required by section 3409 may be renewed for an interim period not to exceed three years in length, and for successive interim periods of not more than two years in length, until the environmental impact statement required by section 3409 has*

²³ See: <https://cdn.ca9.uscourts.gov/datastore/memoranda/2016/07/25/14-15514.pdf>

²⁴ See: <https://www.usbr.gov/mp/cvpia/docs/public-law-102-575.pdf>

²⁵ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41544

²⁶ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=32781

²⁷ See: https://www.usbr.gov/mp/cvpia/3404c/3404c_law.html#c

been finally completed, at which time such interim renewal contracts shall be eligible for long-term renewal as provided above. Such interim renewal contracts shall be modified to comply with existing law, including provisions of this title. With respect to all contracts renewed by the Secretary since January 1, 1988, the Secretary shall incorporate in said contracts a provision requiring payment of the charge mandated in subsection 3406(c) and subsection 3407(b) of this title and all other modifications needed to comply with existing law, including provisions of this title. This title shall be deemed "applicable law" as that term is used in Article 14(c) of contracts renewed by the Secretary since January 1, 1988."

Yet the draft 2007 interim contracts do not provide repayment for required Trinity River Division (TRD) facilities or CVPIA restoration activities required pursuant to Section 3406. Enforceable contract provisions of law that by law must be written as contract terms enforceable between the parties include for example:

- *Section 3406(b)(1), which requires and directs anadromous fishery doubling goals and mandates reimbursement for these costs from the water contractors.*
- *Section 3406(b)(2), which authorizes and directs the dedication of up to 800 thousand AF (TAF) of CVP water for environmental purposes.*
- *Section 3406(b)(23), which requires mitigation and restoration of the Trinity River and establishes protections for Indian fishing and water rights.*
- *Section 3406(d), which requires firm CVP water supplies amounting to 480 TAF to be delivered to federal, state and some private wildlife refuges the costs of which are required to be reimbursed by the contractors.*

Conclusions and Recommendations

Reclamation should make available the 2007 Final interim contracts with the associated exhibits for an additional public review period. A full environmental impact statement should be conducted and consultation with Fish and Wildlife as required under the Federal Endangered Species Act. In addition, these 6 interim contracts should be amended to 1) remove the refund language in Article 10 of these contracts, and 2) incorporate provisions requiring water rates and repayment for CVPIA fish and wildlife required mitigation and restoration provisions including sections 3406(b) (1) & (2), 3406(b)(23) and 3406(d).

Further, we conclude that Reclamation should amend the CVP interim contracts for Panoche and San Luis WDs to 1) cease deliveries of water to drainage-impaired lands and 2) provide repayment of D-1485 salinity costs and costs associated with compliance with State water quality standards as required under Section 102 of Public Law 99-546—OCT. 27, 1986 100 STAT. 3051.

Thank you for considering these comments. Please make sure the undersigned are included in any future actions with regard to CVP contract renewals and/or conversion of CVP contracts pursuant to Section 4011 of the WIIN Act.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://www.planningandconservationleague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://www.pacificcoastfishermen.org)
mike@ifrfish.org



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Brandon Dawson
Policy Advocate
Sierra Club California
brandon.dawson@sierraclub.org



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



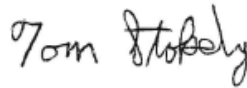
Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council,
Fly Fishers International
mrockwell1945@gmail.com



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



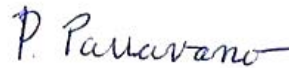
Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.com)
connere@gmail.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



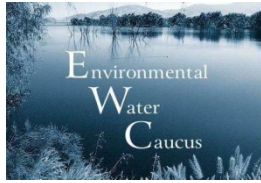
Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Policy Advocate
Crab Boat Owners Association
papaduck8@gmail.com



CA Save Our Streams Council



October 6, 2020

Brenda Burman
Commissioner
U.S. Bureau of Reclamation
1849 C Street NW
Washington DC 20240-0001

Ernest Conant
Regional Director
California-Great Basin Reg.Bldg
2800 Cottage Way
Sacramento CA 95825-1898

Erma Leal
Repayment Specialist - SCCAO-445
Dept. of Interior | Bureau of Reclamation
Interior Region 10 - California - Great Basin
South-Central California Area Office
1243 N Street, Fresno CA 93721
eal@usbr.gov

Via Email and Regular Mail

Re: Comments on Panoche, Pacheco, and SLWD WDs Conversion Contracts under the WIIN Act § 4011.

Dear Commissioner Burman, Mr. Conant and Ms Leal,

On August 7, 2020, the U.S. Bureau of Reclamation (Reclamation) made available three draft repayment contracts (contracts) for Pacheco, Panoche and San Luis Water Districts (WDs) for a 60-day public

comment period.¹ As denoted on Reclamation’s website, written comments on these contracts must be received by close of business on October 6, 2020.²

The three contracts that are the subject of this comment letter lock-in deliveries of about 229,160 acre-feet of water per year. Our organizations provide these additional comments on the draft conversion contracts for Pacheco WD (Contract No. 6-07-20-W0469-P), Panoche WD (Contract No. 14-06-200-7864A-IR1-P), and San Luis WD (Contract No. 14-06-200-7773A-IR1-P). As described under Article 3(a) of these contracts, water to be furnished to these contractors is 10,080 acre-feet/year (AFY) for Pacheco, 94,000 AFY for Panoche WD, and 125,080 AFY for San Luis WD. These comments supplement our organization’s comments submitted on October 5, 2020.

The Draft Contract Fails to Comply with CVPIA § 3404(c)(2).

CVPIA Section 3404(c)(2) states: “*Upon renewal of any long-term repayment or water service contract providing for the delivery of water from the Central Valley Project, the Secretary shall incorporate all requirements imposed by existing law, including provisions of this title, within such renewed contracts. The Secretary shall also administer all existing, new, and renewed contracts in conformance with the requirements and goals of this title.*” The draft contract does not contain within the *contract terms* explicit language that is enforceable between the parties as required by CVPIA Section 3404(c)(2). This section requires that provisions of law be written as contract terms enforceable between the parties. Exhibit C of the draft contract (Unpaid Construction Cost), provides no repayment for required Trinity River Division (TRD) facilities or CVPIA restoration activities. Enforceable contract provisions of law that by law must be written as contract terms enforceable between the parties include for example:

- *Section 3406(b)(2), which authorizes and directs the dedication of up to 800 thousand AF (TAF) of CVP water for environmental purposes.*
- *Section 3406(b)(23), which addresses restoration efforts for the Trinity River Division (TRD).*
- *Section 3406(d), which requires firm CVP water supplies amounting to 480 TAF to be delivered to federal, state and some private wildlife refuges.*

Failure to Comply with the Coordinated Operations Act of 1986.³

These draft contracts omit the obligation of Pacheco, Panoche, and San Luis WDs and the United States to deliver Project water in accordance with water quality standards specified in PL 99-546. This language was omitted from these draft contracts: "water quality standards specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or other existing Federal laws." Instead the quality of water and operations are left to the Contracting Officer instead of specific reference to required water quality protection levels. Congress directed that the United States and its Contractors operate the CVP in conformity with State water quality standards for the

¹ See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=71983>

² See: <https://www.usbr.gov/mp/wiin-act/negotiated-conversion-contracts.html>

³ See Section 101 and Section 102: <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg3050.pdf>

San Francisco Bay/Sacramento-San Joaquin Delta and Estuary and to operate the CVP so that water supplied at the intake of the Contra Costa Canal is of a quality equal to the water quality standards contained in the Water Right Decision 1485 of the State of California Water Resources Control Board, dated August 16, 1978, except under limited conditions. We know of no law that authorizes Reclamation to change this Congressional direction in a contract. This substantially changes the terms of the contract and obligations to meet state water quality standards. Changing the water quality protection standards to some undefined term as "what is feasible" also has significant environmental impact and has not been analyzed nor the endangered species impacts considered.

Also required under Section 102 of Public Law 99-546—OCT. 27, 1986 100 STAT. 3051, the contract needs to provide for repayment of D-1485 salinity costs and complying with State water quality standards. The modified Final contract does not include these reimbursements and repayment of these costs.

A Complete Draft of the Contract Exhibits has not been provided.

Draft contract exhibits provided online are incomplete and fully informed public comment has thus, been precluded. Problems with the exhibits⁴ include:

- 1. Exhibit A – Maps of Contractors’ Service Areas**— The required updated irrigation suitability land classification maps and the systematic evaluation of lands with respect to suitability for agricultural production under irrigation are not provided.

Further, we note that a non-irrigation covenant for 178.3 acres within San Luis WD was recorded with the County of Merced for the Vega Solar Project in 2011,⁵ yet these acres are still included within the CVP contract service area boundary for San Luis WD (Exhibit A map to the San Luis WD contract).

- 2. Exhibit B – Rates and Charges** [*-- This Exhibit template is unchanged from current Contract and is updated annually. Rate Schedules may be found at:* <https://www.usbr.gov/mp/cvpwaterrates/ratebooks/index.html>] Two DOI Inspector General Reports have indicated the amounts being charged are insufficient to repay the capital costs.⁶ Reclamation law and policy require a contract to ensure that sufficient rates are charged to repay federal taxpayers. The undersigned have provided comment on how the proposed cost allocation will impact environmental protections and take additional money from the federal treasury without adequate repayment, as required.⁷ We adopt those comments by reference.

⁴ See: <https://www.usbr.gov/mp/wiin-act/docs/san-luis-water-district-exhibits-508-compliant.pdf>
<https://www.usbr.gov/mp/wiin-act/docs/panoche-exhibits-508-compliant.pdf>
<https://www.usbr.gov/mp/wiin-act/docs/pacheco-exhibits-508-compliant.pdf>

⁵ See: http://web2.co.merced.ca.us/pdfs/commissionarchive/2013/11-20/final_eir_vega_solar.pdf

⁶ See: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/land.html & 2004 DOIG *Central Valley Contract Renewal Process August 2004* [OIG Report No W-IN-BOR-0016-2004]

⁷ <http://calsport.org/news/wp-content/uploads/Conservation-Fishing-and-Tribe-Cmts-RE-CVP-Cost-AllocationStudy-Burman-1-2-2020-.pdf>

3. **Exhibit C – Repayment Obligation** (Exhibit D in previous contracts) —This is just a placeholder and this Exhibit is effectively blank. Moreover, this is apparently going to change further: "*This Exhibit template was developed during the WIIN Act Negotiations. Relevant data will be incorporated upon contract execution.*" The public has been excluded from the negotiations so there is no ability to comment on this changing aspect of the contract. Further ratepayers and taxpayers are left in the dark regarding final payment obligations or the ability to pay off these Contractors' debts.

4. **Water Needs Assessments are not Included** -- We note that previous interim contracts for Panoche and San Luis WDs have included an **Exhibit C - Central Valley Project Water Needs Assessments**. No such exhibit including water needs assessments for each WD was provided with these draft contracts. Reclamation is contractually required to conduct a proper water needs assessment, and without current water needs assessments, there is no way of knowing if the Contractors' needs equal the current total contract quantity.⁸ Further, no current water needs assessment is available for Pacheco WD since their contract does not expire until 2024.

A current water needs assessment should be included with the San Luis WD's contract that identifies those lands within District that are no longer using CVP water (e.g., Charleston Drainage District, Vega Solar Project), and the contract quantity should be revised accordingly.

Violation of Article 16(b)(2)(ii) of the draft Contracts

All of these draft contracts include language under Article 16(b) regarding use of Project facilities for conveyance and/or diversion of non-project water owned or acquired by the contractors. Article 16(b)(2) of these contracts defines the following provisions for non-Project water:

"Delivery of such non-Project water in and through Project facilities shall only be allowed to the extent such deliveries do not:

- (i) interfere with other Project purposes as determined by the Contracting Officer,*
- (ii) reduce the quantity or quality of water available to other Project Contractors;*
- (iii) interfere with the delivery of contractual water entitlements to any other Project Contractors; or*
- (iv) interfere with the physical maintenance of the Project facilities."*

Current projects such as the Grassland Bypass Project⁹ and the Delta Mendota Canal Pump-In Program,¹⁰ and involving these WDs, allow degradation of water quality in the Delta Mendota Canal, Mud Slough (North) and the San Joaquin River. This would violate Article 16(b)(2)(ii) of these draft contracts, by reducing the quality of water available to other Project Contractors.

⁸ See: https://www.usbr.gov/mp/cvpia/3404c/process_info/cont_policies/3_cvp_policies/01_02-22-99.pdf and <https://pcffa.org/wp-content/uploads/2016/07/102-7-25-16-Amended-Memorandum.pdf> pg 7

⁹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41544

¹⁰ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=32781

Conclusions and Recommendations

These draft contracts are riddled with gaps and undisclosed provisions, as detailed in the following attached comments. Sections of the proposed contract are missing and others remain undisclosed. The true amount of water to be provided is not disclosed to water users in the Delta, North of the Delta, South of the Delta, the San Joaquin Valley and Southern California. True costs and subsidies are misrepresented or just omitted. Key examples include:

- Congressionally mandated limits on the water service area are left to the discretion of the functionary contracting officer and the WDs to modify. We know of no Reclamation regulation or law that grants such authority to a contracting officer to deliver water outside of the Congressionally designated service area.
- The draft contract fails to comply with (1) the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq., (2) the Endangered Species Act (ESA), 16 U.S.C. §1531 et seq., (3) Federal Reclamation law, (4) CEQA Public Resources Code 21000-21189 and CESA Cal. Fish & Game Code §§2050-2106.5, and (5) CVPIA in general and specifically Section 3404(c)(2) which requires that provisions of law be written as contract terms enforceable between the parties. These enforceable provisions of law required by the CVPIA are absent from the contract.
- The Contract evades water quality requirements specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) Federal Coordination Act 3or other existing Federal laws, by omitting these water quality obligations and the obligation to meet repayment by 2030.
- New cost allocation formulas as of January 2020 and other Reclamation actions arbitrarily reduce the amount these WDs owe for repayment of its contracts. These contracts further deplete the US Treasury by not recovering all capital costs owed. And instead, shift these costs to the taxpayers violating provisions of the CVPIA that require CVP mitigation payments be made by these contractors.
- Cumulative impacts are ignored. Reclamation is in the process of converting virtually all CVP water service contracts, about 77 of them, into permanent water repayment 9(d) contracts similar to these draft contracts.¹¹ Pursuant to NEPA, “cumulative impact” “is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. . . .” (NEPA Regulations § 1508.7.) The cumulative environmental impacts of converting all of Reclamation’s contracts into permanent contracts will be enormous and adverse, but have not been considered.

We urge you to deny these contract conversions and that the process be restarted with proper public transparency and following established legal requirements including a full EIS review as required by the CVPIA and NEPA. We request public contract negotiations be held and that adequate notice is provided, especially in the counties and areas from which the proposed irrigation water is taken. Furthermore, these negotiations should not be held until a full environmental impact statement is completed, endangered species consultation is provided, and an accurate irrigable land map is provided along with a complete draft and exhibits (including a water needs assessment) of the proposed contract.

¹¹ On December 20, 2019, Reclamation gave public notice on its web site that 77 contractors had requested contract conversions. The same notice said that 14 of the contract conversions had already been negotiated and the public comment period on those contract conversions would close on February 19, 2020. The subject contracts were spread among the Central, Northern, and South-Central California Area Offices.

Our detailed comments on these contracts follow. We also refer Reclamation to our October 5, 2020, August 31, 2020, August 20, 2020, August 7, 2020, April 27, 2020, April 22, 2020, February 15, 2020, January 7, 2020, and January 6, 2020 comments on CVP contract conversions.

Thank you for considering these comments. Please make sure the undersigned are included in any future actions with regard to CVP contract renewals and/or conversion of CVP contracts pursuant to Section 4011 of the WIIN Act. Please find our detailed comments attached.

Sincerely,



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League
jminton@pcl.org



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Caleen Sisk
Chief and Spiritual Leader of the
Winnemem Wintu Tribe
caleenwintu@gmail.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Barbara Vlamis
Executive Director
AquAlliance
barbarav@aqualliance.net



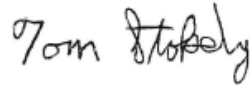
Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Mike Conroy
Executive Director
Pacific Coast Federation of Fishermen's Asso.
mike@ifrfish.org



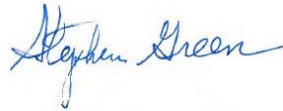
Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restoredelta.org

DETAILED COMMENTS ON PACHECO, PANOCHÉ AND SAN LUIS WATER DISTRICTS' MODIFIED PERMANENT CONTRACTS

I. The Secretary is Required to Contract for the Delivery of Project Irrigation Water Only to Lands with Characteristics that Allow Delivery--this draft contract Violates that Mandate.

As stated above water is being provided to the service areas of these three districts even though no updated irrigable lands map have been provided. Public Law 99-546, 100 Stat. 3050. (Coordinated Operations Act) Sec. 305. § 4(c) of the Act requires, among other things, that the Secretary must show that lands receiving project water are capable of "*successful irrigability of those lands and their susceptibility to sustained production of agricultural crops by means of irrigation has been demonstrated in practice. Such proposal shall also include an investigation of soil characteristics which might result in toxic or hazardous irrigation return flows.*" No such documentation and evidence has been provided in support of these proposed permanent water contracts to irrigate the lands referenced in Exhibit A of each proposed contract. In fact, government documents show that roughly 46,000 acres of the lands in Pacheco (4,100 acres), Panoche (38,000 acres) and San Luis WDs (3,882 acres) proposed for irrigation under this contract will generate "toxic or hazardous irrigation return flows" to ground or surface

waters.¹² Indeed, current practices result in some of these toxic flows being discharged without proper Clean Water Act permits or consideration of hazardous conditions for fish and wildlife.^{13,14}

The proposed permanent contracts will deliver water to lands that are unsuitable for irrigation. Delivery of water to these lands could obligate the federal government to furnish something that has been unattainable for decades—drainage service. The drainage service obligation does not exist, however, if water service to these lands is cut off because of the impracticability of irrigation. This alternative—cessation of irrigation water from unsuitable lands—is mandated by law and regulation.¹⁵ The toxic drainage, groundwater pollution, and surface water pollution is created in large part by the Bureau’s [of Reclamation] deliveries of CVP water to these drainage-impaired lands. Reducing water service instead of expanding it is the obvious solution. Controlling or eliminating the supply of drainage water by eliminating deliveries to these identified toxic soils will control the demand for drainage and the enormous costs estimated at \$2.7 billion.¹⁶ The unauthorized financial obligation inferred by issuing the proposed permanent water contract must be addressed.¹⁷

II. A Full EIS analysis under NEPA is Required.

As we noted in our October 5, 2020 comments, given the numerous potential environmental effects associated with these San Luis Unit water deliveries, a full EIS and ESA analysis must be completed prior to converting these existing contracts to permanent contracts. The CVPIA PEIS and Biological Opinion provided a framework whereby future CVP-related actions, including interim and long-term CVP water contract renewals, could be reviewed for site-specific impacts under NEPA and ESA.

¹² As described on page 38 of FEA for Panoche and San Luis WD CVP interim renewal contracts: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=37785

¹³ <http://calsport.org/news/wp-content/uploads/Conant-Burman-Ltr-Re-Extension-of-Cmt-Re-SLD-Discharges-UseAgreement-12-10-19.pdf>

¹⁴ http://calsport.org/news/wp-content/uploads/PCL-et-al_Comments-on-DEA-for-GBP-Stormwater-Plan_12-23_2019-.pdf

¹⁵ Continuing to provide project water to these toxic soils would require approval from Congress to increase the authorized appropriation cap under the San Luis Act. Also see Reclamation Directives and Standards PEC P12 for required continuing investigations into land classification and suitability for irrigation for the delivery of project water.

¹⁶ The estimated cost to implement the San Luis Drainage Feature Re-evaluation Record of Decision (SLDFR) was \$2.7 billion in 2008: <https://www.usbr.gov/mp/mpr-news/docs/factsheets/san-luis-drainage.pdf>

¹⁷ The SLDFR 2008 Feasibility Report sent to Congress explained that “Federal interest is established either by legislation or through an evaluation of a proposed action relative to the agency’s mission” and that, to be federally implementable, an action “must be feasible as defined by the Economic and Environmental Principles and Guidelines (Principles and Guidelines). The Principles and Guidelines require Federal actions contribute to the national economic development (NED).” The 2008 Feasibility Report continued: The San Luis Act of 1960 as amended establishes the Reclamation’s Federal interest in the proposed action. However, the requirement for a net positive contribution to the Nation’s economy cannot be met by either of the two action alternatives. The 2008 Feasibility Report concluded the action alternative selected by the Bureau was not appropriate for implementation according to the government’s own accepted standards.

The environmental review completed for Panoche and San Luis WDs interim contracts is inadequate, as our organizations have documented in our February 6, 2019 comments on the Draft Environmental Assessment.¹⁸ We incorporate those comments by reference. These sequential two-year contracts have failed to address reduction in exports, irrigability of these lands, drainage impacts, and conversion to municipal and industrial uses as contemplated under the conversion of these 9(e) contracts to 9(d) repayment contracts issued in perpetuity. In addition, the contract renewal for Pacheco WD has not been reviewed in a NEPA document since the existing contract does not expire until 2024.

Federal law requires a full EIS for these CVP Contract conversions. An EIS must comprehensively assesses the far-ranging and complex direct and secondary effects of irrigation and illuminate the total environmental impact of contract renewal and conversion to a permanent contract. Responsible decision making requires guidance from this EIS and adherence to established legal requirements.

In comments submitted in 1999 by the USEPA to the Bureau of Reclamation on Long Term Contract Renewals for the CVP, EPA recommended that an EIS should be the level of review for contract renewals: *“an EIS should be assumed the appropriate level of analysis for contract renewals, especially considering the many regional and localized concerns which were not covered in the CVPIA PEIS; e.g. water quantity, water quality, or specific terms and conditions for contract renewals.”*¹⁹ Further, in comments on CVP Long Term Contracts in 2000 the USEPA argued that, *“long term water service contracts are not and should not be permanent entitlements, but rather that they should be subject to review at the end of each contract period to reevaluate water supply and environmental conditions in a rapidly changing state.”*²⁰ Locking in these paper water supplies in perpetuity artificially inflates Pacheco, Panoche, and San Luis WDs’ allocations during times of shortage and results in shortfalls to other contractors and the environment.

The following impacts from Pacheco, Panoche and San Luis WDs’ contract conversions are significant and should be addressed in a full EIS:

1. Effects to the San Francisco Bay-Sacramento and San Joaquin River Delta Estuary.

There have been repeated violations of the Clean Water Act standards²¹ and Endangered Species Act requirements under the Reasonable and Prudent Alternatives. CVP operations and the exports of

¹⁸ See Appendix F in 2019 FEA for Panoche and San Luis WDs Interim Contracts:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=37785

¹⁹ See: <https://archive.epa.gov/region9/nepa/web/pdf/cvprenew.pdf>

²⁰ See: <https://archive.epa.gov/region9/nepa/web/pdf/cvprenewals.pdf>

²¹ Of particular note, the SWRCB, referencing WR Order 90-05, stated in WR 92-02 at page 9: *The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery.* SWRCB warned against USBR decisions to maximize water deliveries in the initial years of a drought and failing to maintain sufficient carryover storage to protect fisheries and public trust resources.

water pursuant to these WDs' contracts have consistently violated the Coordinated Operation Act of 1986, which requires adherence to Delta Water Quality Standards contained in D-1485 and subsequent water quality standards.

The operations of the Federal Central Valley Project and State Water Project (Water Projects) have caused devastating environmental impacts and have contributed to severe declines in California's native fish species, several of which are now listed as endangered or threatened species under the Endangered Species Act. Specifically, Water Projects operations have been major factors in the decline of the endangered Sacramento River winter-run Chinook salmon ("winter-run Chinook salmon"), threatened Central Valley spring-run Chinook salmon ("spring-run Chinook salmon"), threatened Central Valley steelhead, threatened Green Sturgeon and threatened Delta Smelt, and in the listing of these and other species under the Endangered Species Act. Further, species not currently listed, such as longfin smelt and Sacramento splittail, are also being adversely affected by Water Project operations.

2. Effects to Indian Trust Assets in the Trinity River must be assessed and disclosed.

The Yurok and Hoopa Tribe's fishing and associated water rights in the Trinity River are Indian Trust Assets. Protection of the Indian Trust Assets for the Hoopa, Yurok and Winnemem Wintu people require sufficient water to remain within the Tribe's watershed so that their fishery resources will thrive, not merely survive.²² As the Hoopa Tribe commented as far back as 2010, the CVP water diversions to San Luis Unit contractors including Pacheco, Panoche, and San Luis WDs, significantly impact their Indian Trust Assets:

*"...It is irrelevant to the environmental review that the Tribe's reservation is not in the vicinity of the Proposed Action Area. The water to which the Tribe has a right and whose use is essential to its fishery resources is being delivered and will continue to be delivered pursuant to the proposed federal action from the vicinity of the reservation to the contractors' area by CVP facilities that divert water from the Tribe's watershed."*²³

3. Effects to Listed Species: the required Endangered Species Consultation has not been completed or made available to the public.

For any federal action that may affect a threatened or endangered species or its habitat, the agency contemplating the action, otherwise known as "the action agency" (here, the Bureau of Reclamation), must consult with the appropriate "consulting agency" (here, the FWS and NMFS), for the purpose of ensuring that the federal action is not likely to: (1) jeopardize "the continued existence of" an endangered or threatened species; and (2) that the federal action will not result in the "destruction or adverse modification" of the designated critical habitat of the listed species. 16 U.S.C. § 1536(a)(2).²⁴

²² *Federal court: Tribal water rights outrank farmers' rights* Associated Press 11/25/2019 See <https://www.cherokeephoenix.org/Article/Index/113786>

²³ See: January 29, 2010 Letter to Rain Healer, USBR from Joseph Membrino Re: Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts. pg 3.

²⁴ See: <https://www.fws.gov/endangered/laws-policies/section-7.html>

For these San Luis Unit contract conversions, Reclamation is required to request both FWS and NMFS to complete a formal Section 7 consultation under the ESA.

Terrestrial federally listed species that could be affected by these San Luis Unit water deliveries and contract conversions include:

Mammals: San Joaquin kit fox, Fresno kangaroo rat, Giant kangaroo rat;
Reptiles: Blunt-nosed leopard lizard;
Plants: San Joaquin woolly-threads.

Threats to these species include loss of habitat to cultivation, conversion of land to other uses, use of rodenticides, herbicides and pesticides, any of which could decimate small, isolated populations.

Supporting documentation for this USEPA Docket for Selenium in California includes 2 reports by USFWS: Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries (includes a list of species considered most at risk for selenium exposure in CA)²⁵ and Species at Risk from Selenium Exposure in the San Francisco Estuary.²⁶ The species identified as most at risk from selenium exposure from agricultural drainage contamination in the San Joaquin Valley and San Francisco Estuary include:

Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
Reptiles: Giant Garter Snake;
Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

4. Effects of San Luis Unit Drainage Caused by Imported Irrigation Water from the CVP are Significant and Complex and Must be Addressed in a Comprehensive EIS.

Federal and State law prohibit degradation of the waters of the State and Nation. The proposed contract conversions would allow the continued delivery of CVP water to lands known to create pollution when applied to irrigate these soils without data or substantive environmental analysis of the effects of drainage contamination from Pacheco, Panoche or San Luis WDs or Reclamation. This drainage pollution can deform fish and wildlife, impair reproduction, and reduce survival. These adverse impacts affect trust resources including migratory birds, anadromous fish, and federally and state listed species. Continued delivery of water to these soils, as contemplated by this contract renewal, will degrade the waters of the State and Nation. The USEPA, in their comments on San Luis Unit Long Term Contract Renewals (@ pg 4 of Attachment A), concluded that, “*the Drainage solutions and features relied upon to implement these solutions should not be separated from the implementation of long-term water contracts.*”²⁷ Yet that is exactly what Reclamation has done in with these contract conversions for Pacheco, Panoche and San Luis WDs.²⁸

²⁵ See: <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0144&contentType=pdf>

²⁶ See: <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0265&contentType=pdf>

The USEPA in their comment letter on the Draft EIS and Supplemental Information for Renewal of Long-Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006). EPA recommended that the FEIS for San Luis Unit Long Term Contracts should include information on the relationships between irrigation in the San Luis Unit and groundwater movement downslope, in terms of flow and water quality. EPA further noted that Reclamation should provide information on the San Luis Unit's role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as "*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*"²⁹

5. Drainage Contamination in Grasslands Wetland Channels must be disclosed.

Panoche, Pacheco and San Luis WDs participate in the Grassland Bypass Project (GBP) which manages agricultural drainage from the 97,000 acres in the Grassland Drainage Area. The undersigned organizations have long-standing interests in the GBP because contaminants in agricultural drainage discharges have profound effects to the environment, including effects to downstream waterways, aquatic life, and migratory birds. The Grasslands Wetland Channels are listed as impaired for selenium on the State's 303(d) list³⁰ and elevated selenium in those channels could be harming aquatic-dependent fish and wildlife resources including federally listed species such as the threatened giant garter snake.

We hereby include our previous comments on the 2009 GBP EIR/EIS³¹ and Basin Plan Amendment by reference.³² We also include our comments submitted to Reclamation December 23, 2019 on the Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area (Draft EA-19- 029) by reference.³³

²⁷ [Ibid.](#)

²⁸ <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=71983>

²⁹ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

³⁰ See: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/01657.shtml#34338

³¹ See comments on the GBP EIS/R from CWIN and CSPA starting on pdf pg 3:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4417

³² See: Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker. June 22, 2015. Available at:

https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015_may/

³³ See: Coalition comments on the Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area

6. The San Francisco Bay/Delta continues to be impacted by selenium from agricultural drainage.

The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta, including Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta, are listed as impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).⁴⁰ Sources of selenium contamination include agricultural drainage from the Central Valley and effluent discharges from oil refineries (Linares et al 2015; Presser and Luoma 2010). At risk species include federally listed as threatened or endangered, green sturgeon, Chinook salmon, steelhead trout, delta smelt, Sacramento splittail and the California Ridgway's rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters.

Our organizations submitted comments to USEPA on the proposed selenium water quality and tissue criteria for the Bay Delta supporting more protective water quality criteria and hereby incorporate those comments by reference.³⁴ The selenium discharges being considered by the Regional Board from the GBP for the next 25 years will affect the Bay-Delta ecosystem and could affect compliance with EPA's proposed water quality criteria for San Francisco Bay and Delta. The 5.0 µg /L Basin Plan selenium objective for Mud Slough and the San Joaquin River is not protective of downstream beneficial uses, will result in non-compliance with proposed water quality criteria and will cause deleterious effects to fish and wildlife in the Bay-Delta. Agricultural drainage from Pacheco, Panoche and San Luis WDs and other drainage-impaired lands in the Grasslands Drainage Area contribute to this discharge and therefore must be analyzed in a full EIS for these contract conversions.

New information has been published in 2020 that identifies adverse effects from selenium to Sacramento splittail. Recent publications by the USGS and NMFS have documented elevated levels of selenium in the benthic clam food chain used by the Sacramento splittail and the federally listed green sturgeon in the San Francisco Bay Delta. In the spring of 2011, young-of-year splittail were found to have a high incidence (>80%) of spinal deformities characteristic of selenium toxicity at the site of a water diversion station in the San Joaquin Valley of the Delta (U.S. Department of the Interior, Bureau of Reclamation Tracy Fish Collection Facility) (Johnson et al 2020). This study identified various sources of selenium contamination and points to agricultural drainage as a significant source:

“These data suggest that individuals acquired Se toxicity while feeding in the freshwaters of the San Joaquin River but already started with significantly higher Se burdens from females maturing in the estuary (Figure 3, Table1 and Supporting Information).”³⁵

(Draft EA-19- 029)—A Comprehensive EIS is Required and Compliance with the Clean Water Act starting @ pdf pg 200: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41925

³⁴ Coalition comments of environmental, fishing and environmental justice organizations on EPA's Water Quality Standards for the Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta. October 28, 2016. Available at <https://www.regulations.gov/document?D=EPA-HQ-OW-20150392-0246>

³⁵ See: <https://dx.doi.org/10.1021/acs.est.9b06419>



A second publication (Stewart et al 2020) compared splittail tissue concentrations with those proposed by EPA in 2016 for the Bay Delta and found that, “Despite the consistently low muscle Se concentrations across all regions and years and no exceedances, the frequency of exceedance in liver and ovary were high for Pacheco, ranging from 60 to 80% (range for both tissues and years), followed by Suisun in 2011 (33%) and the Confluence in 2010 (17%).” These findings are significant as they document harm in a fish foraging in a benthic clam food web in the Delta, which is also utilized by the federally listed green sturgeon.

7. Drainage Treatment is not cost effective and has not been proven to be reliable and meet operational criteria.

The 2006 EIS for SLDFR and the 2009 EIR/EIS for the GBP included treatment as a significant component of the plan to manage drainage and reduce brine volumes to be discharged or disposed of. Reclamation has promoted and funded drainage treatment solutions for decades with repeated operational failures and unreliable results.³⁶ Both the SLDFR EIS and the GBP EIS/R included a biotreatment plant to reduce the selenium load being discharged, and to ultimately achieve zero discharge of agricultural drainage to the San Luis Drain and San Joaquin River.³⁷

³⁶ See USBR SLDFR Feasibility Report 2008, Appendices D and E. See: http://calsport.org/news/wpcontent/uploads/USBR_SLDFR-Feasibility-Rpt_AppE-Se-Biotreatment-Performance_2008.pdf http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppD-RO-TreatmtPerformance_2008.pdf

³⁷ See SLDFR FEIS Appendix B page 18: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

In 2012, construction began of the SLDFR Demonstration Treatment Plant (Demo-Plant) in Panoche Drainage District. The purpose of the Demo-Plant was to demonstrate and operate water treatment processes to collect cost and performance data for the design of a full-scale water treatment facility to be constructed in Westlands. The Demo-Plant was completed in 2014 in Panoche Drainage District but did not operate consistently due to operational failures and faulty design. The treatment plant has yet to become operational.³⁸

The Department of Interior’s Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant.³⁹ The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational performance criteria. In addition, Reclamation was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, Reclamation spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals. Warned of fraud, the Inspector General found that “work at the “pilot” Demo-Plant included: “invalid single audits, conflicts of interest with key personnel, a general absence of project oversight, and questionable use of a cooperative agreement as the legal instrument.” The Inspector General also raised federal fraudulent funding issues, stating: “*We also question how and why the project grew from a pilot-scale \$15 million demonstration and research and development plant to a full-size \$37 million plant. Further, we have been told that the costs to operate and maintain the plant could outweigh the benefits of the treated water produced.*”⁴⁰

All action alternatives in the SLDFR FEIS included bio-treatment and reverse osmosis treatment as a large part of the schematic to manage drainage for the San Luis Unit. Since the Demo-Plant has yet to work reliably, the viability and costs of the drainage plan put forth in the SLDFR ROD is questionable, particularly at full-scale. Without treatment, how will drainage volumes and selenium loads be managed? These issues related to the contract conversion must be addressed and analyzed in a full EIS.

8. Long Term Viability of Drainage Management Actions.

The SLDFR FEIS included a suite of management actions, including drainage reuse (to reduce the volume of drainage that would need to be treated), treatment, and disposal. Pilot studies conducted for SLDFR failed to meet specified objectives, putting doubt into effective implementation of any of these approaches at full-scale.

Reuse of polluted drainage in reuse areas does not eliminate the loading of wastes. It simply stockpiles contaminants on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into saline and toxic wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to permanent fallowing of more and more land, leaving hazardous conditions.

³⁸ Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.

³⁹ See <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luisdemonstrationtreatment-plant>

⁴⁰ See https://www.doioig.gov/sites/doioig.gov/files/ManagementAdvisory_ProposedModification_112717.pdf

9. Cessation of deliveries to these toxic soils is the most cost effective and proven strategy to manage drainage.

Our organizations have previously submitted comments to the Regional Water Board about the success of land retirement in relation to the GBP’s drainage volume load reductions.⁴¹ The USBR’s 2004 Broadview Water Contract Assignment Draft Environmental Assessment cites Summer’s Engineering as predicting a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year from the cessation of irrigation on 9,200 acres of agricultural land in Broadview Water District as per Table 4-1 below (USBR 2004). This amounts to a per acre reduction of 0.28 AF of drainage, 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of boron.

**TABLE 4-1
DRAINAGE AND WATER QUALITY EFFECTS OF PROPOSED ACTION ON THE
SAN JOAQUIN RIVER**

	Existing Conditions	Under Proposed Action Conditions	Estimated Reduction Attributable to Proposed Action
BWD Drainage to San Joaquin River (afy)	3,700	1,100	2,600
BWD Estimated Salt Production (tons/yr)	24,300	7,300	17,000
BWD Estimated Selenium Production (lbs/yr)	2,140	640	1,500
BWD Estimated Boron Production (lbs/yr)	74,000	22,000	52,000

Source: Summers Engineering, 2003

Land retirement likely accounted for most of the reductions in selenium, and the majority of reductions in drainage volume, boron, and salt claimed by the Grasslands Bypass Project in the 2009 EIR/EIS.

The USEPA, in a letter regarding the Bay Delta Conservation Plan,⁴² strongly recommended the USBR’s Land Retirement Program be revived to save water and prevent further selenium contamination and impacts to endangered species (page 13):

⁴¹ See: Coalition letter to CVRWQCB on Selenium Basin Plan Amendment, April 26, 2010, p 15-16; http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr and Coalition letter to Karl Longley on Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements: <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-toLongley-re-gbpland-retirement.pdf>

⁴² See: <http://calsport.org/news/wp-content/uploads/bay-delta-conservation-plan-deis.pdf>

Recommendations: *To mitigate for the project's impacts to selenium levels in the estuary as a result of the BDCP operations, consider reviving and funding the Bureau of Reclamation's Land Retirement Program¹⁷ to remove from cultivation and irrigation large areas of selenium laden lands on the West side of the San Joaquin Valley. This would save irrigation water, reduce discharges of selenium into the San Joaquin River basin, and advance attainment of selenium reduction targets¹⁸ set by EPA and the Central Valley Regional Water Quality Control Board. Evaluate the extent to which restoration of these "retired" lands to the native plant community could also contribute to the recovery of threatened and endangered plants and animals listed by FWS. Consider analyzing the cost/benefit of implementing treatment technologies vs. land retirement. Although cost/benefit analyses are not required under NEPA, such an analysis may be useful to decision makers and the public in this case."*

Further, Reclamation's SLDFR Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit. Three land alternatives were evaluated in the SLDFR EIS, 306,000 acres, 194,000 acres and 100,000 acres respectively. The Final EIS found that the only environmentally and economically preferred alternative was to retire 306,000 acres (In-Valley/Drainage Impaired Area Land Retirement).⁴³ It's clear from the NED findings in Table N-10 below that additional land retirement would provide increased net economic benefits.

**Table N-10
Benefit/Cost Summary
Changes Relative to the No Action Alternative (\$/year in 2050)**

Subarea	In-Valley Disposal	Out-of-Valley Disposal	In-Valley/ Groundwater Quality Land Retirement	In-Valley/ Water Needs Land Retirement	In-Valley/ Drainage-Impaired Area Land Retirement
Total NED Benefit	\$37,962,000	\$38,430,000	\$31,164,000	\$20,629,000	\$9,931,000
Total NED Cost	51,225,000	51,370,000	46,767,000	30,778,000	6,288,000
Net NED Benefit	-\$13,263,000	-\$12,940,000	-\$15,603,000	-\$10,149,000	\$3,643,000

Notes:

Values represent net NED benefits relative to No Action.
Values rounded to nearest \$1,000. Totals may not add due to rounding.

Moreover, the US Fish and Wildlife Service (FWS), in their Fish and Wildlife Coordination Act Report (FWCAR) for SLDFRE, recommended that all of the northerly area within the San Luis Unit (including all drainage-impaired lands within Pacheco, Panoche and San Luis WDs) be retired as well,⁴⁴ but Reclamation did not consider that alternative. The FWS concluded on page 67 of the FWCAR, "To avoid and minimize risks and effects to fish and wildlife resources in the San Joaquin Valley and Pacific Flyway, the Service recommends land retirement on all drainage impaired lands in the SLU. This approach would maximize the elimination of drainage at its source, and therefore avoidance of adverse fish and wildlife effects."

⁴³ SLDFRE Final EIS, Appendix N, Table N-10, page N-17, accessed at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2240

⁴⁴ SLDFRE Final EIS, Appendix M, USFWS FWCAR accessed at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236

10. A Drainage Plan is required by law.

Federal courts and reclamation law require a drainage plan for the San Luis Unit. There is no plan. The drainage management laid out in the schematics of the preferred alternatives in the SLDFR FEIS and ROD have failed during pilot studies, and treatment has not proven viable or cost effective.⁴⁵ Moving forward with contract conversions that authorize full contract quantities in perpetuity without acknowledging drainage problems and technological and economic limitations is negligent and in violation of the law. This ‘head in the sand’ approach continues the delivery of CVP water to drainage-impaired lands in the San Luis Unit and creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River and the Bay-Delta estuary, especially in wetter years.

11. NEPA Analysis of Pacheco, Panoche and San Luis WDs’ contract conversions should include alternatives that reduce water contract quantities.

There is nothing presented in the record that precludes the Secretary of Interior from considering an alternative that decommissions the drainage-impaired lands from these contracts. There is no legal obligation to operate a project once it was built if experience reveals to the Secretary that the project is not “practicable” under reclamation law without drainage (which of course both Reclamation and Congress knew to be the case beforehand) and is harmful to public and environmental health. At the time the San Luis Unit (SLU) was authorized in 1960, vast portions of the Unit were understood by Congress, the Bureau of Reclamation and the State of California not to be “practicable” for irrigation without drainage. *See* Reclamation Act of 1902 § 4 (43 USC 419) “*Upon the determination by the Secretary of the Interior that any irrigation project is practicable, he may cause to be let contracts for the construction of the same...*” The statutory premise and requirement of practicable irrigability remains under Reclamation law. Based on Reclamation's own studies: (1) Over 45,000 acres under the proposed Pacheco, Panoche and San Luis WDs contract are not practicable of irrigation due to drainage problems;⁴⁶ and (2) it is not a beneficial use to apply water to these lands that are not practicable of irrigation.

These SLU contract conversions would renew full contract quantities in perpetuity. These contract quantities are justified by outdated, inaccurate data, and bias that renders the Water Needs Assessment (WNA) insufficient in addressing shortcomings identified by the 9th Circuit Court.⁴⁷ Additionally, we note that no current WNA has been made available to the public for Pacheco WD. Further, the 9th Circuit Court ruled in their July 25, 2016 Amended Memorandum that “*Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion, and the agency did not adequately*

⁴⁵ These important scientific reports were removed from USBR's website but can be found here:

http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppE-Se-BiotreatmentPerformance_2008.pdf Also see http://calsport.org/news/wp-content/uploads/USBR_SLDFR-FeasibilityRpt_AppD-RO-Treatmt-Performance_2008.pdf

⁴⁶ As described on page 38 of FEA for Panoche and San Luis WD CVP interim renewal contracts: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=37785

⁴⁷ *Ibid.* See Appendix A and B of the FEA for Panoche and San Luis WDs interim contract renewals, CVP Water Needs Assessments (WNA) Purpose and Methodology, and Contractor WNA, respectively.

explain why it eliminated this alternative from detailed study... On remand, the district court shall direct Reclamation consider such an alternative in any future EA for an interim contract renewal.”⁴⁸

Drainage was known to be an issue and it was required to be provided under the San Luis Act of 1960 (PL 86-488). The project proceeded without it. So, the catastrophe of San Luis Unit's irrigation causing pollution and degradation of water supplies was both predictable and predicted. The contract conversion does not require Reclamation to merely roll over the existing interim contracts without considering the irrigability requirements under Reclamation law and by definition the cessation of exported water to these non-irrigable lands.

Any consideration of a "no-action" alternative should not set up the false choice of drainage vs. no drainage. This is a false choice. The alternative which needs to be considered is the cessation of water exports under the contract to these lands that are causing the pollution. Such a false choice-- drainage vs. no drainage-- is a deliberate obfuscation by the Secretary to avoid considering the alternative of discontinuing water deliveries to these unsuitable lands. The “No-Action” in the SLDFR alternative created by Reclamation set up a false choice between no drainage and drainage. The no-action alternative is feasible and legal under the 9th Circuit court decision if the Secretary changed operations and discontinued deliveries to drainage-impaired lands.

Finally, under Reclamation law, feasibility is required of project operations. Typically, project feasibility is determined by an economic analysis, the goal of which is a 1:1 benefit-cost ratio. If one includes the obligation for drainage management, for which no solution except land retirement has been effective, it seems that irrigation of drainage-impaired lands in these San Luis Unit districts is not *economically* feasible from a national perspective, even if it is *financially* beneficial to irrigators in the Unit. The ongoing environmental damage caused by its operation is a cost that needs to be fully integrated into any justification for continued deliveries.

There is a need for a full and fair review in the NEPA analysis that would determine what lands within Pacheco, Panoche and San Luis WDs service areas are not practicably irrigable and then that portion of the project should be *decommissioned*. Review should be made of the authority of the Secretary to make the non-practicability determination and thus, stop water deliveries. How can there be an obligation to provide—and liability for not providing—drainage when the government has decided, using another cornerstone of reclamation law, that irrigation of San Luis Unit is not a “beneficial” use of water. *See* section 8 of the 1902 Act “beneficial use shall be the basis, measure, and limit of the right.”

In addition, the cumulative impacts of other water export projects, such as a tunnel project providing even greater exports, needs to be evaluated against (1) the full cost, including drainage and environmental remediation costs of irrigating the San Luis Unit; and (2) who is responsible for those costs.

The benefit/cost ratio of the SLU is no longer favorable, if ever it could have been. The SLU irrigation development has fundamental flaws in its soil contaminants, and drainage that are not economical to remediate. Irrigation of all lands within the SLU is not feasible. The SLU is not a practicable irrigation project.

⁴⁸ See: <https://cdn.ca9.uscourts.gov/datastore/memoranda/2016/07/25/14-15514.pdf>

Section 4 of the 1902 act states: “Upon the determination by the Secretary of the Interior that any irrigation project is *practicable*, he may cause to be let contracts for the construction of the same . . .” (emphasis added). We know that subsequent to 1902, by the time of the SLU authorization in 1960, reclamation law had changed to require congressional authorization of projects. But the basic criterion of practicability remained intact.

When one looks PL 86-488, one can see how problematic the project development was, with drainage being the biggest problem. Tapping distant water supplies (e.g. Trinity River) along with expensive pumping plants and the Delta-Mendota Canal/California Aqueduct Intertie added to the problem. Too many subsidies are needed to address problems that it turns out cannot be solved. Moreover, there has been an enormous environmental price to pay because the SLU has not worked and was not feasible in the first instance to construct. Thus, one is drawn to the unavoidable conclusion that using CVP water on these SLU lands under these conditions is not practicable under federal law or “beneficial” under state law.

The USEPA in their comments on the Draft EIS and Supplemental Information for Renewal of Long Term Contracts for SLU Contractors (CEQ# 050411 and 060056, dated April 17, 2006, @ pg 2 of Attachment A) recommended that the SLU FEIS should consider mitigation measures, such as “...*contract provisions, or changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*” EPA further cited 40 CFR 1502.14 (b) and CEQ’s NEPA 40 Most Asked Questions, which emphasize the need to evaluate all reasonable alternatives, even if they conflict with local or federal law (2b).⁴⁹

Curtailing deliveries of CVP water to drainage-impaired lands could have significant benefits to the environment, including: reducing diversions from the Trinity River and pumping in the Delta, reduction of drainage production and selenium contamination of the environment, freeing up water to meet CVPIA fish and wildlife obligations including water for fisheries restoration and improvement as established in CVPIA Sections 3406 b(2) and b(3) and for refuge water management needs as established in 3406(d).⁵⁰

We conclude that the State Water Board must re-open the water right and Reclamation must cease deliveries of water to these toxic lands. It remains unclear whether the State Board has conformed its *place of use* designation for CVP water exports to facts on the ground. A contract requirement should include: (1) A prohibition of any water deliveries to drainage-impaired lands, (2) the CVPIA restoration fund payment obligation must remain intact, and (3) any proprietary interest in the water as a result of a change in the contract whereby Pacheco, Panoche or San Luis WDs can use or sell the water as the market warrants, must be subject to CVPIA limitations for other project purposes such as fishery restoration, preservation and propagation. Similarly, fish and wildlife refuge needs also must be considered prior to such change in use or sale.

⁴⁹ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁵⁰ See: <https://www.usbr.gov/mp/cvpia/docs/public-law-102-575.pdf>

12. Open ended contract provisions have potentially significant impacts that must be disclosed.

The draft conversion contracts for Panoche and San Luis WDs include Article 3 (c-d) which are not included in Pacheco WD's conversion contract.

Article 3 (c) allows for “a contractual agreement that the Contracting Officer shall make Project Water available at the point or points of delivery in or north of the Delta, at the request of the Contractor and upon completion of any required environmental documentation, this Contract shall be amended to provide for deliveries in or north of the Delta on mutually agreeable terms. Such amendments to this Contract shall be limited solely to those changes made necessary by the addition of such alternate points of delivery in or north of the Delta; Provided, That the Contracting Officer's use of the Harvey O. Banks Pumping Plant to deliver Project Water does not trigger this right of amendment.”

Article 3(d) allows “Groundwater recharge programs (direct, indirect, or in lieu), groundwater banking programs, surface water storage programs, and other similar programs utilizing Project Water or other water furnished pursuant to this Contract conducted with the Contractor's Service Area which are consistent with applicable State law and result in use consistent with Federal Reclamation law will be allowed: Provided, That any direct recharge program(s) is (are) described in the Contractor's water conservation plan submitted pursuant to Article 25 of this Contract; Provided, further, That such water conservation plan demonstrates sufficient lawful uses exist in the Contractor's Service Area so that using a long-term average, the quantity of Delivered Water is demonstrated to be reasonable for such uses and in compliance with Federal Reclamation law. Groundwater recharge programs, groundwater banking programs, surface water storage programs, and other similar programs utilizing Project Water or other water furnished pursuant to this Contract conducted outside the Contractor's Service Area may be permitted upon written approval of this Contracting Officer, which approval will be based upon environmental documentation, Project Water rights, and Project operational concerns. The Contracting Officer will address such concerns in regulation, policies or guidelines.”

These additional provisions in the Panoche and San Luis WDs conversion contracts are significant and the full impact of these changes needs to be disclosed to the public. Both NEPA and ESA consultation are needed. Further a complete discussion as to how these changes would be legal under existing federal authorization contained in the San Luis Act of 1960, the Coordinated Operations Act of 1986, CVPIA along with other federal reclamation law is needed. This vague and open-ended blank check to change points of diversion outside of public negotiation sessions is not warranted and will likely cause significant environmental impact that have not been disclosed.

In addition, the Biological Opinion (BO) on CVPIA included the following commitment on conjunctive use of CVP water (@ pg 2-58): “Future conjunctive use projects involving Reclamation will be coordinated with the [US Fish and Wildlife] Service's SFWO Endangered Species Division to address effects to listed species.”

Further, Reclamation committed to the following in the project description of the CVPIA BO related to general consultation processes (@ pg 2-68):

16. In addition to commitments and conservation measures in this opinion, and within other consultations, Reclamation will develop, as appropriate, guidelines and policies that address: (1) conversion of listed species habitat prior to any required Section 7 consultation on Reclamation actions or assistance with implementation of an HCP, (2) indirect effects of groundwater recharge on listed species habitats inside and outside of water districts resulting from

Reclamation actions, and (3) applications of CVP water outside of the place of use or for purposes other than the State approved purpose of use.

In a letter from the USFWS to Reclamation on San Luis Unit draft contracts, dated December 27, 2004, the FWS requested, “*The Service [USFWS] is therefore requesting that all off-site conjunctive use storage projects associated with CVP deliveries be documented and analyzed in materials submitted to the Service for initiation of long-term water contract renewals to ensure that listed species effects are adequately addressed.*” Impacts of on and off-site conjunctive use projects can potentially have damaging effects to listed species, can potentially allow CVP water to be applied outside the State permitted Place of Use, and requires NEPA analysis and ESA consultation.

13. Cumulative Effects Analysis is Required in an EIS.

As denoted by NEPA Regulations [40 C.F.R. §1508.8], the action agency must “*analyze the full range of direct, indirect, and cumulative effects of the preferred alternative...*” Section 1508.7 of NEPA defines cumulative impact as, “*the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions... Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.*”⁵¹ For all these San Luis Unit contract conversions, Reclamation should do complete an EIS that includes the effects of other past, present, and reasonably foreseeable future actions that could result in cumulative impacts on the biological resources of the study area.

In the 2019 FEA completed for Panoche and San Luis WDs’ interim contract renewals,⁵² Reclamation concluded that there would be no cumulative impacts to biological resources over a 2-year period (@ pg 29 of FEA). However, these conclusions of finding no cumulative impacts to biological resources are dependent on the timely implementation of future agricultural drainage service, habitat restoration, land acquisition and retirement, water conservation, and CVPIA programs including implementation of Fish and Wildlife Habitat Restoration Programs under Sections 3406 b(2), b(3) and 3406 d(1) and d(2). The FEA for Panoche and San Luis WDs interim contract renewals references the Programmatic EIS for CVPIA which identified these restoration programs necessary to remediate adverse impacts of these contract renewals. Yet, some important ecosystem restoration provisions of CVPIA, such as acquisition of full Level 4 refuge water supplies, have lacked funding for adequate implementation. Purchase of environmental water under the CVPIA b(3) program has also fallen substantially short of targeted needs due to inadequate funding mechanisms. This unmet need may increase in the future as market prices for water continue to rise with demand. Further, past and present efforts to meet water quality standards in the San Joaquin Basin have been significantly hampered by the lack of adequate fresh water supplies. The USEPA recommended, in their comments on the DEIS and Supplemental Information for San Luis Unit Long Term Contracts (@ pg 6 of Attachment A) that, “*The cumulative impacts analysis in the FEIS should be based on the past and present trends of supplies available for redirection to meet restoration and refuge needs in the area, including Trinity Restoration needs. Where information is available, the analysis should reflect the actual implementation status of CVPIA restoration actions.*”⁵³

⁵¹ See: https://ceq.doe.gov/docs/get-involved/Citizens_Guide_Dec07.pdf

⁵² See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=37785

⁵³ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

Examples of actions that should be reviewed in an EIS Cumulative Effects Analysis include:

- CVP water assignments
- Groundwater pump-ins into the Delta Mendota and San Luis Canals
- Water transfers and exchanges
- Groundwater banking projects
- Cuts to the CVPIA Restoration Funding

As our organizations have documented in prior comment letters, San Luis Unit contractors, have been involved with a number of CVP water assignments, groundwater pump-ins, transfers and exchanges. These actions have adverse local effects as many involve substitution of higher quality surface water supplies with lower quality groundwater or commingling of poor-quality groundwater with surface water supplies. These projects can cumulatively effect trust resources.

We also note that during a San Luis WD Board Meeting on August 25, 2020 it was discussed that sources of non-CVP water for the WD are not subject to the rescheduling cap imposed on CVP water. In this way, WDs can maximize carryover storage while limiting their exposure to Reclamation's rescheduling cap. This results in greater exports from the Delta Estuary that need to be disclosed.

These San Luis Unit WDs continue to pump groundwater causing subsidence impacts to canals and permanent impacts to groundwater quality and levels. Without detailed analysis the public and decision makers are left in the dark regarding the impacts of these massive pumping programs and compliance with Sustainable Groundwater Management Act (SGMA). These impacts are further compounded by additional pumping in the present, and reasonably foreseeable future groundwater pumping, exchanges and transfers that involve these WDs including:

- Ten-Year Exchange Agreements and/or Warren Act Contract for Conveyance of Groundwater in the Delta-Mendota Canal - Contract Years 2013 through 2023,⁵⁴
- 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area,⁵⁵
- Mendota Pool Group (MPG) 20-Year Exchange Program⁵⁶
- Firebaugh Canal Water District 5-Year Transfer Program, 2019-2023⁵⁷

⁵⁴ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=11470

⁵⁵ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41544

⁵⁶ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=36282

⁵⁷ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=36203

- Delta-Mendota Canal Groundwater Pump-In Program Revised Design Constraints⁵⁸
- San Joaquin River Exchange Contractors Water Authority, 25-Year Groundwater Pumping and Water Transfer Project⁵⁹
- Long Term Water Transfer Program⁶⁰
- Water transfers from the San Joaquin Exchange Contractors⁶¹
- Los Banos Creek Detention Reservoir Re-Regulation⁶²
- Permanent Partial Assignment of Portion of San Luis Water District CVP Contract to Santa Nella County Water District⁶³
- San Luis Water District Water Transfer and Related Exchanges⁶⁴
- Meyers Groundwater Banking Exchange Agreement⁶⁵
- B.F. Sisk Dam Raise and Reservoir Expansion Project⁶⁶
- Del Puerto Canyon Reservoir Project⁶⁷
- Water Exchange Agreement with San Luis and Grassland Water Districts for Refuge Level 4 Water Supplies⁶⁸
- Water Transfer Program for the San Joaquin River Exchange Contractors Water Authority, 2014-2038 EIS/EIR⁶⁹
- Kaljian Drainwater Reuse Project⁷⁰
- Althea Avenue Bridge Replacement⁷⁰
- Delta Mendota Canal Subsidence and Conveyance Capacity Study⁷⁰

⁵⁸ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=32781

⁵⁹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=2771

⁶⁰ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=18361

⁶¹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=9086

⁶² See: <https://ceqanet.opr.ca.gov/2020050047/2>

⁶³ See: <https://ceqanet.opr.ca.gov/2018038578>

⁶⁴ See: <https://ceqanet.opr.ca.gov/2012028167>

⁶⁵ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=15021

⁶⁶ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=46464

⁶⁷ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=43344

⁶⁸ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=32822 and https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=26827

⁶⁹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=9086

⁷⁰ See Appendix D in: https://sldmwa.org/IRWMP/WSJ%20IRWMP%20Appendices_ADA-OK.pdf

III. Failure to Comply with CVPIA.

As was noted in our October 5, 2020 comments, NEPA Compliance is also Required by the Central Valley Project Improvement Act (CVPIA) before entering into Conversion Contracts.⁷¹ The CVPIA was enacted in 1992 to reduce adverse environmental impacts of CVP operations and to modify State water right permits to include fish and wildlife as a purpose of the project. The CVPIA requires preparation of an EIS before Reclamation renews any long-term water service contract. (CVPIA §§ 3402(a), 3404(c)(1)). That requirement has not been eliminated by the WINN Act. Further as noted CVPIA § 3404 (c) (2) requires specified environmental mitigation payments and restoration of fish and wildlife to be included in all new or renewed contracts.

IV. Failure to Comply with CEQA.

Public Resources Code Section 21151, which provides that EIRs are required for certain projects, notes that a Categorical Exclusion is not allowed when:

- a. The project site is environmentally sensitive as defined by the project's location. A project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant.
- b. The project and successive projects of the same type in the same place will result in cumulative impacts;
- c. There are "unusual circumstances" creating the reasonable possibility of significant effects.

Our previous comments have described significant groundwater contamination and downstream cumulative impacts from these San Luis Unit contract conversions. The toxic runoff, drainage, and effects of drainage treatment and disposal, including but not limited to, fish, wildlife, air emissions, transportation and other impacts, have not been disclosed. These draft contracts are also silent with regard to paying for these water quality costs and protections. Without a proven drainage solution, water quality impacts from irrigation of toxic soils in Pacheco, Panoche and San Luis WDs have far reaching impacts outside of the districts and in downstream waters.⁷² Therefore, there clearly are significant

⁷¹ Section 3404(c) of the CVPIA requires that an EIS be completed before Reclamation can renew any long-term repayment or water service contract for a period of 25 years. Reclamation defines "long term contract" as a "contract with a term of more than 10 years." See: <https://www.usbr.gov/recman/pec/pec-p05.pdf> By these definitions any contract term longer than 10 years is by Reclamation's own definition 'a long-term contract.' A conversion to a permanent contract fits the definition of a long-term contract. Thus, federal law requires a full EIS before entering into permanent repayment contracts. Congress determined that long-term contracts would have a significant effect on the environment such that an EIS is required.

⁷² The Department of Interior's Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant. The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational performance criteria. In addition, the USBR was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, USBR spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals.[see <https://www.doi.gov/reports/bureau-reclamation-did-not-effectively-manage-sanluisdemonstrationtreatmentplant>]

effects to the environment associated with the issuance of these permanent water contracts and, therefore, a full EIR under CEQA needs to be completed along with compliance with federal and state endangered species laws.

Further any full EIR for these contract conversions should include information on the relationships between irrigation in the San Luis Unit and groundwater movement downslope, in terms of flow and water quality. The USEPA has noted previously that such an environmental review should provide information on the San Luis Unit's role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife.⁷³ Absent this information, the public and decision makers are left in the dark as to significant impacts and required mitigation measures, such as "*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*" The effects of toxic pollution from the San Luis Unit caused by irrigation enabled by the proposed permanent water contracts are significant and complex and must be addressed in a comprehensive EIR.

Finally, consideration and analysis of a full range of project alternatives is needed to prevent significant impacts. We have raised these issues in the past, and they are even more pertinent today. They include first the failure to study "the alternative of a reduction in maximum interim contract water quantities. By failing to study this alternative, these contract conversions defy the PCFFA Court's instruction that Reclamation must "give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities." PCFFA, 655 Fed. Appx. at 599. Second, a CEQA exemption for these contract conversions fails to disclose – let alone analyze as required – the massive environmental impacts of diverting this water from the Delta and applying to contaminated soils. Third, an accurate map of the land uses that will be receiving water under these contracts is needed to determine the impacts of converting these agricultural areas to other uses, including utilities, such as Vega Solar.⁷⁴ And, fourth, there needs to be an assessment of the ability of existing agricultural users to pay the significant amounts of debt required under the contract conversion process. This required debt load predictably will change land uses and the likely shift to industrial uses must be disclosed and analyzed. Lastly, no information is provided as to how this debt will be repaid and the impacts on existing agricultural and industrial operations, especially during severe prolonged droughts and with climate change. These critical shortcomings leave decision-makers and the public in the dark.

V. Failure to comply with California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA)

As emphasized in our previous comment letters on San Luis Unit CVP Repayment contract conversions, and our January 21, 2020 comments on proposed adoption of a Categorical Exemption under CEQA,⁷⁵ areas within the project area, and downstream habitats are known to be habitats for endangered species that are sensitive to selenium contamination and salt. Specifically, impacts from these water contract deliveries and drainage contamination may occur to State and Federally listed species. These previously identified impacts are now further compounded by these added draft contracts for the Pacheco, Panoche,

⁷³ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁷⁴ See: http://web2.co.merced.ca.us/pdfs/commissionarchive/2013/11-20/final_eir_vega_solar.pdf

⁷⁵ See: https://www.restorethedelta.org/wp-content/uploads/2020.01.21-CBD-PCL-et-al_Objects-to-CEQAExemption-for-Westlands-Perman....pdf

and San Luis WDs and yet, no compliance with the CESA or the Federal ESA has been provided. Further, Senator Feinstein noted with the passage of the WIIN Act, "... the bill's savings clause that prevents the legislation from violating state or federal environmental laws including the Endangered Species Act and biological opinions..."⁷⁶

ESA Compliance is a Mirage--the Draft Contract References Compliance with ESA Consultation Requirements that is Absent.

The draft contracts for Pacheco, Panoche and San Luis WDs state in Article 3(e) that the Contractor shall "comply with requirements applicable to the Contractor in biological opinion(s) prepared as a result of a consultation regarding the execution of any water service contract between the Contracting Officer and the Contractor in effect immediately prior to the Effective Date of this Contract undertaken pursuant to Section 7 of the Endangered Species Act of 1973 (ESA)..." Yet no ESA consultation has been completed on these contracts nor has there been a consultation that identifies Pacheco, Panoche or San Luis WDs as Applicants under the ESA. As denoted on page 2-12 of the USFWS ESA Section 7 Handbook⁷⁷,

"For purposes of this discussion, the Federal action involves the approval of a permit or license sought by the applicant, together with the activities resulting from such permission. The action agency determines applicant status, including requests arising from prospective applicants in early consultations. The action agency also determines how the applicants are to be involved in the consultation, consistent with provisions of section 7(a)(3), (b) and (c) of the Act and the section 7 regulations."

Reclamation has failed to proceed in the manner required by ESA and Pacheco, Panoche and San Luis WD have failed to proceed in the manner required by CESA with these contract conversions. Reclamation has failed to complete an ESA consultation and Pacheco, Panoche and San Luis WD have failed to consult under CESA before the contract was finalized. Even language in this draft contract suggests that ESA consultations would be completed and that the contractor(s) would comply with applicable provisions of biological opinions. Without Applicant status, there are no applicable provisions in an ESA consultation for these contractors. This contract provision is a mirage designed to evade federal ESA requirements. Reclamation failed to request Applicant status for these contractors, so the language in the draft contracts suggesting that there are applicable provisions in biological opinions is inappropriate and misleading.

VI. Endangered Species Consultations completed on SLDFR and Panoche and San Luis WDs contracts are outdated or contain invalid assumptions.

1. Consultations on Drainage

Consultations by the USFWS on San Luis Drainage (SLDFR) and Grasslands Bypass Project (GBP) included as part of the project a cessation of discharge to the San Joaquin River by 2010 in SLDFR⁷⁸

⁷⁶ See: <https://www.feinstein.senate.gov/public/index.cfm/pressreleases?ID=FF5C94EB-667A-4DEC-A0A4-296AB5027B>

⁷⁷ See: https://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf

and 2019 in GBP.⁷⁹ In December 2019 Reclamation proposed to extend the Use Agreement for the San Luis Drain (allowing GBP discharges to the San Joaquin River) for an additional 10 years.⁸⁰

The SLDFR 2006 biological opinion (BO) and Fish and Wildlife Coordination Act Report (FWCA) were predicated on a drainage treatment performance objective of <10 µg/L selenium in treatment effluents, primarily as selenate. SLDFR FEIS studies of the proposed drainage management scheme reported that treatment (RO and selenium biotreatment) had not been performing to performance objectives that the Service used for the basis of the FWCA Report and BO. The SLDFR pilot evaporation pond data in the SLDFR FEIS demonstrated double the bioconcentration that was predicted by the bioconcentration model (see page 18, Appendix B). The highest reported invertebrate selenium concentration from the SLDFR pilot evaporation ponds was 225.7 µg/L dry weight from a sample of aquatic nektonic invertebrates (primarily water boatmen) collected from pond 1 (see Appendix B, Attachment B-2, Table 10, SLDFR FEIS).⁸¹ By comparison, concentrations of selenium in water boatman collected from Kesterson Reservoir in the mid-1980's were in the range of 5.9-130 µg/L (see Moore et al., 1990 page 4-43). Most selenium concentrations for invertebrates from the SLDFR pilot evaporation ponds were well above concentrations associated with adverse biological effects to wildlife (i.e., >7 µg/L dry weight in invertebrates based on dietary effects on reproduction in chickens, quail and ducks, see Table 6-4, Recommended Ecological Risk Guidelines Based Upon Selenium Concentrations, on page 6-27 of the FEIS/R Grassland Bypass Project, 2010–2019.⁸²

The critical issue with respect to environmental risk is associated with bioaccumulation potential of waterborne selenium through the food-web and into higher trophic level consumers. A two-fold increase in bioconcentration factors may have a pronounced impact on realized risks to wildlife populations because toxicity is not a linear phenomenon (i.e., the dose-response curve is sigmoidal). In the case of selenium, a trace element with a very narrow safety margin (the range between nutritionally beneficial and toxic concentrations), the dose-response curve is quite steep (see, for example, SLDFR FEIS Appendix M, USFWS Adult Avian Mortality Protocol).⁸³ Therefore, the ESA consultation and Coordination Act Report were based on invalid performance objectives and are invalid. Even Interior in their latest status report on the drainage litigation (@ pg 4) admits a need to

⁷⁸ See appendix M of SLDFR FEIS for Biological Opinion and Fish and Wildlife Coordination Act Report available at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236,

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2237,

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2238,

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2239

⁷⁹ The 2009 GBP FWS Biological Opinion is available at:

https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4826

⁸⁰ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41546

⁸¹ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

⁸² See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4412

⁸³ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2237

re-scope [SLDFR] project needs: “Reclamation, in collaboration with Westlands, San Luis WD, Panoche Water District, and Pacheco Water District, is collecting and analyzing data to verify that the original assumptions and conceptual plans presented in the 2008 Feasibility Study are still accurate.”⁸⁴

2. ESA Consultations on Panoche, and San Luis WDs Interim Contracts are Insufficient & Outdated.

The EA on the 2019 CVP Interim Contract Renewals for Panoche and San Luis WDs,⁸⁵ includes an Environmental Protection Measure for biological resources @ page 11, Table 2: “No CVP water would be applied to native lands or land untilled for three consecutive years or more without additional environmental analysis and approval.” Yet, there is no data presented validating this measure. Without actual data or analysis to verify compliance this environmental commitment is of little value. Further, there is no mechanism identified in the Draft EA to address habitat conversions that may have occurred without additional “environmental analysis and approval.” The consequences of non-compliance need to be defined and implementable.

3. Status of Consolidated Place of Use Mitigation should be Disclosed.

In November 1999, the SWRCB issued a final EIR that updated Reclamation’s 16 CVP water rights permits. Included in this EIR were changes to the state authorized place of use for these permits (CPOU). The EIR authorized the addition of “encroachment lands” to the CPOU (defined as lands within the boundaries of CVP water contractor service areas outside of the POU that received CVP water historically). The EIR did not authorize the addition of “expansion lands” to the CPOU (defined as lands within the boundaries of CVP water contractor service areas but outside of the POU that have never received CVP water) until adequate site-specific environmental documentation is completed (CPOU EIR @ pg ES-2).⁸⁶

The CPOU EIR concluded that historic delivery of CVP water to encroachment lands has resulted in significant adverse effects to vegetation and wildlife. The EIR and SWRCB Decision 1641 (D-1641) identified that of the 85,620 acres of encroachment lands that currently receive CVP water, the development and land use conversion of 45,390 acres was facilitated by delivery of CVP water supplies for agricultural purposes. As part of the D-1641 Reclamation was required to provide compensation for lost habitat due to encroachment. Specifically, Reclamation was required to delineate existing habitats of the affected special status species and in consultation with CDFW and USFWS to develop a mitigation plan satisfactory to the SWRCB. This decision required that the mitigation plan be developed and completed within ten years of the date of D-1641 (D-1641 was signed in March 2000, @ pg 165). This

⁸⁴ Oct 1, 2019 Fed Defendants Status Report, Case 1:88-cv-00634-LJO-SKO

⁸⁵ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=37785

⁸⁶ Available at this link:
https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/eirs/eir1999_ccpou/docs/ccpoufeir.pdf

decision also requires a mitigation monitoring and reporting program to ensure continued protection and enhancement of special status species.⁸⁷

San Luis WD was identified in the CPOU EIR to have 10,668 acres of agriculture-induced encroachment lands. The SWRCB identified the following habitat types that would need to be mitigated for from San Luis WD encroachment: 789 acres of alkali scrub, 2,032 acres of Valley-foothill riparian/fresh emergent wetland, and 7,847 acres of annual grassland (CPOU EIR @ pg 2-65, Table 2-28). No information was provided on the status of mitigation for CPOU in the 2019 EA for Panoche and San Luis WDs CVP interim contract renewals.

Conclusion

Reclamation has engaged in a process to convert Pacheco, Panoche, and San Luis WDs' water service contracts that functionally ignores much of Reclamation contract law and violates NEPA, CVPIA, CEQA, CESA and ESA, the Administrative Procedures Act, the Reclamation Reform Act, and other federal statutes. The public has been given a puzzle of dizzying complexity without the puzzle picture. These contract conversions must be withdrawn and restarted with full consideration of all similar contract conversions and their cumulative effects. The water contract conversion process must start with outreach to the 17-20 parties of interest that have thus far been excluded or contracted out under the proposal. Furthermore, all of these draft contracts must be publicly disclosed and the critical exhibits including a Water Needs Assessment must be provided to the public and those areas of origin that are most impacted by the water that is being taken and exported to the San Luis Unit.

⁸⁷ D-1641 @ pg 140, available at this link:

https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf

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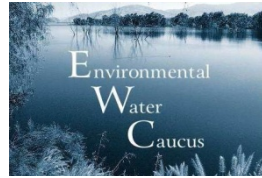
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CA Save Our Streams Council



September 11, 2020

Mr. Wilson Orvis
Deputy Regional (Acting) Director
Business Services, MP-11 0
Bureau of Reclamation Mid-Pacific Region
2800 Cottage Way
Sacramento, CA 95825
E-mail WORVIS@usbr.gov

Heather Casillas
Division Chief - Program Management
CVPIA Program Manager
BDO-300, 801 I Street, Suite 140
Sacramento, CA 95814
E-mail hcasillas@usbr.gov

Via U.S. MAIL and E-mail

Re: Comments on Revised Central Valley Project Improvement Act (CVPIA) Financial Guidelines & Request for Written Comments on Interim Guidelines for the (CVPIA) and Draft Business Practice Guidelines (BPG) for CVPIA Receipts, Program Accounting, Cost Allocation and Cost Recovery¹

¹ Reclamation modernizing Central Valley Project Improvement Act accounting procedures
<https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=71963>

We have reviewed the Revised CVPIA Financial Guidelines (Guidelines) and participated in related workshops. The proposed Guidelines and how they will be applied raise fundamental problems that must be addressed before they are adopted and implemented:

1. There is universal agreement that the fisheries restoration objectives and refuge objectives of CVPIA have not been effectively met by historical and current restoration strategies and funding levels (see following result from Office of Management and Budget review).
2. The Restoration Fund is depended upon and has historically accounted for more than half of total funding for fisheries restoration, yet has rarely been funded at the full level of \$50 million 1992 dollars (approximately \$93 million 2020 dollars).
3. Reclamation estimates, by comparing historical funding to the Restoration Fund to what would result from the proposed revised Guidelines, that average annual funding of the Restoration Fund would decline about \$10 million and the decline will be greater if the frequency of drought years increases as expected.
4. The inescapable conclusion is that the proposed Guidelines will further weaken an already failing and inadequate effort to restore fisheries, river restoration, and refuges as required by the CVPIA.
5. To meet the statutory requirements of CVPIA, the need is clear: improved strategy, improved management, and substantially higher funding.
6. Because of the far-reaching impacts of the proposed Guidelines, this discretionary major federal action requires a full EIS that fully evaluates the impacts of the guidelines and, importantly, proposes and evaluates alternatives.

Each of these points is expanded below along with addition related matters.

2006 Review of CVPIA by Office of Management and Budget (OMB)—selected excerpts

The Office of Management and Budget (OMB) evaluated the progress of the CVPIA program in 2006. OMB had concerns that stemmed in part from the disparity between the Congressional requirement to “double by 2002” anadromous fisheries impacted by the Central Valley Project (CVP) , and the current status of Central Valley anadromous fish populations. OMB questioned the lack of measurable performance goals for program implementation, especially goals that could relate to factors within the control of the agencies in program implementation.

OMB recommended that the agencies undertake a comprehensive program review, including an independent science review. In 2008, Reclamation and the [U.S. Fish and Wildlife] Service organized this independent review in response to the OMB critique, seeking to address four objectives:

- *Improve the effectiveness and efficiency of programs and implementation actions to achieve the fish restoration goals of the Act;*
- *Enhance the agencies’ ability to learn from and optimize program actions;*
- *Improve the transparency and accountability of the fish restoration programs to management, stakeholders, and the public; and*
- *By achieving the first three objectives, enhance public understanding and support for the program and continuing restoration activities.*

In 1992 Congress directed the Department of Interior to develop and implement a program that makes “all reasonable efforts” to ensure and sustain on a long-term basis a doubling of the number of naturally produced anadromous fish in Central Valley rivers and streams by 2002.

Doubling did not happen by the legislative goal of 2002, or by 2008, nor is it likely to ever occur unless renewed commitments and improvements are made to the CVPIA program. What we do know is that while a few small populations of chinook salmon have shown apparent gains, on the whole the Central Valley's naturally produced anadromous fish populations stayed relatively even or declined from 1992-2005. Recent surveys have indicated that over the last several years, fall-run chinook populations have collapsed.it is also far from clear that the agencies have done what is possible and necessary to improve freshwater conditions to help these species weather environmental variability, halt their decline and begin rebuilding in a sustainable way. A number of the most serious impediments to survival and recovery are not being effectively addressed, especially in terms of the overall design and operation of the Central Valley Project system. ... Federal courts have recently invalidated as inadequate federal plans to address the requirements of these species under the federal Endangered Species Act. The Interior Department, at the highest department and agency levels, needs to rethink the entire approach to the CVPIA anadromous fish restoration program. There needs to be an overarching, discretely and comprehensively organized and staffed Anadromous Fish Restoration Program, led by one official highly placed in the agency that has the funding and implementation responsibility. ...This may sound obvious, but it is not the way the agencies are organized now to implement the CVPIA. ... The agencies should develop a more expansive view of the authorities at their disposal to address the problems, especially with regard to water management and project operations. The agencies have followed a more restrictive view of their authorities than appears legally necessary or appropriate to the seriousness of the mission – certainly the federal courts believe the agencies have more tools at their calling. Reclamation in particular needs to embrace this mission with equal zeal to its core mission of water supply and find a way to bring these two missions into balance and improve ecological conditions in a highly managed river system. To be successful, Reclamation will need to revitalize its mission working both with its agency partners and with its contractor partners who have a fundamental economic stake in helping Reclamation be successful in integrating anadromous fish improvements as a baseline program cost of delivering water. ... In redesigning the program plan, the agencies must do a fundamentally better job addressing the problems at the system-wide scale.

The program effectively ignores the larger system problems that inhibit the natural production of anadromous fish:

- *headwaters dams that have taken away most of the spawning and rearing capacity in the valley;*
- *highly regulated flows and diversions completely out of balance with natural flow regimes to which these species are adapted;*
- *rivers levied and channeled and disconnected from floodplains to such an extent that natural river habitats and rearing conditions are largely absent; and*
- *environmentally degraded conditions for fish in the Delta due to water exports, degraded water quality, entrainment, and predation that are a significant source of poorly addressed mortality.*

The agencies need to fully use their authorities to understand and address the system problems, or ask Congress for additional authorities and guidance.²

² https://www.usbr.gov/mp/cvpia/docs_reports/indep_review/FisheriesReport12_12_08.pdf

The proposed (CVPIA) Financial Guidelines and Interim Guidelines for the (CVPIA) Business Practice Guidelines (BPG), if adopted, will perpetuate the environmental degradation caused by the CVP and fail to address the Congressionally mandated obligations of the water and power contractors.

Historical Funding Shortfalls will be Exacerbated by Proposed Guidelines³

The CVPIA Restoration Fund (RF) has historically accounted for more than half of total funding for fisheries restoration, yet has rarely been funded at the full level of \$50 million 1992 dollars (approximately \$93 million 2020 dollars).

Data provided by Reclamation show that total expenditures from the RF during 1993-2017 were \$1,007,423,819, compared to the inflation-adjusted CVPIA goal of about \$2,000,000,000. Thus, the CVPIA goal for the RF, the largest single source of funding for fisheries restoration, was only 50% achieved.

Reclamation estimates, by comparing historical funding to the RF to what would result from the revised Guidelines, that average annual funding of the Restoration Fund would decline about \$10 million under the proposed modifications.. Ten years of actual and draft proposed estimates for 2010 to 2020 indicate an average annual funding of the RF of \$54,336,084 per year, compared to 44,571,451 for the proposed Guidelines.

Conclusions and Related Issues

The inescapable conclusion is that the proposed Guidelines will further weaken an already inadequately funded and failing effort to restore fisheries, wetlands and refuges as required by the CVPIA. The changes to CVPIA § 3407 are discretionary and a major federal action and thus, require a full environmental review and EIS in accordance with the National Environmental Policy Act (NEPA). The proposed changes to reimbursable cost allocations violate CVPIA §3406. Congress established these cost allocations and these changes to reimbursable costs are not authorized.

Alternative approaches to the financial guidelines, which enhance the CVPIA RF rather than diminish it, need to be developed and analyzed. The impacts of the reduced funding and staffing resulting from the proposed Guidelines need to be disclosed and addressed. The range of tools and authority available to Fishery Agencies (Commerce's National Marine Fisheries Service & Interior's Fish and Wildlife Service) along with Reclamation to address this funding shortfall is required. Moreover, the analysis needs to disclose and analyze impacts to achieving the Congressionally mandated obligations contained in CVPIA §3406 along with other provisions of existing law.

There are three major programs that are wholly reimbursable by water and power contractors without limitation: Section 3406 (b) (1), (b) (23) and (d) (1). These Congressionally mandated obligations include funds for the Anadromous Fish Restoration Program, Habitat Restoration program, Trinity Restoration Program, and mandated water deliveries for fisheries and refuges. Many of additional obligations set forth under Section 3406 are also partially reimbursable. The proposed changes in revenue collection should not be used to evade the statutory obligations of the water and power contractors by adopting some new allocation whereby 14% would be allocated to the federal taxpayer. The proposal to reclassify reimbursable activities to non-reimbursable activities will only exacerbate impacts and funding shortfalls. Further this arbitrary action is counter to the CVPIA statutory cost

³ See the 1993 Guidelines Redline version USBR draft provided August 10, 2020 and virtual workshop materials provided August 21, 2020 and August 25, 2020.

allocations set forth by Congress. Congress made clear that the reimbursable designations in the CVPIA were intended as cost allocations to the water and power contractors and stated as such.⁴

A closely related issue is Reclamation's proposal to use the January 2020 Cost Allocation Study (CAS) methodology with regard to some of the cost allocations, which even further compounds funding shortfalls and arbitrarily assigns more costs to the federal taxpayer. The undersigned groups have commented extensively on the faulty assumptions⁵ that assist water and power contractors to evade the reimbursable costs of the CVP and will arbitrarily compound the lack of revenues needed to mitigate and restore fish and wildlife as required under the CVPIA. The CAS methods, along with this proportional proposal to reduce restoration funding, further enables water and power contractors to evade their obligation to restore rivers which the CVP has tapped for water supply and electrical energy, damaging rivers by lowering flows, raising temperatures, modifying channels, and destroying habitat. The projects have adversely impacted the estuary and, through all of these impacts, devastated fishery resources. The mitigation and restoration costs associated with this damage need to be borne by these extractive interests. Any formula must account for these devastating impacts and values.

Further compounding this shift in allocated costs from the contractors to the public, the proposed Guidelines create yet another cost allocation formula to further evade reimbursable costs from 2013 forward. The CVPIA, however, does not authorize Reclamation to arbitrarily make its own cost allocations. The statute clearly sets forth statutorily the cost allocations. Under Reclamation's proposal they plan to allocate statutorily prescribed reimbursable activities to non-reimbursable federal purposes. We can find no authority for such an arbitrary action and none was provided despite repeated requests.

In our view, any true-up or 'modernization' scheme ought to include an explicit "per acre-foot" charge for mitigation and restoration costs as an O&M rate component or water rate augmentation that would be set out in the CVP rate books. Further, the signatories to this letter and others have argued with regard to

⁴ See for example CVPIA section 3406(b)(4) that costs "shall be allocated among project water and power users..." or CVPIA Section 3408(b) notes that certain costs "shall, if reimbursable, be repaid..."

⁵ To reduce costs to water and power contractors Reclamation grossly overstated surface water supplies available and understated groundwater usage under without the CVP scenario among other flaws, thus minimizing benefits and the resulting costs allocated to water and power contractors. Further without authority removed distribution canals and delivery from the cost allocations. See: <http://calsport.org/news/wp-content/uploads/Conservation-Fishing-and-Tribe-Cmts-RE-CVP-Cost-Allocation-Study-Burman-1-2-2020-.pdf>

<http://calsport.org/news/wp-content/uploads/Final-USBR-Cost-Allocation-Methodology-Cmt-Letter-6-4-2014-IFR-Coalition....pdf>

<http://calsport.org/news/wp-content/uploads/PCL-et.-al.-Cmts-Re-Draft-CVP-Cost-Allocation-Study-April-2019.highlight....pdf>

<http://calsport.org/news/wp-content/uploads/PCL-IFR-Coalition-CVP-Cost-Allocation-Completion-October-2019-Cmts.pdf>

the permanent WIIN Act water repayment contracts⁶, pursuant to CVPIA §3404(c)(2), these financial obligations should be specifically incorporated in the new CVPIA conversion contracts.⁷

These permanent water conversion contracts, along with the proposed changes to restoration funding, clearly are designed to limit water contractors' exposure to meeting the cost of the environmental restoration purposes of the CVPIA. This is unacceptable and thwarts the goals of CVPIA. In the case of the largest CVP permanent water contract for Westlands Water District, where Reclamation claims to annually allocate roughly two times the average water used by all of Los Angeles, this is done in several ways: (1) evading the specific incorporation of the obligation required by §3404(c)(2); (2) referring only to the RF obligation in the contract; and (3) adding Article 37, which is a blanket authorization for WWD to seek to repudiate that obligation in any forum in which it arises. All of this is counter to the CVPIA authority contained in §3406 (b)(1&23) and to some varying degree b(2-22). History has demonstrated that payments in excess of those to the RF: (1) are required of CVP contractors; and (2) have indeed been charged. Moreover, any changes need to explicitly state that these charges include any Endangered Species Act or Clean Water Act compliance costs that are fully reimbursable. We note that CVP ESA consultations assumed compliance and funding for *"other CVP-related, non-CVPIA actions benefiting fish, wildlife, and associated habitats and related effects of interim contract renewals will continue with at least current funding levels."*⁸ Finally, any reduction to the RF must clearly generate water and power charges to meet these reimbursable obligations. To avoid confusion, Reclamation needs to make the obligations clear in both the "true up" process and the permanent water contracts.

In addition, we urge Reclamation to use its authority to adopt additional mitigation and restoration charges for use of CVP conveyance facilities under Warren Act contracts. These pollution impacts are likely to impact low income residents, endangered species, and potentially cause additional subsidence and long term canal costs.⁹ Drainage costs and additional land retirement costs, along with the environmental impacts of the continued irrigation of the toxic soils within the San Luis Unit, need to be

⁶ WIIN Act § 4011

⁷ <http://calsport.org/news/wp-content/uploads/Environmental-Advocate-Comment-Letter-Re-Interim-Contract-Renewal-WWD-S....pdf>

⁸ See 01-F-0027 Friant Long Term Contracts Key Assumptions (page 2-55) <https://calsport.org/news/wp-content/uploads/2001-F-0027-Formal-Consultation-on-Friant-and-Cross-Valley-Div-LTCR.pdf>

02-F-0070 CVP Interim Contract Renewals 2002-2004 (pages 1-27) See: https://www.usbr.gov/mp/cvpia/3404c/env_docs/draft_ea_fonsi/sea_dft_app_c_app_f.pdf

2012-F-0256 CVP Interim Contract Renewals for Westlands WD contracts 2012-2014 (pages 1-27) See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=9287

2014-F-0035 CVP Interim Contract Renewals for Westlands WD contracts 2014-2016 (page 10) See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=16935

⁹ See https://calsport.org/news/wp-content/uploads/Env-Advocate-8_20_2020-Cmts-Re-DEA-for-WWD-Pump-in-SLC_Cal-Aqueduct-EA-....pdf

added, addressed, and disclosed.¹⁰ Failure will only further impact fish and wildlife resources including anadromous fish and water fowl in the Pacific Flyway.

Proportionality for the power contractors should not be calculated using a single year of water payments on a two-year lag. The result would upend the Restoration Fund during dry periods and make Reclamation unable to comply with the CVPIA environmental mandates. One solution would be to assess power contractors a set fee each year as a proportion of the \$30 million fee collection cap. Alternatively, the CVPIA defines proportionality on a 10-year rolling average basis. Reclamation could use that method to calculate power's share, using the past 10 years of water payments rather than one single year.

Changing the allocation of operation and maintenance costs from historic construction allocations to instead allocating these expenditures based upon the assumptions from the final CAS will also further exacerbate funding shortfalls to meet CVPIA obligations. As noted, the assumptions in the CAS shift millions of dollars from the water and power contractors due to faulty assumptions and non-transparent calculations. Further compounding these arbitrary changes, Reclamation is proposing yet another 'new methodology' where the proportion between water and power will be fixed as of 2013 unless new facilities are constructed that provide "new benefits" to the CVP. Using a "placeholder" to describe this new approach which would further reduce Restoration Fund receipts. The public is left in the dark as to what costs Reclamation will classify as reimbursable or non-reimbursable under this new as yet to be determined guideline.

We oppose the reclassification of reimbursable activities. As discussed above, the authority for this arbitrary action has not been provided or disclosed. CVP costs to implement Biological Opinions are reimbursable – whether funded through the RF or not. If RF collections are reduced, these activities should be excluded from the RF and charged as reimbursable activities. We also oppose the removal of tributary streams identified as critical to anadromous fish habitat mitigation and restoration from reimbursable CVP costs.¹¹ We oppose the proportionality constraints of no mid-year adjustment, no end of the year reconciliation, and the lack of stability for advance planning for the various CVPIA programs.

¹⁰ See “Comments on Tentative Waste Discharge Requirements (WDRs) for Surface Water Discharges from the Grassland Bypass Project in Merced and Fresno Counties” to Ashley Peters, Central Valley Regional Water Quality Control Board from PCFFA et al [22 Conservation, Fishery, Tribal and Community Organizations] <http://www.restorethedelta.org/wp-content/uploads/Fishing-Conservation-Grps-Cmt-Ltr-CV-RWQCB-WDRs-for-Federal-SLD-Grassland-Drainers-Discharge-11-6-19-.pdf>

¹¹ See <https://www.fisheries.noaa.gov/resource/document/biological-opinion-and-conference-opinion-long-term-operations-central-valley> & https://www.fws.gov/sfbaydelta/documents/SWP-CVP_OPs_BO_12-15_final_OCR.pdf & <https://calsport.org/dev/8-11-09.htm> *Slight increases in outflow (above normal and wet years only) and requirements to create 8,000 acres of habitat (with speculative results) do not equal full mitigation.* And RPA requirements not met including: Creating 3,500 acres of managed wetlands, restoring 17,500+ acres of floodplain, restoring 9,000 acres of tidal and sub-tidal habitat, restoring 1,000+ acres of aquatic, riparian and upland habitat, completing 5 fish passage improvement projects and creating 35,000 feet of riparian habitat. Further see pgs 659 to 669 near-term fish passage and long-term fish passage assumptions and RPA requirements. The majority of these actions have not been completed.

To be successful, a dependable and predictable source of funding was envisioned by Congress by establishing both the funding mechanisms contained in §3407 and §3406, along with other provisions of Reclamation law. The restoration contemplated by §3406 (b) (1) and (b) (23) do not have funding caps. The funding needs to be driven by the statutory objectives that are required to be achieved, as strongly recommended in the OMB review. As noted, these charges need to be assessed in each repayment contract and are subject to 100% reimbursability.

Our bottom-line recommendation is that Reclamation withdraw the proposed Guidelines and related “true-up” plans and proportionality plans. Instead, and before taking such actions, a complete environmental analysis and range of alternatives is needed along with complete disclosure of the calculated credits and impacts before proceeding. This analysis must include fish and wildlife agencies, who are equal partners in CVPIA, but have not been consulted regarding the proposed reductions. Moreover, only a limited number of water and power contractors were invited to comment on the "CVPIA True-Up and draft Business Practice Guidelines (BPG) provided by Reclamation on November 21, 2019." We appreciate Reclamation providing a copy of the power and water contractor comments, but note that none of the undersigned were provided notice of the opportunity to comment. This bias could be remedied by providing the public with a complete EIS analyzing the proposed reductions and changes in allocations for the CVPIA and the CVPIA RF. We believe this approach can be taken after the remanded case *NCPA v United States* determines what the limitation is upon Reclamation's ability to collect payments to the RF from power contractors. Acting prematurely by adopting formulas and guidelines that are "placeholders" without proper analysis and disclosure of the impacts will only further muddy the federal case. This will increase liability exposure for federal taxpayers and likely will invite even further litigation and costs to taxpayers.

Thank you for considering these comments. Please make sure the undersigned are included in any future USBR actions with regard to CVPIA as well as, CVP contract renewals and/or conversion of CVP contracts pursuant to Section 4011 of the WIIN Act. If you have any questions please contact John Buse, Senior Counsel Senior Attorney, Center for Biological Diversity, 1411 K St. NW, Washington, D.C. 20005 jbuse@biologicaldiversity.org.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



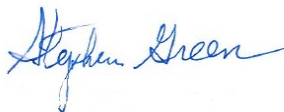
Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers Int.
mrockwell1945@gmail.com



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.com)
connere@gmail.com



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



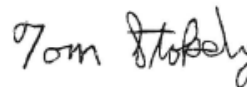
Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Gerald Neuburger
Representative
Delta Fly Fishers.
gneuburg@gmail.com



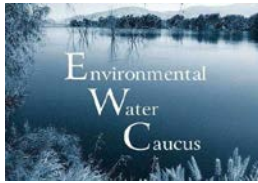
Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



CA Save Our Streams Council



August 31, 2020
Via Email and Regular Mail

Brenda Burman
Commissioner
U.S. Bureau of Reclamation
1849 C Street NW
Washington DC 20240-0001

Ernest Conant,
Regional Director
California-Great Basin Reg.Fed Bldg.
2800 Cottage Way
Sacramento CA 95825-1898

Erma Leal
Repayment Specialist - SCCAO-445
Dept. of Interior | Bureau of Reclamation
Interior Region 10 - California - Great Basin
South-Central California Area Office
1243 N Street, Fresno CA 93721

Re: Comments on Westlands WD Conversion Contract for Oro Loma Partial Assignment Contract under the WIIN Act § 4011.

Dear Commissioner Burman, Mr. Conant and Ms Leal;

The largest federal irrigation district in the nation, Westlands Water District (Westlands), is seeking another permanent water contract for the partial assignment from Oro Loma Water District. The cumulative total of Westlands contracts (including this assignment contract) is double the amount of water used by all the people of Los Angeles during 2018. As with Westlands' other repayment contracts authorized under the WIIN Act § 4011, this draft contract allows Westlands to escape limits on ownership acreage and full cost pricing, and sanctions irrigation with subsidized water on lands outside of the federally authorized service area boundaries. The contract would allow irrigation of lands known to

generate toxic drainage and runoff pollution. Further, there is no current arable irrigation map to guide the Secretary's decisions about eligible water contract deliveries.

Our organizations filed comments on the WIIN Act draft repayment contract for the Oro Loma Assignment Contract, as well as 14 other south of Delta contractors on August 20, 2020, and we incorporate those comments by reference.¹ In addition, our organizations filed comments to the U.S. Bureau of Reclamation (Reclamation) on (1) the Final WIIN Act Conversion Contract for Westlands on April 27, 2020, (2) draft WIIN Act Contracts for the American River Division and 5 Westlands Assignment Contracts in the Delta Division on February 15, 2020, and (3) draft Westlands WD Conversion WIIN Act Contract for 1.15 MAF & Exhibits. We incorporate these comments by reference.²

We provide these present comments specifically on the Westlands WD Conversion Contract for Oro Loma Partial Assignment Contract (Oro Loma Assignment), Contract No.14-06-200-7823J-LTR1-P for up to 4,000 acre-feet/year. Reclamation made this contract available for a 60-day public comment period closing on August 31, 2020.³ These comments supplement our organization's comments submitted on August 20, 2020, as noted above.

Oro Loma Partial Contract Assignment to Westlands

Oro Loma Water District is a CVP contractor in the Delta Division. On April 7, 1959, Oro Loma signed a long-term contract (Contract 14-06-200-7823) with Reclamation for 4,600 AF of CVP water (Reclamation 1959). This contract expired on February 28, 1995. Following a series of interim renewal contracts, Oro Loma negotiated a long-term renewal of its water service contract (Contract 14-06-200-7823-LTR1) which Oro Loma and Reclamation executed with an effective date of March 1, 2005 that will expire in 2030.

In February 2012, Reclamation signed a FONSI and Final EA (FEA)⁴ for a partial assignment of 4,000 acre-feet of Oro Loma Water District's CVP water to Westlands. As denoted in the FEA, poor soil conditions and a shallow groundwater table prevent landowners in Oro Loma from maximizing the beneficial use of this water supply. Consequently, Oro Loma has historically transferred much of their CVP water supply to other CVP contractors, such as Westlands, through the South-of-Delta (SOD) Accelerated Water Transfer Program authorized under Section 3405 of Central Valley Project Improvement Act (CVPIA, Title 34 of Public Law 102-575). Our organizations submitted comments on the draft EA for the Oro Loma Assignment and we incorporate those comments by reference (see Appendix B, pdf pgs 57-67).⁵

Legal Compliance Questions about Oro Loma's 2005 Long-Term Contract.

On February 25, 2005, Reclamation entered into a long-term contract with Oro Loma WD for the amount of 4,600 acre-feet of CVP water (14-06-200-7823-LTR1).⁶ Under Explanatory Recitals of Oro Loma's contract,

¹ <https://calsport.org/news/wp-content/uploads/8-20-20-cmt-ltr-Reclamation-more-Ks-final-for-pdf.pdf>

² http://calsport.org/news/wp-content/uploads/PCL_PCFFA-et-al_Comments-on-Final-Westlands-Permanent-Contract_4-27_-202....pdf

<http://calsport.org/news/wp-content/uploads/1-7-20-O-cmts-Reclamation-Westlands-k.pdf>

<http://calsport.org/news/wp-content/uploads/PCL-et.-al.-Comments-on-WWD-Permanent-Contract-Conversion-Jan-6-2020.pdf>

³ See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=71568>

⁴ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=9183

⁵ Ibid.

⁶ See: https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2005_exec_cts_water_serv/05_watersvc_oro_loma_wd.pdf

the 10th WHEREAS states the required condition of reasonable and beneficial use, but this requirement has not been met:

WHEREAS, the Contractor has demonstrated to the satisfaction of the Contracting Officer that the Contractor has utilized the Project Water supplies available to it for reasonable and beneficial use and/or has demonstrated projected future demand for water use such that the Contractor has the capability and expects to utilize fully for reasonable and beneficial use the quantity of Project Water to be made available to it pursuant to this Contract;

Questions about Oro Loma WD's capability to utilize their CVP contract for reasonable and beneficial use were described in the 2006 San Luis Drainage Feature Re-evaluation (SLDFR) Final EIS⁷ @ pg 1-10:

Oro Loma Water District's CVP contractual supply is in the process of being assigned, and only about 90 acres within the district were irrigated in 2005.

Additional questions are raised because the remaining 600 acre-foot allocation to Oro Loma WD is not included in the WIIN Act Negotiated Draft Conversion Contracts.⁸ Additionally, much if not all of the land within Oro Loma WD was included in the Grassland Bypass Project's Long Term Stormwater Management Plan as part of a new proposed drainage reuse area and depicted in the figures below. The first figure below delineates water districts neighboring Panoche WD, including Oro Loma.⁹ The second figure is from the San Luis and Delta Mendota Water Authority's CEQA Initial Study, Grassland Bypass Project – Long-term Storm Water Management Plan for the Grassland Drainage Area.¹⁰ We question the legality of how Oro Loma WD has a CVP water contract as they admittedly cannot and have not put the water to beneficial use for irrigation of lands within the district and the lands are not irrigable in accordance with the requirements of Reclamation law.

⁷ See SLDFR FEIS, purpose and need at: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=61

⁸ See: <https://www.usbr.gov/mp/wiin-act/negotiated-conversion-contracts.html>

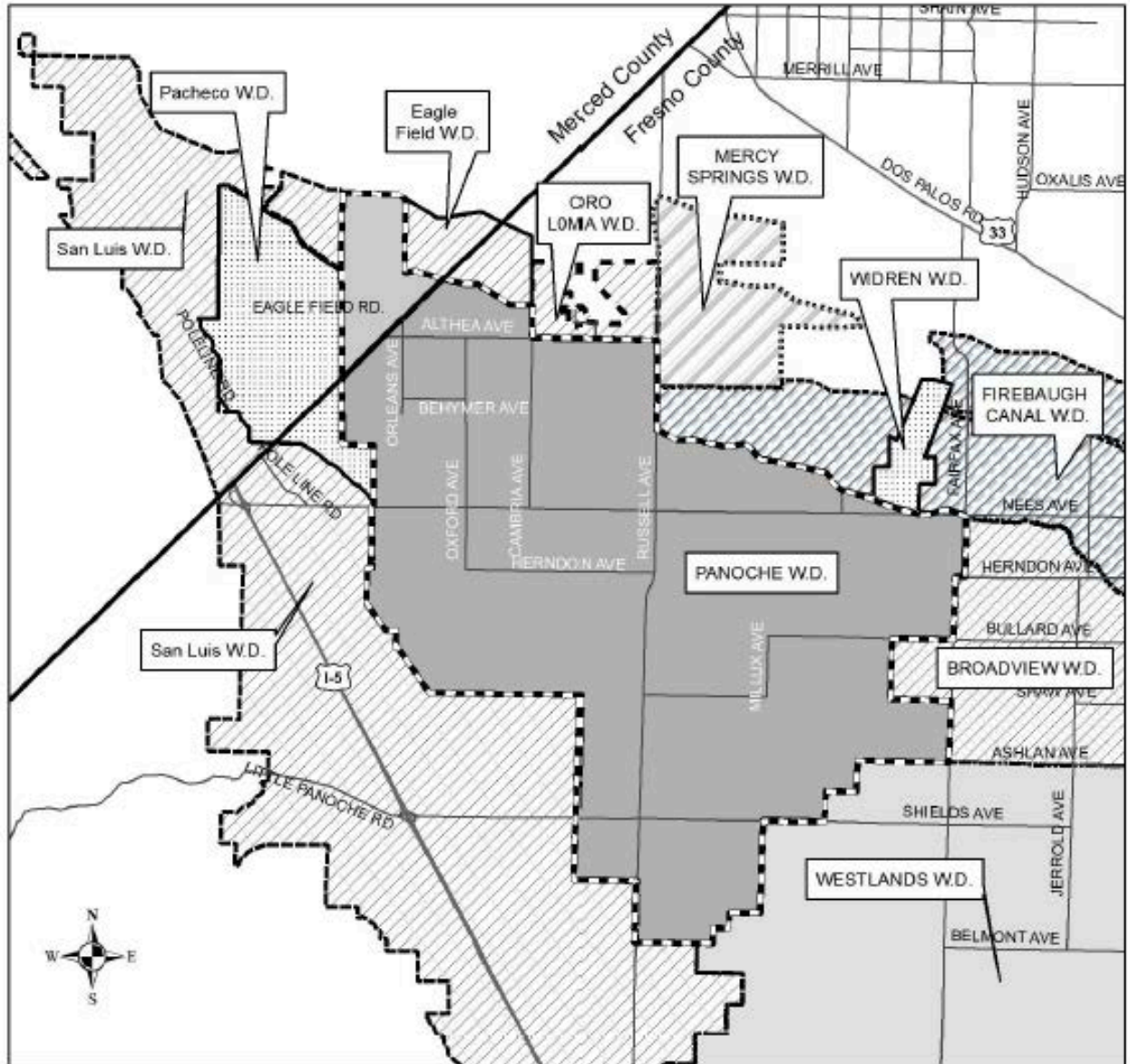
⁹ See page 16 in: <http://www.fresnolafo.org/documents/MSRs/Panoche%20WD%20MSR%20Draft.pdf>

¹⁰ See @pdf pg 149 in: <http://sldmwa.org/grasslandbypass/LTSWMP%20Initial%20Study%20080519.pdf>

Figure 3 – Panoche Water District and Neighboring Agencies

Fresno Local Agency Formation Commission
Panoche Water District

Note: District lies in Multiple Counties.



- Panoche Water District Area and SOI, Fresno
- Panoche Water District, portion in Merced County

Water Districts (California), Fresno County

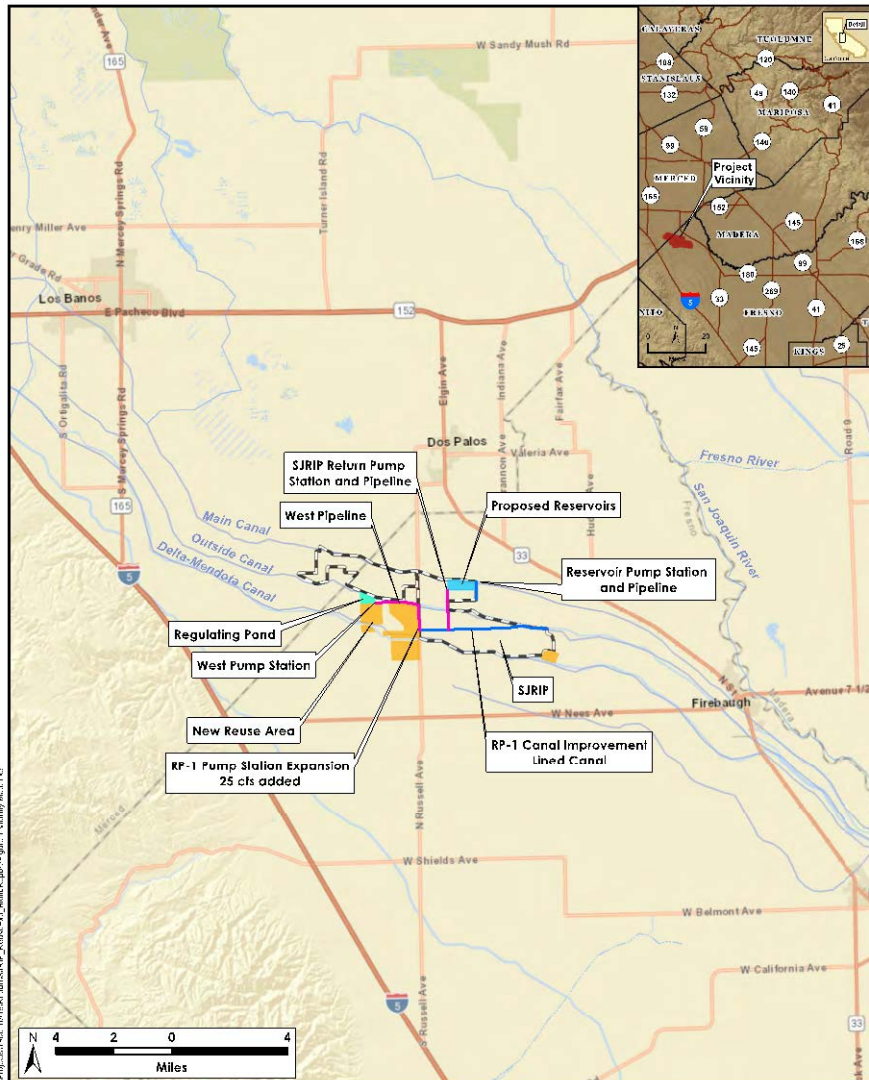
- Broadview W.D.
- Firebaugh Canal W.D.
- Mercy Springs W.D.

Water Districts (California), Merced County

- Oro Loma W.D.
- Westlands W.D.
- Widren W.D.

Water Districts (California), Merced County

- Eagle Field W.D.
- Pacheco W.D.
- San Luis W.D.



H. T. HARVEY & ASSOCIATES
Ecological Consultants

Figure 1. Vicinity Map of the San Joaquin River Water Quality Improvement Project
Proposition 84 Storm Water Improvements and SJRIP Expansion Biotic Report (1960-18)
December 2018

CVP Water Assignments have been used by Reclamation as a means to Avoid Requirements of CVPIA § 3404(a).

The Central Valley Project Improvement Act (CVPIA) [Section 3404(a)] provides that, "Except as provided in subsection (b) of this section, the Secretary shall not enter into any new short-term, temporary, or long-term contracts or agreements for water supply from the Central Valley Project for any purpose other than fish and wildlife before: the provisions of subsections 3406(b)-(d) of this title are met..." The provisions of CVPIA subsections 3406 (b)-(d) include the Anadromous Fish Restoration Program, the Supplemental Water Acquisition Program, San Joaquin and Stanislaus rivers restoration programs, and the Refuge Water Supply Program. Much of the water supplies used by these programs have been from annual spot market purchases, and do not constitute firm CVP contract supplies. The price of these environmental water supplies is increasing as the price per acre foot continues to rise. And yet the contract provides this water permanently to

Westlands at a reduced rate without required CVPIA reimbursable environmental obligations specified in the contract.

We point to the language in Reclamation's 2012 EA for the Oro Loma partial assignment to Westlands.¹¹ The language in the EA suggests that Oro Loma was unable to beneficially use their CVP contract supply due to unsuitable soil and drainage conditions. The inability of Oro Loma WD to use their CVP contract for beneficial use within the district should have been justification to reduce or eliminate the CVP contract amount to Oro Loma and reallocation for unmet CVPIA obligations, rather than a water assignment to Westlands:

EA @ pg 9: *Oro Loma is comprised of approximately 965 acres in northwestern Fresno County. Total acreage under irrigation and the types of crops grown in Oro Loma have changed little over time due in large part to constraints posed by high concentrations of salt and boron that naturally occur in the soils and a high, shallow water table requiring artificial drainage. Oro Loma does not pump groundwater and CVP water obtained from in-Delta pumping is its sole source of surface water.*

EA @ pg 10: *As Oro Loma cannot beneficially use their entire contract supply, the assignment would help to balance out deficiencies within Westlands*

Reclamation continues to use CVP Water Assignments as a vehicle to avoid requirements of CVPIA § 3404(a). In March 2020, Reclamation signed a FONSI/EA on new water assignments from Mercy Springs and Fresno Slough WDs (both Delta-Mendota Unit CVP contractors) to Angiola Water District.¹² Angiola WD is a non-CVP contractor in the Tulare Basin that is outside of the CVP Place of Use as established by the SWRCB.¹³ Allocating federal water outside of the State permitted Place of Use, and without consideration of CVPIA fish and wildlife restoration programs is a violation of the law, including the CVPIA § 3404(a).

The Draft Contract Fails to Comply with CVPIA § 3404(c)(2)

CVPIA Section 3404(c)(2) states: *“Upon renewal of any long-term repayment or water service contract providing for the delivery of water from the Central Valley Project, the Secretary shall incorporate all requirements imposed by existing law, including provisions of this title, within such renewed contracts. The Secretary shall also administer all existing, new, and renewed contracts in conformance with the requirements and goals of this title.”* The draft contract does not contain within the *contract terms* explicit language that is enforceable between the parties as required by CVPIA Section 3404(c)(2). This section requires that provisions of law be written as contract terms enforceable between the parties. Exhibit C of the draft contract (Unpaid Construction Cost), provides no repayment for required Trinity River Division (TRD) facilities or CVPIA restoration activities. Enforceable contract provisions of law that must be written as contract terms enforceable between the parties include, for example:

- *Section 3406 (b)(1), which requires the doubling of thenatural production of anadromous fish in Central Valley rivers and streams that will be sustainable... shall make all*

¹¹ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=9183

¹² See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=33881

¹³ See: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/eirs/eir1999_ccpou/docs/ccpoufeir.pdf

reasonable efforts consistent with the requirements of this section to address other identified adverse environmental impacts of the Central Valley Project not specifically enumerated in this section.

- *Section 3406(b)(2), which authorizes and directs the dedication of up to 800 thousand AF (TAF) of CVP water for environmental purposes.*
- *Section 3406(b)(23), which addresses restoration efforts for the Trinity River Division (TRD).*
- *Section 3406(d), which requires firm CVP water supplies amounting to 480 TAF to be delivered to federal, state and some private wildlife refuges.*

Failure to Comply with the Coordinated Operations Act of 1986.¹⁴

The Oro Loma partial assignment draft contract omits the obligation by the contracting parties to comply with water quality standards specified in PL 99-546. This language was omitted from this draft contract: "water quality standards specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or other existing Federal laws." Instead the quality of water and operations are left to the Contracting Officer. Congress directed that the United States and its Contractors operate the CVP in conformity with State water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta and Estuary and to operate the CVP so that water supplied at the intake of the Contra Costa Canal is of a quality equal to the water quality standards contained in the Water Right Decision 1485 of the State of California Water Resources Control Board, dated August 16, 1978, except under limited conditions. We know of no law that authorizes Reclamation to change this Congressional direction in a contract. This substantially changes the terms of the contract and obligations to meet state water quality standards. Changing the water quality protection standards to some undefined term as "what is feasible" also has significant environmental impact and has not been analyzed nor the endangered species impacts considered.

Also required under Section 102 of Public Law 99-546—OCT. 27, 1986 100 STAT. 3051, the contract needs to provide for repayment of D-1485 salinity costs and complying with State water quality standards. The modified Final contract does not include these reimbursements and repayment of these costs.

Questions about Capital Repayment Obligations in the draft contract for the Oro Loma Assignment.

Exhibit C of the draft contract for the Oro Loma Assignment denotes repayment costs for the San Luis Canal (Federal/State portion of the California Aqueduct) facility. We note that Oro Loma WD, as a Delta Division contractor, received its water from the Delta Mendota Canal, not the San Luis Canal. There have been several CVP water assignments that have changed the conveyance canal from the Delta Mendota Canal to the San Luis Canal (e.g., Broadview, Mercy Springs 2-way, Mercy Springs partial, Centinella, Mercy Springs and Fresno Slough, and Oro Loma). All of these assignments raise questions as to who will meet the repayment obligations owed for the DMC capital construction costs? Does the repayment obligation go to the facility that delivers the assigned water? If not, are the remaining and shrinking contractors on the DMC responsible for the Oro Loma capital costs owed for the construction of the DMC? And if so, does that create an increased financial burden of repayment for the remaining Delta

¹⁴ See Section 101 and Section 102: <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg3050.pdf>

Mendota Canal (DMC) CVP contractors along the DMC? This impact and the financial effect needs to be disclosed, addressed and analyzed in a full EIS review of these contracts.

A Complete Draft of the Contract Exhibits has not been provided

Draft contract exhibits provided online are incomplete and, thus, fully informed public comment has been precluded. Problems with the exhibits¹⁵ include:

1. **Exhibit A – Map of Contractor’s Service Area**—The map of WWD’s service area is not consistent with Congressional authorization and the map contained in the San Luis Unit Feasibility Study.¹⁶ The required updated irrigation suitability land classification maps and the systematic evaluation of lands with respect to suitability for agricultural production under irrigation are not provided. As noted, there also are numerous and significant variations of the Oro Loma WD that are not reflected in the map.
2. **Exhibit B – Rates and Charges** [*-- This Exhibit template is unchanged from current Contract and is updated annually. Rate Schedules may be found at: <https://www.usbr.gov/mp/cvpwaterrates/ratebooks/index.html>*] Two DOI Inspector General Reports have indicated the amounts being charged CVP contractors are insufficient to repay the capital costs owed.¹⁷ Reclamation law and policy require a contract to ensure that sufficient rates are charged to repay federal taxpayers. The undersigned have provided comment on how the proposed cost allocation will impact environmental protections and take additional money from the federal treasury without adequate repayment, as required.¹⁸ We adopt those comments by reference.
3. **Exhibit C – Repayment Obligation** (Exhibit D in previous contracts) —This is just a placeholder. Moreover, this is apparently going to change further: "*This Exhibit template was developed during the WIIN Act Negotiations. Relevant data will be incorporated upon contract execution.*" The public was not notified of the contract negotiations, as required, and have been effectively excluded from the negotiations. The public and decision makers are left in the dark as to what this repayment obligation is or will be.

¹⁵ See: <https://www.usbr.gov/mp/wiin-act/docs/oroloma-wwd-exhibits-a-b-c.pdf>. Posted 6-30-20.

¹⁶ In 1956, the Bureau of Reclamation delivered to the United States Congress, “A Report on Feasibility of Water Supply Development” for the San Luis Unit (the 1956 Feasibility Report), which recommended constructing a group of water management facilities, called the San Luis Unit, as an addition to the Central Valley Project, in order to bring irrigation waters to an area of approximately 496,000 acres in the San Joaquin Valley. In 1960, Congress passed the San Luis Act, Pub. L. No. 86-488, 74 Stat. 156 (1960) authorizing water deliveries to 500,000 acres for the entire unit consistent with the Feasibility Report, see § 1(a). Also see LAND Exhibit 299

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/land.html

¹⁷

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/and.html & 2004 DOIG *Central Valley Contract Renewal Process August 2004* [OIG Report No W-IN-BOR-0016-2004

¹⁸ <http://calsport.org/news/wp-content/uploads/Conservation-Fishing-and-Tribe-Cmts-RE-CVP-Cost-AllocationStudy-Burman-1-2-2020-.pdf>

4. **Water Needs Assessments are not Included** -- We note that previous Westlands contracts have included an **Exhibit C - Central Valley Project Water Needs Assessments**. No such exhibit including a water needs assessment was provided with the Oro Loma partial assignment contract. Reclamation is contractually required to conduct a proper water needs assessment, and without a current water needs assessment, there is no way for the public or decision makers to know if Westlands needs equal the current total contract quantity.¹⁹

Conclusion and Recommendations

This draft contract is riddled with gaps and undisclosed provisions, as detailed in the following attached comments. Hundreds of thousands of dollars to be repaid by Westlands are deleted without explanation. Sections of the proposed contract are missing and others remain undisclosed. The true amount of water to be provided is not disclosed to water users in the Delta, North of the Delta, South of the Delta, the San Joaquin Valley and Southern California. True costs and subsidies are misrepresented or just omitted. Key examples include:

- Congressionally mandated limits on the water service area are left to the discretion of the functionary contracting officer and Westlands to modify. We know of no Reclamation regulation or law that grants such authority to a contracting officer to deliver water outside of the Congressionally designated service area. Further, this provision of the Contract directly contradicts the specific acreage specified for delivery to the San Luis Unit.²⁰
- The draft contract fails to comply with (1) the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq., (2) the Endangered Species Act (ESA), 16 U.S.C. §1531 et seq., (3) Federal Reclamation law, (4) CEQA Public Resources Code 21000-21189 and CESA Cal. Fish & Game Code §§2050-2106.5, and (5) CVPIA in general and specifically Section 3404(c)(2) which requires that provisions of law be written as contract terms enforceable between the parties. These enforceable provisions of law required by the CVPIA are absent from the contract.
- The Contract evades water quality requirements specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) Federal Coordination Act 3or other existing Federal laws, by omitting these water quality obligations and the obligation to meet repayment by 2030.
- New cost allocation formulas as of January 2020 and other Reclamation actions reduce the amount Westlands owes for repayment of its contracts by over 120 million dollars. This contract assignment further depletes the US Treasury by not recovering all capital costs owed.
- Cumulative impacts are ignored. Reclamation is in the process of converting virtually all CVP water service contracts, about 77 of them, into permanent water repayment 9(d) contracts similar to this draft contract.²¹ Pursuant to NEPA, “cumulative impact” “is the impact on the environment which

¹⁹ See: https://www.usbr.gov/mp/cvpia/3404c/process_info/cont_policies/3_cvp_policies/01_02-22-99.pdf and <https://pcffa.org/wp-content/uploads/2016/07/102-7-25-16-Amended-Memorandum.pdf> pg 7

²⁰ See PL 86-488: *Be it enacted by the Senate and House of Representatives of the United States of America in Congress That (a) for the principal purpose of furnishing water for the irrigation of approximately five hundred thousand acres of land in Merced, Fresno, and Kings Counties, California, hereinafter referred to as the Federal San Luis unit service area.* emphasis added.

²¹ On December 20, 2019, Reclamation gave public notice on its web site that 77 contractors had requested contract conversions. The same notice said that 14 of the contract conversions had already been negotiated and the public comment period on those contract conversions would close on February 19, 2020. The subject contracts were spread among the Central, Northern, and South Central California Area Offices.

results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. . . .” (NEPA Regulations § 1508.7.) The cumulative environmental impacts of converting all of Reclamation’s contracts into permanent contracts will be enormous and adverse, but have not been considered.

We urge you to deny the Westlands’ contract conversion and that the process be restarted with proper public transparency and following established legal requirements including a full EIS review as required by the CVPIA and NEPA. We request public contract negotiations be held and that adequate notice is provided, especially in the counties and areas from which the proposed irrigation water is taken. Furthermore, these negotiations should not be held until a full environmental impact statement is completed, endangered species consultation is provided, and an accurate irrigable land map is provided along with a complete draft and exhibits (including a water needs assessment) of the proposed contract.

A summary of our comments follow. For detailed comments, we refer Reclamation to our August 20, 2020, April 27, 2020, February 15, 2020, and January 6, 2020 comments on Westlands contracts.

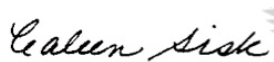
Thank you for considering these comments. Please make sure the undersigned are included in any future Westlands actions with regard to CVP contract renewals and/or conversion of CVP contracts pursuant to Section 4011 of the WIIN Act. If you have any questions please contact John Buse, Senior Counsel Senior Attorney, Center for Biological Diversity, 1411 K St. NW, Washington, D.C. 20005 jbuse@biologicaldiversity.org. Please find our detailed comments attached.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.org)
caleenwintu@gmail.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net

See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=69044>

Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com

Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org

Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers Int.
mrockwell1945@gmail.com

Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com

Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com

Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com

Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net

Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net

Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net

Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org

DETAILED COMMENTS ON THE WESTLANDS' _ORO LOMA

MODIFIED PERMANENT CONTRACT

I. The Secretary is Authorized to Contract for the Delivery of Project Irrigation Water Only to Lands with Characteristics that Allow Delivery--this draft contract Violates that Mandate.

Westlands contract water from the CVP is being provided outside of the Congressionally designated service area and no updated irrigable lands map has been provided. Public Law 99–546, 100 Stat. 3050. (Coordinated Operations Act) Sec. 305. § 4(c) of the Act requires, among other things, that the Secretary must show that lands receiving project water are capable of "*successful irrigability of those lands and their susceptibility to sustained production of agricultural crops by means of irrigation has been demonstrated in practice. Such proposal shall also include an investigation of soil characteristics which might result in toxic or hazardous irrigation return flows.*" No such documentation and evidence has been provided in support of the proposed permanent water contract to irrigate these lands referenced in Exhibit A of the proposed contract. In fact, the San Luis Drainage Feature Re-evaluation (SLDFR) EIS found that roughly 300,000 acres of the lands proposed for irrigation under this and other CVP contracts to Westlands are drainage-impaired²² and will generate "toxic or hazardous irrigation return flows" to ground or surface waters. Indeed, current practice results in some of these toxic flows being discharged to the California Aqueduct without proper Clean Water Act permits or consideration of hazardous conditions for fish and wildlife.²³

The proposed permanent contract for the Oro Loma partial assignment contract to Westlands in combination with Westlands other contracts delivers water to lands that are unsuitable for irrigation and to other lands that are outside of Congressional authorization to receive federal water.²⁴ Further, irrigation of lands that are unsuitable for irrigation could obligate the federal government to furnish something that has been unattainable for decades—drainage service.

²² See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=61

²³ https://calsport.org/news/wp-content/uploads/Env-Advocate-8_20_-2020-Cmts-Re-DEA-for-WWD-Pump-in-SLC_Cal-Aqueduct-EA-....pdf

https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-WWD-SLC-Pump-in-2020-IS_ND_6-10-2020-Cal-Aqueduct.pdf

<http://calsport.org/news/wp-content/uploads/PCL-et.-al.-Cmts-Re-WWD-Interim-Contract-12-14-19.pdf>

<http://calsport.org/news/wp-content/uploads/Conant-Burman-Ltr-Re-Extension-of-Cmt-Re-SLD-Discharges-UseAgreement-12-10-19.pdf>

<https://calsport.org/news/wp-content/uploads/CBD-PCL-et.-al-Cmt-Ltr-Cross-Valley-Interim-Contract-12-12-2019.pdf> & <https://calsport.org/news/cspa-comments-on-bureaus-cvp-cross-valley-contracts/>

²⁴ See San Luis Act of 1960 Section 1(a) *for the principal purpose of furnishing water for the irrigation of approximately five hundred thousand acres of land in Merced, Fresno, and Kings Counties, California, hereinafter referred to as the Federal San Luis unit service area.*

<https://www.govinfo.gov/content/pkg/STATUTE74/pdf/STATUTE-74-Pg156.pdf>

The drainage obligation does not exist, however, if water service to these lands is cut off because of the impracticability of irrigation. This alternative—cessation of irrigation water from unsuitable lands—is mandated by law and regulation.²⁵ The toxic drainage, groundwater pollution, and surface water pollution is created in large part by the Reclamation’s deliveries of CVP water to these non-irrigable lands. Reducing water service instead of expanding it is the obvious solution. Controlling or eliminating the supply of drainage water by eliminating deliveries to these identified toxic soils will control the demand for drainage and the enormous costs estimated at \$2.6 billion. Westlands' land uses have changed significantly²⁶ within the proposed contract acreage. These land use changes, together with cessation of delivery to these lands impracticable of irrigation without generating pollution, must be considered. The unauthorized financial obligation inferred by issuing the proposed permanent water contract must be addressed.²⁷

II. A Full EIS analysis under NEPA is Required.

As noted in our August 20, 2020 comments, given the numerous potential environmental effects associated with Westlands' water deliveries, including the Oro Loma partial assignment, a full EIS and ESA analysis must be completed prior to converting the existing contracts to permanent contracts. The CVPIA Programmatic EIS and Biological Opinion provided a framework whereby future CVP-related actions, including interim and long-term CVP water contract renewals, could be reviewed for site-specific impacts under NEPA and ESA.

In comments submitted in 1999 by the USEPA to the Bureau of Reclamation on Long Term Contract Renewals for the CVP, EPA recommended that an EIS should be the level of review for contract renewals: *“an EIS should be assumed the appropriate level of analysis for contract renewals, especially considering the many regional and localized concerns which were not covered in the CVPIA PEIS; e.g. water quantity, water quality, or specific terms and conditions for contract renewals.”*²⁸ Further, in comments on CVP Long Term Contracts in 2000 the USEPA argued that, *“long term water service contracts are not and should not be permanent entitlements, but rather that*

²⁵ Continuing to provide project water to these toxic soils would require approval from Congress to increase the authorized appropriation cap under the San Luis Act. Also see Reclamation Directives and Standards PEC P12 for required continuing investigations into land classification and suitability for irrigation for the delivery of project water.

²⁶ Industrial uses including massive utility land conversion in thousands of acres has replaced irrigated agricultural uses and yet the contract is silent regarding the rates and interest owed on these land use changes along with water use changes. See the maps referenced in previous comments: <http://calsport.org/news/wp-content/uploads/PCL-et.al.-Cmts-Re-WWD-Interim-Contract-12-14-19.pdf>

²⁷ The 2008 Feasibility Report sent to Congress explained that “Federal interest is established either by legislation or through an evaluation of a proposed action relative to the agency's mission” and that, to be federally implementable, an action “must be feasible as defined by the Economic and Environmental Principles and Guidelines (Principles and Guidelines). The Principles and Guidelines require Federal actions contribute to the national economic development (NED).” The 2008 Feasibility Report continued: The San Luis Act of 1960 as amended establishes the Reclamation's Federal interest in the proposed action. However, the requirement for a net positive contribution to the Nation's economy cannot be met by either of the two action alternatives. The 2008 Feasibility Report concluded the action alternative selected by the Bureau was not appropriate for implementation according to the government’s own accepted standards.

²⁸ <https://archive.epa.gov/region9/nepa/web/pdf/cvprenew.pdf>

*they should be subject to review at the end of each contract period to reevaluate water supply and environmental conditions in a rapidly changing state.”*²⁹ Locking in these paper water supplies in perpetuity artificially inflates Westlands' allocation during times of shortage and results in shortfalls to other contractors and the environment.

The following impacts from Westlands contract conversion and this assignment contract conversion are significant and should be addressed in a full EIS:

1. Effects to the San Francisco Bay-Sacramento and San Joaquin River Delta Estuary.

There have been repeated violations of the Clean Water Act standards³⁰ and Endangered Species Act requirements under the Reasonable and Prudent Alternatives. CVP operations and the exports of water pursuant to this interim contract have consistently violated the Coordinated Operation Act of 1986, which requires adherence to Delta Water Quality Standards contained in D-1485 and subsequent water quality standards.

The operations of the Federal Central Valley Project and State Water Project (Water Projects) have caused devastating environmental impacts and have contributed to severe declines in California's native fish species, several of which are now listed as endangered or threatened species under the Endangered Species Act. Specifically, Water Projects operations have been major factors in the decline of the endangered Sacramento River winter-run Chinook salmon (“winter-run Chinook salmon”), threatened Central Valley spring-run Chinook salmon (“spring run Chinook salmon”), threatened Central Valley steelhead, threatened Green Sturgeon and threatened Delta Smelt, and in the listing of these and other species under the Endangered Species Act. Further, species not currently listed, such as longfin smelt and Sacramento splittail, are also being adversely affected by Water Project operations.

2. Effects to Indian Trust Assets in the Trinity River must be assessed and disclosed.

The Yurok and Hoopa Tribe's fishing and associated water rights in the Trinity River are Indian Trust Assets. Protection of the Indian Trust Assets for the Hoopa, Yurok and Winnemem Wintu people require sufficient water to remain within the Tribe's watershed so that their fishery resources will thrive, not merely survive.³¹ As the Hoopa Tribe commented as far back as 2010, the CVP water diversions to Westlands and other west side San Luis Unit contractors, significantly impact their Indian Trust Assets:

“...It is irrelevant to the environmental review that the Tribe's reservation is not in the vicinity of the Proposed Action Area. The water to which the Tribe has a right and whose use is essential to its

²⁹ <https://archive.epa.gov/region9/nepa/web/pdf/cvpkrenowals.pdf>

³⁰ Of particular note, the SWRCB, referencing WR Order 90-05, stated in WR 92-02 at page 9: *The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery.* SWRCB warned against USBR decisions to maximize water deliveries in the initial years of a drought and failing to maintain sufficient carryover storage to protect fisheries and public trust resources.

³¹ *Federal court: Tribal water rights outrank farmers' rights* Associated Press 11/25/2019 See <https://www.cherokeephoenix.org/Article/Index/113786>

*fishery resources is being delivered and will continue to be delivered pursuant to the proposed federal action from the vicinity of the reservation to the contractors' area by CVP facilities that divert water from the Tribe's watershed."*³²

3. Effects to Listed Species: the required Endangered Species Consultation has not been completed or made available to the public.

For any federal action that may affect a threatened or endangered species or its habitat, the agency contemplating the action, otherwise known as "the action agency" (here, the Bureau of Reclamation), must consult with the appropriate "consulting agency" (here, the FWS and NMFS), for the purpose of ensuring that the federal action is not likely to: (1) jeopardize "the continued existence of" an endangered or threatened species; and (2) that the federal action will not result in the "destruction or adverse modification" of the designated critical habitat of the listed species. 16 U.S.C. § 1536(a)(2).³³ For Westlands' contract conversion and this permanent contract assignment contract, Reclamation is required to request both FWS and NMFS to complete a formal Section 7 consultation under the ESA.

Terrestrial federally listed species that could be affected by Westlands' water deliveries and contract conversion include:

Mammals: San Joaquin kit fox, Fresno kangaroo rat, Giant kangaroo rat, Tipton kangaroo rat,
Reptiles: Blunt-nosed leopard lizard;
Plants: San Joaquin woolly-threads, and California jewel flower.

Threats to these species include loss of habitat to cultivation, conversion of land to other uses, use of rodenticides, herbicides and pesticides, any of which could decimate small, isolated populations.

Supporting documentation for this USEPA Docket for Selenium in California includes 2 reports by USFWS: Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries (includes a list of species considered most at risk for selenium exposure in CA)³⁴ and Species at Risk from Selenium Exposure in the San Francisco Estuary.³⁵ The species identified as most at risk from selenium exposure from agricultural drainage contamination in the San Joaquin Valley and San Francisco Estuary include:

Mammals: Buena Vista Lake Ornate Shrew;
Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
Reptiles: Giant Garter Snake;
Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

³² See January 29, 2010 Letter to Rain Healer, USBR from Joseph Membrino Re: Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts. pg 3.

³³ <https://www.fws.gov/endangered/laws-policies/section-7.html>

³⁴ <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0144&contentType=pdf>

³⁵ <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0265&contentType=pdf>

4. Effects of Drainage from Westlands Caused by Imported Irrigation Water from the CVP are Significant and Complex and Must be Addressed in a Comprehensive EIS.

Federal and State law prohibit degradation of the waters of the State and Nation. The proposed water contract assignment and contract conversion, in addition to the other Westlands contract conversions, would allow the continued delivery of CVP water to lands known to create pollution when applied to irrigate these soils without data or substantive environmental analysis of the effects of drainage contamination from Westlands or Reclamation. This drainage pollution can deform fish and wildlife, impair reproduction, and reduce survival. These adverse impacts affect trust resources including migratory birds, anadromous fish, and federally and state listed species. Continued delivery of water to these soils, as contemplated by this contract renewal, will degrade the waters of the State and Nation. The USEPA, in their comments on San Luis Unit Long Term Contract Renewals (@ pg 4 of Attachment A), concluded that, “*the Drainage solutions and features relied upon to implement these solutions should not be separated from the implementation of long-term water contracts.*”³⁶ Yet that is exactly what Reclamation has done with this contract conversion for Westlands.³⁷

A comprehensive assessment of drainage problems in Westlands has not been conducted since 1980’s. A major planning effort to devise a drainage plan for the San Luis Unit was completed in 2006, with the San Luis Drainage Feature Re-evaluation (SLDFR) Final EIS. Yet much of the data in the SLDFR FEIS for Westlands, which was used to define the drainage problem and help with modeling analyses, was derived from 1980’s data of groundwater conditions in Westlands (CH2MHill 1985).³⁸

The USEPA in their comment letter on the Draft EIS and Supplemental Information for Renewal of Long Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006, @ pg 5 and 6 of Attachment A) found that, “*Subsurface drainage flow comes in part from the Westlands Water District and other water districts upgradient of the northerly [San Luis Unit] districts with high selenium/Total Dissolved Solids (TDS) concentrations ([USBR SLDFR] Plan Formulation Report Addendum, July 2004).*” EPA recommended that the FEIS for San Luis Unit Long Term Contracts should include information on the relationships between irrigation in the San Luis Unit (including Westlands) and groundwater movement downslope, in terms of flow and water quality. EPA further noted that Reclamation should provide information on the San Luis Unit’s role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as “*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*”³⁹

³⁶ Ibid.

³⁷ <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68443> USBR October 25, 2019 *Reclamation releases draft repayment contract for Central Valley Project contractor. And Reclamation extends the public comment period for the released draft repayment contract for Central Valley Project contractors* <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68567>

³⁸ Westlands North, South and Central drainwater quality was estimated in the SLDFR FEIS by geostatistical analysis using TDS concentrations and 1980’s groundwater data (SLDFR FEIS Appendix C, page C-39) https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

³⁹ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

5. Environmental Impacts from Groundwater pump-ins in the California Aqueduct need to be disclosed and mitigated.

Polluted groundwater from Westlands is being pumped into the California Aqueduct as part of a Warren Act Contract approved by USBR in 2015 and proposed for renewal in 2020 despite records showing elevated levels of selenium, arsenic, and boron in this groundwater.⁴⁰ Our organizations submitted comments dated June 10, 2020 on the Initial Study/Negative Declaration and dated August 20, 2020 on the Draft Environmental Assessment for these groundwater pump-ins, and these comments are incorporated by reference.⁴¹

6. Drainage Contamination in Grasslands Wetland Channels must be disclosed.

The Grasslands Wetland Channels are listed as impaired for selenium on the State's 303(d) list⁴² and elevated selenium in those channels could be harming aquatic-dependent fish and wildlife resources including federally listed species such as the threatened giant garter snake. The undersigned organizations have long-standing interests in the Grassland Bypass Project (GBP) because contaminants in agricultural drainage discharges have profound effects to the environment, including effects to downstream waterways, aquatic life, and migratory birds. Westlands' upgradient irrigated lands contribute to drainage discharge into the San Joaquin River. We hereby include our previous comments on the GBP EIR/EIS Basin Plan Amendment by reference.⁴³ We also include our comments submitted to Reclamation December 23, 2019 on the Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area (Draft EA-19- 029) by reference.⁴⁴

⁴⁰ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=21021 and https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=46184

⁴¹ See: https://calsport.org/news/wp-content/uploads/Env-Advocate-Cmts-WWD-SLC-Pump-in-2020-IS_ND_6-10-2020-Cal-Aqueduct.pdf and https://calsport.org/news/wp-content/uploads/Env-Advocate-8_20_2020-Cmts-Re-DEA-for-WWD-Pump-in-SLC_Cal-Aqueduct-EA-....pdf

⁴² See: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/01657.shtml#34338

⁴³ See: https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_cwin.pdf and

https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015may/2015_05_gbp_com_pcffa.pdf

⁴⁴ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41546

7. The San Francisco Bay/Delta continues to be impacted by selenium from agricultural drainage.

The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta, including Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta, are listed as impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).⁴⁵ Sources of selenium contamination include agricultural drainage from the Central Valley and effluent discharges from oil refineries (Linares et al 2015; Presser and Luoma 2010). At risk species include federally listed as threatened or endangered, green sturgeon, Chinook salmon, steelhead trout, delta smelt, Sacramento splittail and the California Ridgway's rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters.

Our organizations submitted comments to USEPA on the proposed selenium water quality and tissue criteria for the Bay Delta supporting more protective water quality criteria and hereby incorporate those comments by reference.⁴⁶ The selenium discharges from the GBP and upgradient irrigated lands in Westlands will cause deleterious effects to fish and wildlife in the Bay-Delta and therefore must be analyzed in a full EIS for the contract conversion. This added supply to these toxic soils from this assignment also must be analyzed in any NEPA analysis.

New Information Regarding Splittail deformities must be analyzed

New information has been published in 2020 that identifies adverse effects from selenium to Sacramento splittail. Recent publications by the USGS and NMFS have documented elevated levels of selenium in the benthic clam food chain used by the Sacramento splittail and the federally listed green sturgeon in the SF Bay Delta. In the spring of 2011, young-of-year splittail were found to have a high incidence (>80%) of spinal deformities characteristic of selenium toxicity at the site of a water diversion station in the San Joaquin Valley of the Delta (U.S. Department of the Interior, Bureau of Reclamation Tracy Fish Collection Facility) (Johnson et al 2020). This study identifies various sources of selenium contamination and points to agricultural drainage as a significant source:

“These data suggest that individuals acquired Se toxicity while feeding in the freshwaters of the San Joaquin River but already started with significantly higher Se burdens from females maturing in the estuary (Figure 3, Table 1 and Supporting Information).”⁴⁷

A second publication (Stewart et al 2020) compared splittail tissue concentrations with those proposed by EPA in 2016 for the Bay Delta and found that, “Despite the consistently low muscle Se concentrations across all regions and years and no exceedances, the frequency of exceedance in liver and ovary were high for Pacheco, ranging from 60 to 80% (range for both tissues and years), followed by Suisun in 2011 (33%) and the Confluence in 2010 (17%).” These findings are significant as they document harm in a fish foraging in a benthic clam food web in the Delta, which is also utilized by the federally listed green sturgeon.

⁴⁵ See:

https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

⁴⁶ Coalition comments of environmental, fishing and environmental justice organizations on EPA's Water Quality Standards for the Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta.

October 28, 2016. Available at <https://www.regulations.gov/document?D=EPA-HQ-OW-20150392-0246>

⁴⁷ See: <https://dx.doi.org/10.1021/acs.est.9b06419>

8. Drainage Treatment is not cost effective and has not been proven to be reliable and meet operational criteria.

The 2006 EIS for SLDFR and the 2009 EIR/EIS for the GBP included treatment as a significant component of the plan to manage drainage and reduce brine volumes to be discharged or disposed of. Reclamation has promoted and funded drainage treatment solutions for decades with repeated operational failures and unreliable results.⁴⁸ Both the SLDFR EIS and the GBP EIS/R included a biotreatment plant to reduce the selenium load being discharged, and to ultimately achieve zero discharge of agricultural drainage to the San Luis Drain and San Joaquin River.⁴⁹

In 2012, construction began of the SLDFR Demonstration Treatment Plant (Demo-Plant) in Panoche Drainage District. The purpose of the Demo-Plant was to demonstrate and operate water treatment processes to collect cost and performance data for the design of a full-scale water treatment facility to be constructed in Westlands. The Demo-Plant was completed in 2014 but has not operated consistently due to operational failures and faulty design. The treatment plant has yet to become operational.⁵⁰

The Department of Interior's Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant.⁵¹ The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational performance criteria. In addition, the USBR was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, USBR spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals. Warned of fraud, the Inspector General found that "work at the "pilot" Demo-Plant included: "invalid single audits, conflicts of interest with key personnel, a general absence of project oversight, and questionable use of a cooperative agreement as the legal instrument." The Inspector General also raised federal fraudulent funding issues, stating: "*We also question how and why the project grew from a pilot-scale \$15 million demonstration and research and development plant to a full-size \$37 million plant. Further, we have been told that the costs to operate and maintain the plant could outweigh the benefits of the treated water produced.*"⁵²

⁴⁸ See USBR SLDFR Feasibility Report 2008, Appendices D and E. See: http://calsport.org/news/wpcontent/uploads/USBR_SLDFR-Feasibility-Rpt_AppE-Se-Biotreatment-Performance_2008.pdf http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppD-RO-TreatmtPerformance_2008.pdf

⁴⁹ See SLDFR FEIS Appendix B page 18: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

⁵⁰ Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.

⁵¹ See: <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luisdemonstrationtreatment-plant>

⁵² See https://www.doioig.gov/sites/doioig.gov/files/ManagementAdvisory_ProposedModification_112717.pdf

All action alternatives in the SLDFR FEIS included bio-treatment and reverse osmosis treatment as a large part of the schematic to manage drainage for the San Luis Unit, primarily from Westlands. Since the Demo-Plant has yet to work reliably, the viability and costs of the drainage plan put forth in the SLDFR ROD is questionable, particularly at full-scale. Without treatment, how will drainage volumes and selenium loads be managed? These issues related to the contract conversion and drainage must be addressed and analyzed in a full EIS.

9. Long Term Viability of Drainage Management Actions.

The SLDFR FEIS included a suite of management actions, including drainage reuse (to reduce the volume of drainage that would need to be treated), treatment, and disposal. Pilot studies conducted for SLDFR failed to meet specified objectives, putting doubt into effective implementation of any of these approaches at full-scale.

Reuse of polluted drainage in reuse areas does not eliminate the loading of wastes. It simply stockpiles contaminants on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into saline and toxic wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to permanent fallowing of more and more land, leaving hazardous contaminant conditions.

10. Cessation of deliveries to these toxic soils is the most cost effective and proven strategy to manage drainage.

Our organizations have previously submitted comments to the Regional Water Board about the success of land retirement in relation to the GBP's drainage volume load reductions.⁵³ Reclamation's SLDFR Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit. The Final EIS found that the only environmentally and economically preferred alternative was to retire 306,000 acres in Westlands and Broadview WDs (In-Valley/Drainage Impaired Area Land Retirement).⁵⁴ Moreover, the USFWS, in their Fish and Wildlife Coordination Act Report (FWCAR) for SLDFR, recommended that all of the northerly area within the San Luis Unit (GBP Drainage Area) be retired as well,⁵⁵ but USBR did not consider that alternative. The Service concluded on page 67 of the FWCAR, "*To avoid and minimize risks and effects to fish and wildlife resources in the San Joaquin Valley and Pacific Flyway, the Service recommends land retirement on all drainage impaired lands in the SLU. This approach would maximize the elimination of drainage at its source, and therefore avoidance of adverse fish and wildlife effects.*"

⁵³ See Coalition letter to CVRWQCB on Selenium Basin Plan Amendment, April 26, 2010, p 15-16; http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_letter and Coalition letter to Karl Longley on Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements: <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-toLongley-re-gbpland-retirement.pdf>

⁵⁴ SLDFR Final EIS, Appendix N, Table N-10, page N-17, accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2240

⁵⁵ SLDFR Final EIS, Appendix M, USFWS FWCAR accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236

11. A Drainage Plan is required by law.

Federal courts and reclamation law require a drainage plan. Yet, there is no plan. The drainage management laid out in the schematics of the preferred alternatives in the SLDFR FEIS and ROD have failed during pilot studies, and treatment has not proven viable or cost effective.⁵⁶ Moving forward with contract conversions that authorize full contract quantities in perpetuity without acknowledging drainage problems and technological and economic limitations is negligent and in violation of the law.

12. NEPA Analysis of Westlands' contract conversion and the Oro Loma contract assignment should include alternatives that reduce water contract quantities.

At the time the San Luis Unit was authorized in 1960, vast portions of the unit were understood by Congress, Reclamation and the State of California not to be “practicable” for irrigation without drainage. *See* Reclamation Act of 1902 § 4 (43 USC 419) “*Upon the determination by the Secretary of the Interior that any irrigation project is practicable, he may cause to be let contracts for the construction of the same...*” The statutory premise and requirement of practicable irrigability remains under Reclamation law. Based on Reclamation's studies: (1) Over 200,000 acres under the proposed Westlands contract is no longer practicable of irrigation due to drainage problems; and (2) it is not a beneficial use to apply water to these lands that are not practicable of irrigation.

The Westlands contract conversions, including this contract for the partial contract assignment from Oro Loma WD, would renew these contract quantities in perpetuity. The contract quantities are justified by outdated, inaccurate data, and bias that renders the Water Needs Assessment (WNA) in Appendix B of the 2020 Final EA for Westlands Interim Contracts insufficient.⁵⁷ As previously noted in these comments, this draft contract on the partial assignment from Oro Loma does not include an Exhibit with the needed WNA.

The USEPA in their comments on the Draft EIS and Supplemental Information for Renewal of Long Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006, @pg 2 of Attachment A) recommended that Reclamation should consider mitigation measures, such as “...*contract provisions, or changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*” EPA further cited 40 CFR 1502.14 (b) and CEQ’s NEPA 40 Most Asked Questions, which emphasize the need to evaluate all reasonable alternatives, even if they conflict with local or federal law(2b).⁵⁸

Curtailing deliveries of CVP water to drainage-impaired lands could have significant benefits to the environment, including: reducing diversions from the Trinity River and pumping in the Delta, reduction

⁵⁶ These important scientific reports were removed from USBR's website but can be found here:

http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppE-Se-BiotreatmentPerformance_2008.pdf Also see http://calsport.org/news/wp-content/uploads/USBR_SLDFR-FeasibilityRpt_AppD-RO-Treatmt-Performance_2008.pdf

⁵⁷ See: Appendix B of Final EA on Westlands Interim Contracts starting @ pdf pg 74:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=42467

⁵⁸ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

of drainage production and selenium contamination of the environment, freeing up water to meet CVPIA fish and wildlife obligations including water for fisheries restoration and improvement as established in CVPIA Sections 3406 b(2) and b(3) and for refuge water management needs as established in 3406(d).⁵⁹ Further, the 9th Circuit Court ruled in their July 25, 2016 Amended Memorandum that “*Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion, and the agency did not adequately explain why it eliminated this alternative from detailed study... On remand, the district court shall direct Reclamation consider such an alternative in any future EA for an interim contract renewal.*”⁶⁰

We conclude that the State Water Resources Control Board (State Board) must re-open the water right to Reclamation for Westlands contracts and require that Reclamation must cease deliveries of water to these toxic lands. It remains unclear whether the State Board conformed its place of use designation for CVP water exports to facts on the ground. A contract requirement should include (1) A prohibition of any water deliveries to drainage-impaired lands, (2) the restoration fund payment obligation must remain intact, and (3) any proprietary interest in the water as a result of a change in the contract whereby Westlands can use or sell this water as the market warrants, must be subject to CVPIA limitations for other project purposes such as fisheries restoration, preservation and propagation. Similarly, fish and wildlife refuge water needs also must be considered prior to such change in use or sale.

13. Cumulative Effects Analysis is Required in an EIS

As denoted by NEPA Regulations [40 C.F.R. §1508.8], the action agency must “*analyze the full range of direct, indirect, and cumulative effects of the preferred alternative...*” Section 1508.7 of NEPA defines cumulative impact as, “*the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions... Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.*”⁶¹ For all of Westlands contract conversions, including the Oro Loma partial assignment, Reclamation should do complete an EIS that should include the effects of other past, present, and reasonably foreseeable future actions that could result in cumulative impacts on the biological resources of the study area.

In the 2020 EA completed for Westlands’ interim contract renewals,⁶² Reclamation concluded that there would only be minimal cumulative impacts to biological resources over a 2-year period. However, these conclusions of finding minimal cumulative impacts to biological resources are dependent on the timely implementation of future agricultural drainage service, habitat restoration, land acquisition and retirement, water conservation, and CVPIA programs including implementation of Fish and Wildlife Habitat Restoration Programs under Sections 3406 b(2), b(3) and 3406 d(1) and d(2). The EA for Westlands interim contracts references the Programmatic EIS for CVPIA which identified these restoration programs necessary to remediate adverse impacts of these contract renewals. Yet, some important ecosystem restoration provisions of CVPIA, such as acquisition of full

⁵⁹ See: <https://www.usbr.gov/mp/cvpia/docs/public-law-102-575.pdf>

⁶⁰ See: <https://cdn.ca9.uscourts.gov/datastore/memoranda/2016/07/25/14-15514.pdf>

⁶¹ See: https://ceq.doe.gov/docs/get-involved/Citizens_Guide_Dec07.pdf

⁶² See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41301

Level 4 refuge water supplies, have lacked funding for adequate implementation. Purchase of environmental water under the CVPIA b(3) program has also fallen substantially short of targeted needs due to inadequate funding mechanisms. This unmet need may increase in the future as market prices for water continue to rise with demand. Further, past and present efforts to meet water quality standards in the San Joaquin Basin have been significantly hampered by the lack of adequate fresh water supplies. The USEPA recommended, in their comments on the DEIS and Supplemental Information for San Luis Unit Long Term Contracts (@ pg 6 of Attachment A) that, “*The cumulative impacts analysis in the FEIS should be based on the past and present trends of supplies available for redirection to meet restoration and refuge needs in the area, including Trinity Restoration needs. Where information is available, the analysis should reflect the actual implementation status of CVPIA restoration actions.*”⁶³

Examples of actions that should be reviewed in an EIS Cumulative Effects Analysis include:

- CVP water assignments involving Westlands
- Groundwater pump-ins into the San Luis Canal (California Aqueduct) from Westlands
- Water transfers and exchanges
- Groundwater banking projects
- Cuts to the CVPIA Restoration Funding

As our organizations have documented in prior comment letters, Westlands is involved with a number of CVP water assignments, groundwater pump-ins, transfers and exchanges. These actions have adverse local effects as many involve substitution of higher quality surface water supplies with lower quality groundwater or commingling of poor-quality groundwater with surface water supplies. These projects can cumulatively effect trust resources. The cumulative total potential water that would be made up by these actions is over 700,000 AF, although availability of some of these supplies rely on floodwater capture and are variable.

We also note that during Westlands Regular Board Meeting on August 18, 2020 it was disclosed that sources of non-CVP water for Westlands are not subject to the rescheduling cap imposed on CVP water. In this way, Westlands can maximize carryover storage while limiting their exposure to Reclamation’s rescheduling cap. This results in greater exports from the Delta Estuary that need to be disclosed. And potentially increased pollution from the irrigation of these toxic soils.

Westlands continues to pump groundwater causing subsidence impacts to canals and permanent impacts to groundwater quality and levels.⁶⁴ Without detailed analysis the public and decision makers are left in

⁶³ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁶⁴ In Westlands' May 2020 board documents, Westlands indicates that it would use approximately 450,000 acre-feet of groundwater. Later revised to 400,000 AF in August 2020. Westlands' SGMA groundwater basin plan requires that an average of only 272,000 to 296,000 acre-feet be extracted. This continued pumping along with continuing to pump out groundwater for export to the SLC will exacerbate impacts to the groundwater basin and raise questions as to SGMA compliance.

the dark regarding the impacts of these massive pumping programs and compliance with Sustainable Groundwater Management Act (SGMA). These impacts are further compounded by additional pumping in the present, and reasonably foreseeable future groundwater pumping, exchanges and transfers that involve Westlands include:

- Mendota Pool Group (MPG) 20-Year Exchange Program⁶⁵
- Westlands San Luis Canal Pump-in Program⁶⁶
- Reclamation Approvals Associated with the Poso Creek Water Company's Multiyear Banking and Transfer Program⁶⁷
- Reclamation Approvals Associated with Harris Farms and Shows Family Farms Multiyear Banking and Transfer Program⁶⁸
- Westlands Water District 5-year Warren Act Contract for Kings River Flows in the San Luis Canal⁶⁹
- Semitropic Water Storage District's Groundwater Bank⁷⁰
- Firebaugh Canal Water District 5-Year Transfer Program, 2019-2023⁷¹
- Delta-Mendota Canal Groundwater Pump-In Program Revised Design Constraints⁷²
- San Joaquin River Exchange Contractors Water Authority, 25-Year Groundwater Pumping and Water Transfer Project⁷³
- Long Term Water Transfer Program⁷⁴
- Water transfers from the San Joaquin Exchange Contractors⁷⁵
- Agricultural Aquifer Storage and Recovery Program⁷⁶
- Broadview Aquifer Storage and Recovery Project⁷⁷
- Panoche Creek Groundwater Replenishment Project⁷⁸

⁶⁵ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=36282

⁶⁶ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=46184

⁶⁷ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=28801

⁶⁸ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=32081

⁶⁹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=29341

⁷⁰ See: <https://ceqanet.opr.ca.gov/2017051016/3>

⁷¹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=36203

⁷² See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=32781

⁷³ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=2771

⁷⁴ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=18361

⁷⁵ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=9086

⁷⁶ See: <https://ceqanet.opr.ca.gov/2019089109/2/Attachment/QdGzdr>

⁷⁷ See: <https://wwd.ca.gov/wp-content/uploads/2020/07/rfp-irwm-broadview-asr.pdf>

⁷⁸ See Appendix C in: https://sldmwa.org/IRWMP/WSJ%20IRWMP%20Appendices_ADA-OK.pdf

- Pasajero Groundwater Replenishment Project⁷⁹

III. Failure to Comply with CVPIA.

As was noted in our August 20, 2020 comments, NEPA Compliance is also Required by the Central Valley Project Improvement Act (CVPIA) before entering into Conversion Contracts.⁸⁰ The CVPIA was enacted in 1992 to reduce adverse environmental impacts of CVP operations and to modify State water right permits to included fish and wildlife as a purpose of the project. The CVPIA requires preparation of an EIS before Reclamation renews any long-term water service contract. (CVPIA §§ 3402(a), 3404(c)(1.) That requirement has not been eliminated by the WINN Act. Further as noted CVPIA § 3404 (c) (2) requires specified environmental mitigation payments and restoration of fish and wildlife to included in all new or renewed contracts.

IV. Failure to Comply with CEQA.

Public Resources Code Section 21151, which provides that EIRs are required for certain projects, notes that a Categorical Exclusion is not allowed when:

1. The project site is environmentally sensitive as defined by the project's location. A project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant.
2. The project and successive projects of the same type in the same place will result in cumulative impacts;
3. There are "unusual circumstances" creating the reasonable possibility of significant effects.

Our previous comments have described significant groundwater contamination and downstream cumulative impacts from the Westlands contract conversions. The toxic runoff, drainage, and effects of drainage treatment and disposal, including but not limited to, fish, wildlife, air emissions, transportation and other impacts, have not been disclosed. This draft contract, as well as Westlands' other contract conversions, are also silent with regard to paying for these water quality costs and protections. Without a proven drainage solution, water quality impacts from irrigation of toxic soils in Westlands have far reaching impacts outside of the district and in downstream waters.⁸¹ Therefore, there clearly are

⁷⁹ Ibid.

⁸⁰ Section 3404(c) of the CVPIA requires that an EIS be completed before Reclamation can renew any long-term repayment or water service contract for a period of 25 years. Reclamation defines "long term contract" as a "contract with a term of more than 10 years." See: <https://www.usbr.gov/recman/pec/pec-p05.pdf> By these definitions any contract term longer than 10 years is by Reclamation's own definition 'a long-term contract.' A conversion to a permanent contract fits the definition of a long-term contract. Thus, federal law requires a full EIS before entering into permanent repayment contracts. Congress determined that long-term contracts would have a significant effect on the environment such that an EIS is required.

⁸¹ The Department of Interior's Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant. The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational performance criteria. In addition, the USBR was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, USBR spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals.[see <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luisdemonstrationtreatmentplant>

significant effects to the environment associated with the issuance of permanent water contracts to Westlands, including this draft contract and, therefore, a full EIR under CEQA needs to be completed along with compliance with federal and state endangered species laws.

Further any full EIR for long term contracts should include information on the relationships between irrigation in the San Luis Unit (including Westlands) and groundwater movement downslope, in terms of flow and water quality. The USEPA has noted previously that such an environmental review should provide information on the San Luis Unit's role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife.⁸² Absent this information, the public and decision makers are left in the dark as to significant impacts and required mitigation measures, such as *"changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization."* The effects of toxic pollution from Westlands caused by irrigation enabled by the proposed permanent water contracts are significant and complex and must be addressed in a comprehensive EIR.

Finally, consideration and analysis of a full range of project alternatives is needed to prevent significant impacts. We have raised these issues in the past, and they are even more pertinent today. They include first the failure to study "the alternative of a reduction in maximum interim contract water quantities. By failing to study this alternative, the Westlands contract conversions defy the PCFFA Court's instruction that Reclamation must "give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities." PCFFA, 655 Fed. Appx. at 599. Second, the CEQA exemption fails to disclose – let alone analyze as required – the massive environmental impacts of diverting this water from the Delta and applying to contaminated soils. Third, an accurate map of the land uses that will be receiving water under these contracts is needed to determine the impacts of converting these agricultural areas to other uses, including utilities.⁸³ And, fourth, there needs to be an assessment of the ability of existing agricultural users to pay the significant amounts of debt required under the contract conversion process. This required debt load predictably will change land uses and the likely shift to industrial uses must be disclosed and analyzed. Lastly, no information is provided as to how this debt will be repaid and the impacts on existing agricultural and industrial operations, especially during severe prolonged droughts and climate change, will be managed. These critical shortcomings leave decision-makers and the public in the dark.

⁸² See <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁸³ See WWD 2008 Bond Debt Statement: 30,065,000 Westlands Water District adjustable Rate Refunding Revenue Certificates of Participation, Series 2008a _ Westlands Water District Notes To Financial Statements Years Ended FEBRUARY 28, 2007 AND 2006 @ page 31: "In February and March 2005, the District acquired approximately 8,750 acres of land within the Broadview Water District, which is substantially all of Broadview's irrigable acreage. In conjunction with the acquisition, the District initiated the process to annex all of Broadview's lands and will seek a permanent assignment of Broadview's Central Valley Project Water Contract totaling 27,000 acre-feet to the District from the Bureau of Reclamation. Of this water supply, the District plans to annually make available 6,000 acre-feet of entitlement to the Naval Air Station – Lemoore pursuant to the Supplemental Water Allocation Agreement between the District and NASL." See this 2016 overview of transmission lines, towers and land conversion maps for Westlands WD: http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI_02/TN210903_20160330T140735_Daniel_Kim_Comments_WSP_comments_to_RETI_20_plenary_group_meeti.pdf & <http://web.energyacuity.com/REProject.aspx?id=16887>

V. Failure to comply with California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA)

As emphasized in our previous comment letters on Westlands' CVP Repayment contract conversions, and our January 21, 2020 comments on proposed adoption of a Categorical Exemption under CEQA,⁸⁴ areas within the project site, and downstream habitats known to be habitats for endangered species that are sensitive to selenium contamination and salt. Specifically, impacts from these water contract deliveries and drainage contamination may occur to State and Federally listed species. These previously identified impacts are now further compounded by the added draft contract for the Oro Loma partial assignment and yet, no compliance with the CESA or the Federal ESA have been provided. Further, Senator Feinstein noted with the passage of the WIIN Act, "... the bill's savings clause that prevents the legislation from violating state or federal environmental laws including the Endangered Species Act and biological opinions..."⁸⁵

ESA Compliance is a Mirage--the Draft Contract References Compliance with ESA Consultation Requirements that is Absent.

The draft contract for the Oro Loma partial assignment to Westlands states on Lines 319-330 that the Contractor shall "*comply with requirements applicable to the Contractor in biological opinion(s) prepared as a result of a consultation regarding the execution of any water service contract between the Contracting Officer and the Contractor in effect immediately prior to the Effective Date of this Contract undertaken pursuant to Section 7 of the Endangered Species Act of 1973 (ESA)...*" Yet no ESA consultation has been completed on these contracts nor has there been a consultation that identifies Westlands as an Applicant under the ESA. As denoted on page 2-12 of the USFWS ESA Section 7 Handbook⁸⁶,

"For purposes of this discussion, the Federal action involves the approval of a permit or license sought by the applicant, together with the activities resulting from such permission. The action agency determines applicant status, including requests arising from prospective applicants in early consultations. The action agency also determines how the applicants are to be involved in the consultation, consistent with provisions of section 7(a)(3), (b) and (c) of the Act and the section 7 regulations."

Reclamation has failed to proceed in the manner required by ESA and Westlands has failed to proceed in the manner required by CESA with this contract conversion. Reclamation has failed to complete an ESA consultation and Westlands has failed to consult under CESA before the contract was finalized. Even language in this draft contract suggests that ESA consultations would be completed and that Westlands would comply with applicable provisions of biological opinions. Without Applicant status, there are no applicable provisions in an ESA consultation for Westlands. This contract provision is a mirage designed to evade federal ESA requirements. Reclamation failed to request Applicant status for Westlands, so the language in the draft contract suggesting that there are applicable provisions in biological opinions is inappropriate and misleading.

⁸⁴ See: https://www.restorethedelta.org/wp-content/uploads/2020.01.21-CBD-PCL-et-al_Objects-to-CEQA-Exemption-for-Westlands-Perman....pdf

⁸⁵ See: <https://www.feinstein.senate.gov/public/index.cfm/pressreleases?ID=FF5C94EB-667A-4DEC-A0A4-296AB5027B>

⁸⁶ See: https://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf

VI. Previous ESA Consultations involving Westlands Contracts and Drainage are outdated or contain invalid assumptions.

1. Consultations on Drainage

Consultations by the USFWS on San Luis Drainage in 2006 (SLDFR) and Grasslands Bypass Project in 2009 (GBP) included as part of the project a cessation of discharge to the San Joaquin River by 2010 in SLDFR⁸⁷ and 2019 in GBP.⁸⁸ Yet, in December 2019 Reclamation proposed to extend the Use Agreement for the San Luis Drain (allowing GBP discharges to the San Joaquin River) for an additional 10 years.⁸⁹

The SLDFR 2006 biological opinion (BO) and Fish and Wildlife Coordination Act Report (FWCA) were predicated on a drainage treatment performance objective of <10 µg/L selenium in treatment effluents, primarily as selenate. Most selenium concentrations for invertebrates from the SLDFR pilot evaporation ponds were well above concentrations associated with adverse biological effects to wildlife (i.e., >7 µg/L dry weight in invertebrates based on dietary effects on reproduction in chickens, quail and ducks, see Table 6-4, Recommended Ecological Risk Guidelines Based Upon Selenium Concentrations, on page 6-27 of the FEIS/R Grassland Bypass Project, 2010–2019.⁹⁰ The SLDFR ESA consultation and FWCA Report were based on unmet performance objectives and are therefore invalid. Even Interior in their the October 2019 status report on the drainage litigation (@ pg 4) admits a need to re-scope [SLDFR] project needs: *“Reclamation, in collaboration with Westlands, San Luis WD, Panoche Water District, and Pacheco Water District, is collecting and analyzing data to verify that the original assumptions and conceptual plans presented in the 2008 Feasibility Study are still accurate.”*⁹¹

2. ESA Consultations on Westlands Interim Contracts are Insufficient & Outdated.

Environmental Protection Measure is unverified.

The CVPIA PEIS and biological opinion (BO) provided a framework whereby future CVP-related actions, including interim and long-term CVP water contract renewals, could be reviewed for site-specific impacts under NEPA and ESA. Included in the BO was a commitment to develop and implement a Comprehensive Mapping Program (aka CVPHMP) (as described on pages 2-62 and 2-63 of the Final CVPIA BO): *“Reclamation and the Service will use the best scientific and commercial information available, in conjunction*

⁸⁷ See appendix M of SLDFR FEIS for Biological Opinion and Fish and Wildlife Coordination Act Report available at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236, https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2237, https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2238, https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2239

⁸⁸ GBP BO available at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4826

⁸⁹ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41546

⁹⁰ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4412

⁹¹ Oct 1, 2019 Fed Defendants Status Report, Case 1:88-cv-00634-LJO-SKO

with data from aerial photograph analysis to monitor trends in the environmental baseline for listed species. It is the ultimate goal of Interior to assure that listed species are being recovered. For any species affected by the CVP that are continuing to decline, the Service and Reclamation will immediately assess critical needs for the species and determine whether it is appropriate to expand the Conservation Program or implement other conservation measures. Any native habitat converted to agricultural or municipal/industrial use within the water service area without prior biological surveys, as required by Reclamation prior to the delivery of Reclamation water, will be evaluated to determine what mitigation measures will be required.” The purpose of the CVPHMP was to identify natural habitats remaining in CVP contract service areas and monitor of those habitats every 5 years. This information is essential to confirming that listed species baselines are stable and that the conservation goals of CVPIA are being met.

The 2020 EA for Westlands interim contract renewals includes no mention of the CVPHMP commitments, or any data from it.⁹² Without actual data to verify the environmental commitment @ pg 11, “No CVP water would be applied to native lands or land untilled for three consecutive years or more” is of little value. Further, there is no mechanism identified in the EA to address land conversions that may have occurred without additional “environmental analysis and approval.” The consequences of non-compliance need to be defined and implementable.

Status of Consolidated Place of Use Mitigation should be disclosed.

In November 1999, the SWRCB issued a final EIR that updated Reclamation’s 16 CVP water rights permits. Included in this EIR were changes to the state authorized place of use for these permits (CPOU). The EIR authorized the addition of “encroachment lands” to the CPOU (defined as lands within the boundaries of CVP water contractor service areas outside of the POU that received CVP water historically). The EIR did not authorize the addition of “expansion lands” to the CPOU (defined as lands within the boundaries of CVP water contractor service areas but outside of the POU that have never received CVP water) until adequate site-specific environmental documentation is completed (CPOU EIR @ pg ES-2).⁹³ Westlands was identified in the EIR to have 30,718 acres of encroachment lands and 9,664 acres of expansion lands.

The CPOU EIR concluded that historic delivery of CVP water to encroachment lands has resulted in significant adverse effects to vegetation and wildlife. The EIR and D-1641 identified that of the 85,620 acres of encroachment lands that currently receive CVP water, the development and land use conversion of 45,390 acres was facilitated by delivery of CVP water supplies for agricultural purposes. As part of the SWRCB Decision 1641 Reclamation was required to provide compensation for lost habitat due to encroachment. Specifically, Reclamation was required to delineate existing habitats of the affected special status species and in consultation with DFG and USFWS to develop a mitigation plan satisfactory to the SWRCB. This decision requires that the mitigation plan be developed and completed within ten years of the date of D-1641 (D-1641 was signed in March 2000, @ pg 165). This

⁹² See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41301

⁹³ See: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/eirs/eir1999_ccpou/docs/ccpoufeirdf

decision also requires a mitigation monitoring and reporting program to ensure continued protection and enhancement of special status species.”⁹⁴ The SWRCB identified the following habitat types that would need to be mitigated for from Westlands encroachment: 22,343 acres of alkali scrub/ 1,611 acres of Valley-foothill riparian/fresh emergent wetland, and 6,653 acres of annual grassland (CPOU EIR @ pg 2-70, Table 2-32). No information was provided in the Draft EA on the status of mitigation for CPOU.

Conclusion

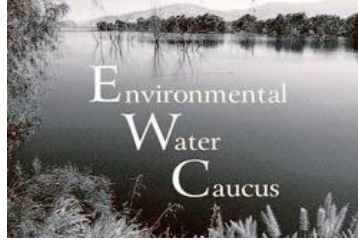
Reclamation has engaged in a process to convert Westlands' water service contract for the partial assignment from Oro Loma WD that functionally ignores much of Reclamation contract law and violates NEPA, CVPIA, CEQA, CESA and ESA, the Administrative Procedures Act, the Reclamation Reform Act, and other federal statutes. The public has been given a puzzle of dizzying complexity without the puzzle picture. Westlands' proposed contract conversion must be withdrawn and restarted with full consideration of all similar contract conversions and their cumulative effects. The water contract conversion process must start with outreach to the 17-20 parties of interest that have thus far been excluded or contracted out under the proposal. Furthermore, all of these draft contracts must be publicly disclosed and the critical exhibits including a Water Needs Assessment must be provided to the public and those areas of origin that are most impacted by the water that is being taken and exported to Westlands.

⁹⁴ D-1641 @ pg 140, available at this link:

https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf

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- Presser, T.S., and S.N. Luoma. 2010. Ecosystem-Scale Selenium Modeling in Support of Fish and Wildlife Criteria Development for the San Francisco Bay-Delta Estuary, California. USGS Administrative Report, Menlo Park, CA, 34 pp. and appendices.
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August 20, 2020

Ernest Conant, Regional Director
through fmorales@usbr.gov
U.S. Bureau of Reclamation
Sacramento, CA

Jacob J. Berens all via email
jberens@usbr.gov
Northern California Area Office
U.S. Bureau of Reclamation

Ryan Everest, Repayment Specialist
reverest@usbr.gov
Northern California Area Office
U.S. Bureau of Reclamation

Georgina Gregory, Repayment Supervisor
ggregory@usbr.gov
Central California Area Office
U.S. Bureau of Reclamation

Re: Written Comments on WIIN Act Draft Repayment Contracts and Contract Amendments between Bureau of Reclamation and Water Contractors in the Delta and Sacramento River Divisions

Dear Regional Director Conant, Repayment Specialist Everest, Mr. Berens, Repayment Supervisor Gregory and U.S. Bureau of Reclamation:

By this letter, our public interest organizations comment, pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq., the Endangered

909 12th Street, Suite 202, Sacramento, CA 95814
(916) 557-1100 FAX (916) 557-9669 www.sierraclubcalifornia.org

Species Act (ESA), 16 U.S.C. §1531 et seq., and Reclamation law, on the Bureau of Reclamation's (Reclamation) draft contracts and amendments to contracts with Central Valley Project (CVP) water contractors (hereinafter referred to as "Water Contractors") to convert renewal contracts to *permanent* repayment contracts.¹

In order to proceed in the manner required by law, Reclamation must prepare an Environmental Impact Statement (EIS) under NEPA, and must engage in consultation under the ESA with the National Marine Fisheries Service and U.S. Fish and Wildlife Service *before* converting the contracts. Reclamation, however, has not complied with NEPA by either preparing an EIS on each individual contract, or by preparing a broad "program" EIS on the direct and cumulative environmental consequences of converting all of the contracts. Reclamation, likewise, has not complied with the ESA.

The contracts we refer to in this letter are 16 contracts and/or amendments to 16 existing contracts in the Delta and Sacramento River Divisions. Comments are due on the 15 contracts in the Delta Division on August 31, 2020. Comments are due on the Sacramento River Division contract on August 28, 2020.

These 16 contracts *lock-in deliveries of about 577,106 acre-feet of water per year*. The Westlands Water District contract that locked in 1,150,000 acre-feet of water per year was the subject of our January 7, 2020, joint comment letter. The American River Division contracts which locked in 606,200 acre-feet of water per year and Delta Division contracts locking in deliveries of 42,948 acre-feet of water per year, were the subjects of our February 15, 2020, joint comment letter. The 23 contracts locking in deliveries of 451,756 acre-feet of water per year were the subjects of our April 22, 2020 joint comment letter to you. The 4 contracts locking in deliveries of 43,203 acre-feet of water per year were the subject of an August 7, 2020 comment letter to you from three of our organizations, Restore the Delta, Center for Biological Diversity, and Planning and Conservation League. *All of these contract conversions collectively, would lock-in deliveries of about 2,871,213 acre-feet of water per year*. And all with no NEPA or ESA compliance whatsoever.

The 16 contracts in the Delta and Sacramento River Divisions that are the subjects of this comment letter are identified on page 11, following the signatures at the end of this letter.

¹ AquAlliance, California Water Impact Network, California Sportfishing Protection Alliance, Center for Biological Diversity, Environmental Water Caucus, Friends of the River, Planning and Conservation League, Restore the Delta, and Sierra Club California join in this letter.

Reclamation Must Comply with NEPA Before Converting the Contracts

Reclamation is converting the contracts with the Water Contractors without any compliance with NEPA. Pursuant to the contracts, Reclamation would be obligated to deliver quantities of water to the Water Contractors each year. Forever. The amended contracts are *permanent*.

Such deliveries have many adverse environmental impacts on the watershed, including the rivers and the San Francisco-San Joaquin Bay-Delta estuary. Adverse impacts include reducing freshwater flows and worsening already degraded Delta water quality; to further endangering and destroying endangered and threatened fish species and critical habitat; to by reducing freshwater flows worsening dangerous toxic algal blooms in the Delta; to adverse impacts on public health and safety in the Delta region; to adverse impacts on agriculture in the Delta.

Consumptive water rights claims are *5 ½ times more* than available supply. *Permanent* contracts in the absence of any environmental review whatsoever are a thoughtless recipe for disaster. Especially in the face of reduced runoff, increasing sea level rise and salinity intrusion due to climate change while ignoring progress with such measures as water conservation and recycling reducing the need for water deliveries.

Reclamation is in the process of converting virtually all contracts, about 75 of them, into permanent contracts similar to the first one, the draft Westlands contract.² Pursuant to NEPA, “cumulative impact” “is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. . . .” (NEPA Regulations § 1508.7.)³ The cumulative environmental impacts of converting all of Reclamation’s contracts into permanent contracts will be enormous and adverse.

An EIS or at least an environmental assessment (EA) must be prepared by Reclamation before entering into any of the contract amendments. The reason is that each contract conversion would be a major federal action that may significantly affect the quality of the human environment. (42 U.S.C. § 4332(C.) “Actions include new and continuing activities,” (NEPA Regulations § 1508.18(a.) NEPA requires “that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter [NEPA], . . .” (42 U.S.C. §4332.)

² On December 20, 2019, Reclamation gave public notice on its web site that 75 CVP contractors had requested contract conversions. The subject contracts were spread among the Central, Northern, and South Central California Area Offices.

³ The NEPA Regulations are codified at 40 C.F.R. §1500 et seq.

NEPA processes must be integrated with other processes “at the earliest possible time to ensure that planning and decisions reflect environmental values,” (NEPA Regulations § 1501.2.) Reclamation, however, has not prepared an EIS on the proposed contracts. Reclamation *has not even prepared an EA* to determine whether an EIS must be prepared. (NEPA Regulations §§ 1501.3; 1508.9.) Reclamation has not made a “finding of no significant impact” on the actions. (NEPA Regulations § 1508.13.) Reclamation has not instituted the required “scoping” process and has not published a notice of intent in the Federal Register. (NEPA Regulations § 1501.7.) Reclamation has not prepared a categorical exclusion or notice thereof on the contracts. (NEPA Regulations § 1508.4.) The subject actions would not in any event qualify for a categorical exclusion.

Consequently, Reclamation has not furnished the public any information whatsoever, by which to evaluate the potential environmental consequences of the contracts and the water diversions and deliveries authorized by them. Reclamation also has not furnished the public any information whatsoever, by which to evaluate the *cumulative* environmental impacts of all of the contract conversions in Reclamation’s pipeline and the water diversions and deliveries authorized by them. Reclamation has not prepared a single EIS on the related contract conversions (NEPA Regulations § 1502.4(a) and has not prepared a broad “program” EIS on the contract conversions in its pipeline. (NEPA Regulations § 1502.4(b.) Reclamation has not prepared any “environmental document” on its action. (NEPA Regulations § 1508.10.)

The EIS section on “alternatives” “is the heart of the environmental impact statement.” (NEPA Regulations § 1502.14.) The alternatives section,

should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public. (NEPA Regulations § 1502.14.)

An EA also must include discussion of alternatives. Reclamation must prepare an EIS or first prepare an EA and then an EIS, which must “Rigorously explore and objectively evaluate all reasonable alternatives,” to the action. (NEPA Regulations § 1502.14(a.) The EIS will necessarily include alternatives that reduce deliveries of project water in order to increase freshwater flows and begin to restore watershed rivers and the Delta. Alternatives reducing deliveries will also reflect lessened needs for deliveries due to progress in water recycling, conservation, and other modern innovations.

The Ninth Circuit Court of Appeals reversed a district court decision denying environmental plaintiffs’ summary judgment because the challenged environmental document issued by Reclamation under NEPA, “did not give full and meaningful consideration to the alternative of a reduction in maximum water quantities.” (*Pacific*

Coast Federation of Fishermen's Assn's v. U.S. Dept. of the Interior, 655 Fed.Appx. 595, 2016 WL 3974183*3 (9th Cir., No. 14-15514, July 25, 2016) (Not selected for publication.) “Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion and the agency did not adequately explain why it eliminated this alternative from detailed study.” (*Id.* at *2.) Reclamation’s “reasoning in large part reflects a policy decision to promote the economic security of agricultural users, rather than an explanation of why reducing maximum contract quantities was so infeasible as to preclude study of its environmental impacts.” (*Id.* at *3.)

The requirement under NEPA to consider the alternative of reducing exports to increase flows through the Delta is so obvious that the Ninth Circuit’s decision was not selected for publication because no new legal analysis was required to reach the decision. The decision pertained to interim two-year contract renewals. If the alternative of reducing exports must be considered during renewal of two-year interim contracts, it most assuredly must be considered before entering into permanent contracts. Moreover, “an alternative may be reasonable, and therefore required by NEPA to be discussed in the EIS, even though it requires legislative action to put it into effect.” *Kilroy v. Ruckelshaus*, 738 F.2d 1448, 1454 (9th Cir. 1984.)

Reclamation will fail to proceed in the manner required by NEPA if it enters into the contracts without having first prepared and issued an EIS.

Reclamation’s Action is Discretionary

We have not seen any communication from Reclamation explaining why it is proceeding to enter into the contracts as if there is no NEPA statute. Reclamation does refer in “whereas” clauses in the draft contract amendments to the Water Infrastructure Improvements for the Nation Act (Pub. L.) 114-322, 130 Stat. 1628), Section 4011 (a-d) and (f) (WINN Act.) For example, the Del Puerto Water District contract recites in the 13th Whereas clause, p. 4, “WHEREAS, on December 16, 2016, the 114th Congress of the United States of America enacted the WIIN Act;” The contract then recites in the 14th Whereas clause, pp. 4-5,

WHEREAS, Section 4011(a)(1) provides that “upon request of the contractor, the Secretary of the Interior *shall* convert any water service contract in effect on the date of enactment of this subtitle and between the United States and a water users’ association [Contractor] to allow for prepayment of the repayment contract pursuant to paragraph (2) *under mutually agreeable terms and conditions.*”; (Emphasis added.)

Reclamation may contend that the WINN Act including use of the word “shall” makes entry into the conversion contracts non-discretionary and thus not subject to

NEPA. As provided by WINN Act section 4011(a)(1), however, the terms and conditions *must be mutually agreeable* meaning they must be agreeable to the Secretary of the Interior, as well as to the contractor. That means under the plain language of the Act, the Secretary of the Interior retains discretion because the terms and conditions of the contracts must be agreeable to him. In *Aluminum Co. of America v. Central Lincoln Util. Dist.*, 467 U.S. 380, 397 (1984), the Supreme Court held,

Because the Regional Act does not comprehensively establish the terms on which power is to be supplied to DSIs [direct-service industrial customers] under the new contracts, it is our view that the Administrator has broad discretion to negotiate them.

NEPA cases have rejected efforts by agencies to avoid complying with NEPA by contending their actions are non-discretionary, when there is some discretion.⁴

The Secretary of the Interior has discretion to determine contract terms and conditions that are agreeable to him. That being the case, Reclamation must comply with NEPA before, not after, converting or amending the water contracts.

NEPA Compliance is also Required by the Central Valley Project Improvement Act Before Converting the Contracts

Savings language in the WINN Act (section 4012(a)(2) requires,

This subtitle shall not be interpreted or implemented in a manner that—
[omitted]

(2) affects or modifies any obligation under the Central Valley Project Improvement Act [CVPIA] (Public Law 102-575; 106 Stat. 4706), except for the savings provisions for the Stanislaus River predator management program expressly established by section 11 (d) and provisions in section 11(g);
[omitted]

The CVPIA was enacted in 1992 to reduce adverse environmental impacts of CVP operations. The CVPIA requires preparation of an EIS before Reclamation renews any long-term water service contract. (CVPIA §§ 3402(a), 3404(c)(1.) That requirement has not been eliminated by the WINN Act.

Reclamation must prepare an EIS before entering into the contracts.

⁴ Such cases include *Forelaws on Board v. Johnson*, 743 F.2d 677 (9th Cir. 1984.)

Reclamation Must Prepare an EIS Before Amending the Contracts

The NEPA Regulations give guidance on whether an action “significantly” affects the quality of the human environment. “ ‘Significantly’ as used in NEPA requires considerations of both context and intensity:” (NEPA Regulations § 1508.27.) Ten factors are listed in § 1508.27(b) 1-10 in evaluating intensity meaning severity of the impact. The factors make it clear an EIS is required here.

1508.27(b)(2) The degree to which the proposed action affects public health or safety

The water deliveries to the contractors diminish freshwater flows through the Delta which decreases water supplies and water quality and worsens the amount and frequency of harmful algal blooms in the Delta. That is one of the ways by which the action affects public health and safety.

(3) Unique characteristics of the geographic area

The Delta already fails to meet established water quality standards and is an ecologically critical area. The water deliveries exacerbate the decline of the Delta.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of the contracts will be highly controversial because of the worsening water supply and water quality crisis in the Delta.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks

Because Reclamation has failed to engage in any NEPA environmental analysis whatsoever, the impacts of the contracts are highly uncertain.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

About 75 contractors started negotiations to convert the contracts. Converting these contracts in the pipeline would, therefore, establish a precedent for future actions with significant effects.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Each contract conversion is related to other contract conversions in the pipeline that would have cumulatively significant impacts. This includes contract conversions that were the subjects of our January 7, February 15, and April 22, 2020 joint comment letters.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat

Endangered winter-run Chinook salmon, threatened spring-run Chinook salmon, Central Valley steelhead, Green Sturgeon, and Delta smelt continue to decline because of the reductions in water quality and flows resulting in rising temperatures, increased salinity, and sedimentation. CVP water deliveries harm the fish by reducing water flows and worsen the contamination of surface waters, groundwater, and soils with pollutants including selenium. The State Water Resources Control Board (SWRCB) explained in its comments on Reclamation's Draft EIS for Reinitiation of Consultation on the Coordinated Long-Term Operation of the CVP and State Water Project (SWP)(September 25, 2019),

Available scientific knowledge indicates that decreasing freshwater flows in the Bay-Delta watershed and increasing exports and associated reverse flows in the interior Delta is expected to have a negative impact on the survival and abundance of native fish species, including threatened and endangered species that are the subject of the existing BiOps for the Projects. There is a body of scientific evidence that increased freshwater flows through the Delta and aquatic habitat restoration are needed to protect Bay-Delta ecosystem processes and native and migratory fish. Accordingly, it is not clear how the proposed project will not further degrade conditions for fish and wildlife species that are already in poor condition, some of which are on the verge of functional extinction or extirpation.⁵

(10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment

The contract conversions threaten violation of federal and state law and requirements imposed for protection of the environment.

Reclamation must prepare an EIS, or an EA followed by an EIS before entering into the contracts.

Reclamation must Comply with the Endangered Species Act Before Converting the Contracts

Savings language in the WINN Act (section 4012(a)(3) requires,

⁵ SWRCB comment letter p.3. [A copy of the SWRCB letter is attached.](#)

This subtitle shall not be interpreted or implemented in a manner that—
[omitted]

(3) overrides, modifies, or amends the applicability of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) or the application of the smelt and salmonid biological opinions to the operation of the Central Valley Project or the State Water Project;
[omitted]

Endangered Species Act (ESA) section 7, 16 U.S. §1536(a)(2) requires consultation to ensure that an agency action is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of its critical habitat. After initiation of the required consultation the agency shall not make any irreversible or irretrievable commitment of resources with respect to the action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures. (16 U.S.C. § 1536 (d.)

Reclamation must enter into the required ESA consultation and not enter into the contracts until ESA compliance has been completed.

Conclusion

Reclamation must comply with NEPA and the ESA before converting the contracts. That means Reclamation must prepare an EIS and enter into ESA consultation before converting the contracts.

Contacts for this comment letter are Conner Everts, Facilitator, Environmental Water Caucus (310) 804-6615 or connere@gmail.com , or Robert Wright, Counsel, Sierra Club California (916) 557-1104 or bwrightatty@gmail.com . We would do our best to answer any questions you may have.

Sincerely,



E. Robert Wright, Counsel
Sierra Club California



Kathryn Phillips, Director
Sierra Club California



Barbara Barrigan-Parrilla, Executive Director, Restore the Delta



Conner Everts, Facilitator
Environmental Water Caucus



John Buse, Senior Counsel
Center for Biological Diversity



Carolee Krieger, Executive Director
California Water Impact Network



Barbara Vlamis, Executive Director
AquAlliance



Bill Jennings, Executive Director
California Sportfishing Protection
Alliance



Eric Wesselman
Executive Director
Friends of the River



Jonas Minton, Senior Water Policy
Advisor
Planning and Conservation League

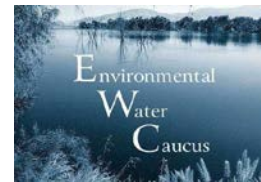
Attachment: SWRCB letter, *Comments on Draft Environmental Impact Statement for the Reinitiation of Consultation on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project* (September 25, 2019)

LIST OF CONTRACTS COMMENTED ON BY THIS LETTER

<i>Delta Division</i>	<i>Contract No.</i>	<i>Acre Feet Per Year</i>
Contra Costa Water District	175r-3401A-LTR1-P	195,000
Banta-Carbona Irrigation District	14-06-200-4305A-LTR1-P	20,000
Byron-Bethany Irrigation District	14-06-200-785-LTR1-P	20,600
Del Puerto Water District	14-06-200-922-LTR1-P	140,210
Eagle Field Water District	14-06-200-7754-LTR1-P	4,550
Fresno Slough Water District	14-06-200-4019A-LTR1-P	4,000
James Irrigation District	14-06-200-700-A-LTR1-P	35,300
Mercy Springs Water District	14-06-200-3365A-LTR1-P	2,842
Patterson Irrigation District	14-06-200-3598A-LTR1-P	16,500
Reclamation District No. 1606	14-06-200-3802A-LTR1-P	228
The West Side Irrigation District	7-07-20-W0045-LTR1-P	5,000
Tranquillity Irrigation District	14-06-200-701-A-LTR1-P	13,800
Tranquillity Public Utilities District	14-06-200-3537A-LTR1-P	70
West Stanislaus Irrigation District	14-06-200-1072-LTR1-P	50,000
Westlands Water District - Assigned from Oro Loma Water District	14-06-200-7823J-LTR1-P	4,000
<i>Sacramento River Division</i>	<i>Contract No.</i>	<i>Acre Feet Per Year</i>
Westside Water District	14-06-200-8222-P	65,000
<i>Total Acre Feet of Water Deliveries per year locked in by contracts</i>		577,106



CA Save Our Streams Council



May 29, 2020

Travis Buttelman,
U.S. Bureau of Reclamation,
2800 Cottage Way, CGB-440,
Sacramento, CA 95825-1898

Via email: Email jbuttelman@usbr.gov and lholm@usbr.gov and econant@usbr.gov

Re: Comments on the draft repayment contract between the San Luis & Delta-Mendota Water Authority and Reclamation for extraordinary maintenance on the C.W. “Bill” Jones Pumping Plant.

The undersigned organizations submit the following comments on the draft repayment contract (Contract) between the US Bureau of Reclamation (Reclamation) and the San Luis & Delta Mendota Water Authority (WA) that establishes terms for the WA’s repayment of a Reclamation loan for costs related to extraordinary maintenance work (XM) on the C.W. “Bill” Jones Pumping Plant (JPP). The Contract was made available for a 60-day public comment period on March 30, 2020.¹ No NEPA was provided at this link, just the draft contract dated March 24, 2020 and denoted as Exhibit 6 of Contract No. 20-WC-20-5647.²

¹ See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=70203>

² See: <https://www.usbr.gov/mp/sccao/docs/2020-03-24-draft-xm-repayment-contract-jpp-exhibit-6-sldmwa-usbr-clean-final.pdf>

No notice of Categorical Exclusion was provided on the implementation of the Contract. The 2019 Categorical Exclusion Checklists (CECs) for the South-Central California Area Office (SCCAO) was posted on November 27, 2019.³ Included in this listing of CECs completed by the SCCAO in 2019 was a CEC for the implementation of this Contract.⁴ As denoted in the summary of the SCCAO's 2019 CECs, "A CEC excludes certain categories of Federal actions from further NEPA documentation because these categories of actions have been determined in a public process to have no significant affect on the environment nor do they involve unresolved conflicts concerning alternative uses of available resources." Reclamation has failed to provide the CEC for this Contract for public review or comment, and we would argue there was no "public process" on the CEC for the Contract.

Our organizations previously provided comments on the Agreement to Transfer the Operation, Maintenance and Replacement and Certain Financial and Administrative Activities Related to the San Luis and Delta-Mendota Canals, C.W. Bill Jones Pumping Plant, Delta-Mendota Canal/California Aqueduct Intertie Pumping Plant, O'Neill Pumping/Generating Plant, San Luis Drain and Associated Works (Agreement) on December 20, 2019. We incorporate those comments by reference. The Agreement was made available for 15-day public comment on December 5, 2019. No NEPA was provided at this link, just the draft contract dated Dec 4, 2019.⁵

Description of XM Work

The JPP provides water to the San Luis and San Felipe Units of the Central Valley Project (CVP). Located near the City of Tracy, the Jones PP lifts water 197 feet up from from the southern end of the Sacramento-San Joaquin Delta taking up to 767 cubic feet per second to the Delta-Mendota Canal for delivery to CVP water service contractors, settlement contractors, and wildlife refuges. Operational limits required by federal statute and SWRCB D-1485 and D-1641 require operations to minimize fish getting sucked into the water pumps and pulverized. Operations provide agricultural and urban water service in the western San Joaquin Valley, and portions of San Benito and Santa Clara Counties.

The WA operates and maintains the JPP on behalf of Reclamation under Operation and Maintenance Agreement No. 8-07-20-X0354. In 2015, Reclamation performed a condition assessment on one of the pumps at JPP (Unit No. 6) and the assessment findings stated that the unit was in a deteriorated state and nearing the end of its service life. To avoid an unplanned failure, the report recommended Unit No. 6 be rehabilitated within 2 to 3 years from the date of the report. A separate repayment contract was executed on February 5, 2018 by Reclamation and the WA for up to a \$5 million for XM work on Unit No. 6 (Contract No. 17-WC-20-S100). The rehabilitation of JPP Unit No. 6 was completed in February 2019 (Unit 6 Contract).

³ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=36741

⁴ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=38722

⁵ See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68783>

Due to the age and deteriorated condition of the remaining five units at the Jones PP, the WA plans to rehabilitate each of these units. The WA self-funded work needed on Unit No. 2.

Nowhere in the draft Contract, nor the Categorical Exclusion for this XM work at the JPP, is there any description of the pumping capacities of the refurbished Units compared to the previous pumping capacities. Without this information, the public is unable to discern whether the refurbished pumps will be able to export more water south of Delta. Any change in pumping capacity should be disclosed in the Contract and associated environmental documents.

Purpose of Draft Contract Loan Agreement

The current draft Repayment Contract is essentially a loan agreement for XM work on JPP Unit Nos 1, 3, 4 and 5. Work includes but is not limited to replacing existing windings and stator core, and the refurbishment of the motor rotor poles. As described in Article 4(a) of the Contract Funds specified (\$12.7 million) shall not exceed a maximum of 80% of the sum of costs incurred for XM Work, plus all costs incurred by the WA directly associated with the rewind work on unit #2 and #6 since January 2017. The WA shall be obligated to repay the Repayment Obligation (the entire sum of funds provided by USBR pursuant to this contract, plus accrued interest). As defined in Article 5 of the draft Contract, the WA shall be obligated to repay the Repayment Obligation (the entire sum of funds provided by USBR pursuant to this contract, plus accrued interest) in up to 4 repayment blocks, one for each Unit. The obligation for repayment for each repayment block will be repaid within 23 years from the first installment of each block.

Effective Dates Precede Public Comment Period on Contract & Authorize A Loan For Work Previously Done Without a Contract.

Article 2 of the draft Contract notes that this Contract shall “become effective on the date first written above and shall remain in effect until the Authority has fully repaid its Repayment Obligation to the United States as described in Article 5 herein.” Article 3 of the draft Contract, Description of XM Work, notes that the “The Contracting Officer shall consider and not withhold approval of reasonable costs incurred for XM Work beginning March 1, 2020.” Essentially the contract is authorizing a loan for work that may have taken place prior to public review of the draft Contract and prior to final approval of the Contract. The legality of obligating federal funds without a contract is not authorized under PL 111-11 Section 9603.

Environmental Compliance is Absent

Article 9(a) of the draft Contract includes language that “the Authority will comply with any applicable environmental measures contained in any environmental documentation prepared in connection with the XM Work.” This wording suggests that environmental documentation has been prepared in connection with this XM work, yet our organizations were unable to find any environmental documentation prepared by the WA under the California Environmental Quality Act (CEQA). Further the 2019 Categorical Exclusion prepared by Reclamation for this XM work does not reference or include any environmental protection measures.⁶ Without specified environmental protection measures, the language in the Article 9(a) of the draft Contract is misleading. And fails to comply with CVPIA Section 3404 (c) (2).

⁶ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=38722

Environmental Protections are Omitted in the Contract.

Further, a comparison of the Unit 6 Contract with the current draft Contract shows significant omissions to environmental protection measures in the current Contract. The 2018 Unit 6 Repayment Contract includes Article 20, Protection of Water and Air Quality. Specifically, Article 20(a) requires that, “*Project facilities used by the Contractor to make available and deliver water to the Contractor's water users shall be operated and maintained in the most practical manner to maintain the quality of the water at the highest level possible as determined by the Contracting Officer...*” Article 20(b) requires that, “*The Contractor shall comply with all applicable water and air pollution laws and regulations of the United States and the State of California; and shall obtain all required permits or licenses from the appropriate Federal, State, or local authorities necessary for the delivery of water by the Contractor...*” And Article 21 further states that the WA agrees to “*comply with all the requirements of section 114 of the Clean Air Act, as amended (42 U.S.C. § 7414), and section 308 of the Clean Water Act (33 U.S.C. § 1318), relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in those sections, and all applicable regulations and guidelines issued thereunder*” and to “*use its best efforts to comply with clean air standards and clean water standards at the facility where the XM Work #6 is being performed.*” None of these water quality or air quality commitments are included in the current draft Contract. These are significant changes and the impacts need to be disclosed to the public for review and comment.

Failure to Comply with CVPIA Requirements.

The Central Valley Project Improvement Act (CVPIA, Public Law 102-575; 106 Stat. 4706)⁷ included several sections that are relevant to new repayment contracts, including the draft Contract under public review. CVPIA §3404(c)(2) states that, “*Upon renewal of any long-term repayment or water service contract providing for the delivery of water from the Central Valley Project, the Secretary shall incorporate all requirements imposed by existing law, including provisions of this title, within such renewed contracts.*” CVPIA §3405(c) requires that Reclamation “*for all CVP water service or repayment contracts for agricultural, municipal, or industrial purposes that are entered into, renewed, or amended under any provision of Federal Reclamation law, shall provide that the contracting district or agency shall be responsible for compliance with all State and Federal water quality standards applicable to surface and subsurface agricultural drainage discharges generated within its boundaries (i.e., appropriate Total Maximum Daily Loads [TMDL's] applied to impaired waters of the State).*”

The draft Contract does not contain within the contract terms explicit language that is enforceable between the parties as required by CVPIA Section 3404(c)(2). This section requires that provisions of law be written as contract terms enforceable between the parties. Enforceable contract provisions of law that by law must be written as contract terms enforceable between the parties include for example:

- Section 3406(b)(2), which authorizes and directs the dedication of up to 800 thousand AF (TAF) of CVP water for environmental purposes.

⁷ See: <https://www.usbr.gov/mp/cvpia/docs/public-law-102-575.pdf>

- Section 3406(b)(23), which addresses restoration efforts for the Trinity River Division (TRD).
- Section 3406(d), which requires firm CVP water supplies amounting to 480 TAF to be delivered to federal, state and some private wildlife refuges.

None of these requirements or other requirements from CVPIA are included in the draft Contract. The proportional

Failure to Comply with the Coordinated Operations Act of 1986.⁸

The draft Contract omits the obligation of the WA and the United States to deliver Project water in accordance with water quality standards specified in PL 99-546. This language was omitted from the Final Contract: “*water quality standards specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or other existing Federal laws.*”

Congress directed that the United States and its Contractors to operate the CVP in conformity with State water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta and Estuary and to operate the CVP so that water supplied at the intake of the Contra Costa Canal is of a quality equal to the water quality standards contained in the Water Right Decision 1485 of the State of California Water Resources Control Board, dated August 16, 1978, except under limited conditions. We know of no law that authorizes Reclamation to change this Congressional direction in a contract. The omission of any environmental protection measures in the draft Contract, including protection of water quality, substantially changes the terms of the contract and obligations to meet state water quality standards. The environmental impact of these changes has not been analyzed nor has the public had the opportunity to comment on such significant changes.

Significant Pest Management Changes are not Disclosed.

A comparison of the Unit 6 Contract with the current draft Contract indicates that the Article on Pest Management has been omitted. The 2018 Unit 6 Repayment Contract includes Article 27 on Pest Management that stipulates, “The Contractor and any of its subcontractors are responsible for complying with applicable Federal, State, and local laws, rules, and regulations related to pest management in performing its responsibilities under this Contract, including but not limited to, the Department of the Interior Manual, Part 517 Integrated Pest Management Policy and Part 609 Weed Control Program, the Plant Protection Act of June 20, 2000 (Pub. L. 106-224), and Executive Order 13112 of February 3, 1999. No mention of pest management requirements is made in the current draft Contract. This change is significant and the impacts need to be disclosed.

Required Judicial Confirmation of this Loan Repayment Contract is Absent.

To protect the United States, Reclamation law⁹ and specifically the Act of May 15,

⁸ <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg3050.pdf>
See Section 101 and Section 102.

⁹ See 43 U.S.C §511(1976) Section 46 of the Omnibus Adjustment Act of 1926 and 43 U.S.C. §423 (1976).

1922, requires state court to validate the contract. Section 1 of the Act of May 15, 1922, which states in part:

..that no contract with an irrigation district under this act shall be binding on the United States until the proceedings on the part of the district for the authorization of the execution of the contract with the United States shall have been confirmed by decree of a court of competent jurisdiction, or pending appellate action if ground for appeal be laid.

The Act of May 15, 1922 requires the judicial confirmation of contracts with irrigation districts. This has not occurred. Further Paragraph 4.B. of Reclamation Directives and Standards PEC P10 indicates such a contract require Standard Article 10. The article and judicial confirmation has not occurred nor been noticed by the WA. The contract fails to meet the legal requirements set forth in Reclamation law and regulation. This contract is not binding without this compliance

Conclusion

The draft Contract fails to comply with (1) the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq., (2) the Endangered Species Act (ESA), 16 U.S.C. §1531 et seq., (3) Federal Reclamation law, (4) CEQA Public Resources Code 21000-21189 and CESA Cal. Fish & Game Code §§2050-2106.5, and (5) CVPIA in general and specifically Section 3404(c)(2) which requires that provisions of law be written as contract terms enforceable between the parties. These enforceable provisions of law required by the CVPIA are absent from the contract.

Thank you for the opportunity to comment. Please make sure the undersigned are notified of any future actions related to this contract or loans.



Jonas Minton
Senior Water Policy Advisor
Planning and Conservation League
jminton@pcl.org



Mike Conroy
Executive Director
Pacific Coast Federation of Fishermen's Asso.
mike@ifrfish.org



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
Environmental Water Caucus
connere@gmail.com



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



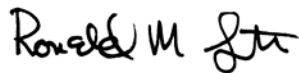
Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com




Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers International
mrockwell1945@gmail.com



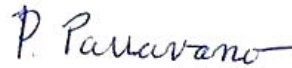
Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net




Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



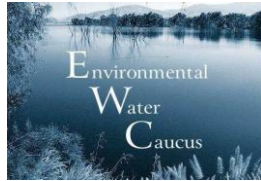
Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



CA Save Our Streams Council



May 3, 2020

Honorable Katie Porter
1117 Longworth Building
Washington, D.C. 20515

Re: Potential Fraud, Waste and Abuse in the Bureau of Reclamation's Administration of the Central Valley Project Improvement Act

Dear Representative Porter:

In the course of monitoring the Bureau of Reclamation's implementation of environmental restoration mandates in the Central Valley Project Improvement Act, Public Law 102-575 Title XXIV (1992) (CVPIA), we have reached the conclusion the Trump Administration caused the Bureau of Reclamation (Reclamation) to violate and otherwise manipulate government cost accounting standards and Reclamation's longstanding criteria for allocating costs owed by Central Valley Project water and power contractors (Contractors).¹ [See Exhibit 1] These actions resulted in a Trump Administration decision to shift at least \$400 million in current debt from the Contractors to Federal taxpayers. That sum represents a significant component of funding required for the Biden Administration's infrastructure initiative, and, correspondingly, an unconscionable financial windfall to the Contractors, whose activities continue to have severe and adverse impacts on California's environment; such impacts to be magnified under the current drought.

¹ https://calsport.org/news/wp-content/uploads/Trump_Bernhardt-CVP-Cost-Allocation-Contractor-Benefits-Fleeing-Taxpayers-April-2021.pdf

One of the documents by which the Trump Administration decision would have been implemented is the “Business Practice Guidelines for Central Valley Project Improvement Act Receipts, Program Accounting, Cost Allocation and Cost Recovery” (Guidelines), which was pending review in the Office of Management and Budget at the end of the Trump Administration. The Biden Administration suspended action on the Guidelines, but the accumulated debt remains uncollected. This failure to collect these costs and implement federally required mitigation and restoration measures violates the law and is causing untold environmental harm and additional harm to Tribal fishing and water rights.²

The purpose of this letter is to request that you, in your capacity as Vice Chair of the Subcommittee on Government Operations and Chair of the Subcommittee on Oversight and Investigations, open an investigation into Reclamation’s past actions and current intentions regarding this outstanding debt.

Briefly, the CVPIA made unprecedented changes to federal reclamation law. First, the CVPIA made environmental restoration a purpose of the Central Valley Project (CVP). Second, it mandated a comprehensive suite of environmental restoration actions, among them restoration of the rights of the Hoopa Valley Tribe in the Trinity River fishery, which the United States holds in trust, and which West Coast sport and commercial fishing enterprises, among others, have an interest. The CVPIA also established restoration measures for fisheries and wildlife refuges in the Sacramento and San Joaquin River watersheds of California’s Central Valley. Third, the CVPIA required the Contractors, not the taxpayers, to pay for restoration as their cost of doing business.

In addition to unlawful CPVIA cost accounting, in its last week the Trump Administration issued a series of Interior Department memoranda that wrongfully and unlawfully declared the environmental restoration mandates of the CVPIA to have been fulfilled.³ Those memoranda should be withdrawn, immediately. Further, the Trump Administration manipulated other federal reclamation law to circumvent the requirements of the CVPIA for the financial benefit of the Contractors, specifically, the Water Infrastructure Improvements for the Nation Act, Public Law 114-322 Subtitle J (2016) (WIIN Act). That Act established a five-year period during which Contractors could convert CVP water service contracts into repayment contracts and prepay their outstanding cost to Reclamation in exchange for a permanent water allocation. The Trump Administration entered into contracts that violate the CVPIA and other laws. The so-called WIIN Act contracts have not been validated, as required by Federal law, and can be voided at the discretion of the Biden Administration to avoid the financial effects of the Trump Administration’s decisions and ensure the financial integrity of the CVPIA’s environmental restoration mandate. Many of the undersigned along with the Hoopa Valley Tribe and non-governmental organizations have suits challenging those contracts pending in the United States District Court for the Eastern District of California.⁴

² <https://calsport.org/news/wp-content/uploads/Hoopa-4-8-21-Ltr-re-CVPIA-to-Congress.pdf>

³ <https://calsport.org/news/wp-content/uploads/SIGNED-Concurrence-to-ASWS-ASFWP-from-Secretary-CVPIA-Jan-19-2021.pdf>
<https://calsport.org/news/wp-content/uploads/ASFWP-ASWS-to-Secretary-re-CVPIA-completion-Wallace-AND-Petty-e-sign.pdf>
https://calsport.org/news/wp-content/uploads/BOR-CVPIA-Memo-Jan-15-2021_Date-Stamp.pdf
<https://calsport.org/news/wp-content/uploads/SOL-Memo-to-RD-Re-Completion-Jan-2021.pdf>

⁴ <https://calsport.org/news/wp-content/uploads/2020-07-08-NCRA-v.-DOI-SASC-with-3-Exhibits-1.pdf>
<https://calsport.org/news/wp-content/uploads/4-2-21-filed-1st-amend-compl-1.pdf>
<https://www.biologicaldiversity.org/campaigns/san-francisco-bay-area-and-delta-protection/pdfs/CVP-Contract-Conversion-Complaint-Filed.pdf>
<https://calsport.org/news/wp-content/uploads/Hoopa-4-8-21-Ltr-re-CVPIA-to-Congress.pdf>
<http://www.schlosserlawfiles.com/%7Ehoopa/ECF%201%20Complaint.pdf>

It is important to note that while the WIIN Act itself is an infrastructure initiative that would be funded by prepayment of Contractors' CVP costs, the Trump Administration appears to have severely discounted the Contractors' prepayment obligation by means of the cost accounting actions described above, as well as other actions yet to be identified.⁵ Moreover, while the WIIN Act expires in December 2021, legislation (H.R. 737) to extend it has been introduced in the 117th Congress. Thus the persistent effects of the Trump Administration's actions remain a serious threat to undermine the CVPIA and deny environmental justice to Californians throughout the State. For example, roughly twice the amount of water used by every household in Los Angeles in a year would be permanently allocated to Westlands Water District (Westlands), which has grown to be the size of Rhode Island and the largest federal contractor of Reclamation water.⁶ Among the other things addressed above, the Trump Administration positioned Westlands to market water to low-income communities within their reach, including El Porvenir and Cantua Creek at the cost of more than \$500 an acre foot even though the water is so degraded that those communities cannot safely use it to bath in or drink.⁷

The Biden administration has the ability, and in our view an obligation, to roll back the Trump administration abuses of water law. It can do that by rescinding the bad rules and unlawful water contracts and collecting the more than \$400 million dollars owed by Westlands and other contractors to the Treasury. We urge you to assist this effort by investigating these serious violations of federal law.

Please let us know if we can further brief you and your staff on these illegal and fraudulent actions.

Thank you for your consideration,



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net

⁵ https://calsport.org/news/wp-content/uploads/2021-02-16-PCFFA-CSPA-Haaland-Water-Contracts-CVPIA-BERNHARDT_RESCISSION_REQUEST.pdf
https://calsport.org/news/wp-content/uploads/Trump_Bernhardt-CVP-Cost-Allocation-Contractor-Benefits-Fleecing-Taxpayers-April-2021.pdf
<https://calsport.org/news/wp-content/uploads/2020-Coalition-Letter-Fitch-Rating-Re-Westlands-June-6-2020-final.pdf>

⁶ <https://www.latimes.com/business/story/2019-11-15/interior-secretary-westlands-water-deal>

⁷ <https://www.fresnobee.com/opinion/readers-opinion/article77013012.html>



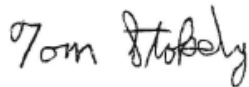
Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](#)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Conner Everts
Executive Director
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lgeorgecarter@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org

Attachment: **Exhibit: Trump_Bernhardt CVP Cost Allocation Contractor Benefits Fleeing Taxpayers April 2021**

Exhibit: Trump_Bernhardt CVP Cost Allocation Contractor Benefits Fleecing Taxpayers April 2021

Trump/Bernhardt Central Valley Project Improvement Act (CVPIA) Cost Allocation Process	
Lawful Actions Potentially Unlawful Actions Unlawful Actions	
1.	DOI Adopts Separable Costs Remaining Benefits (SCRB) for Central Valley Project (CVP) Cost Allocation (CAS) ¹
2.	DOI Segregates CVP and CVPIA mitigation cost allocation ²
3.	DOI Declares mitigation without CVP Project Purpose a Joint Cost ³
4.	DOI Declares CVPIA with CVP Mitigation Project Purpose a Separable Cost ⁴
5.	DOI Completes CAS for CVP Joint Costs
6.	DOI Declares CVPIA a separate program and defer allocating CVPIA Separable Costs in CAS. ⁵ CVPIA costs not allocated are \$340,872,120 ⁶
7.	DOI Determines CVPIA Separable Costs on trend to exceed CVP Restoration Fund (RF) income
8.	DOI Converts Separable CVPIA Costs for Specific Project Purpose to Joint Costs
9.	DOI Revises 1993 Business Practices and Guidelines (BPG) ⁸
10.	DOI Uses revised BPG to convert CVPIA Separable Costs to Joint Costs ⁹
11.	DOI Yields an "average" \$400M credit to water & power contractors. ^{10 11} In 2020, premanent water contracts were signed with Westlands WD and others without provision to collect these statutory cost obligations. ¹²

¹January 14, 2020. Central Valley Project Cost Allocation Study (CAS) <https://www.usbr.gov/mp/cvp/docs/cvp-final-cost-allocation-study-2020.pdf>.

²*Ibid.* CAS @ pdf pg17

³*Ibid.* CAS Section 4.2

⁴*Ibid.* CAS pdf pg 17, footnote 3.

⁵January 2020. "Central Valley Project Final Cost Allocation Study Frequently Asked Questions" at <https://www.usbr.gov/mp/cvp/docs/faq-cvp-01-13-20.pdf> See also CAS section 5.12 & section 5.11 whereby "activities are specifically authorized under CVPIA and have specific cost recovery assignments" (emphasis added) CAS section 12.6 that states the Business Practices Guidelines, not the CAS would specify the allocation of CVPIA mitigation costs.

⁶ CAS pdf page 13.

⁷ CAS Section 12.6; Memorandum pages 15, 19, and 21.

⁸August 6, 2020 "1993 Revised interim Guidelines red-line_version_Public_Comment." See https://calsport.org/news/wp-content/uploads/1993-Revised-Interim-Guidelines-red-line-version_Public-Comment_08.06.20.pdf by Spencer Walden. Also see this link for the BPG PDF revisions including appendices: https://calsport.org/news/wp-content/uploads/Business-Practice-Guidelines_11-21-2019.pdf

⁹*Ibid.* August 6, 2020 revised BPG at pg 10, deletes text referencing reimbursable functions from 'unlimited exposure to environmental mitigation costs and CVPIA's specific mitigation purpose as a separable, not joint costs. Also the revised BPG concludes if the CVPIA does not declare that the mitigation activity is 100 percent reimbursable the cost is declared nonreimbursable. Reclamation has no basis to circumvent Congressional direction which made 15 of the 37 mitigation activities partially reimbursable with specific percentages assigned to the contractors. Further a number of CVPIA statutory provisions under Section 3406 are 100% reimbursable with no cap on expenditures. The CVPIA made mitigation a project purpose and made funding for it a cost of doing business for the water and power contractors, instead of a taxpayer subsidy.

¹⁰December 23, 2020 Westlands WD urges OMB to adopt BPG changes <https://calsport.org/news/wp-content/uploads/WWD-OMB-12-23-2020-White-Paper-re-CVPIA-True-Up-final.pdf> & https://calsport.org/news/wp-content/uploads/Supplemental-White-Paper-re-CVPIA-True-UP_final.pdf

¹¹August 25, 2020. The Trump Administration devised a revised methodology relying upon Appendix B of the withdrawn BPG and revised CAS to change nearly a quarter century old administrative precedent in determining

how CVPIA expenditures, credits and costs are determined. Under the new device, water and power contractors jump from owing hundreds of millions to obtaining a credit from the US Treasury for hundreds of millions of dollars. See CVPIA True Up August Workshop see slide # 10.

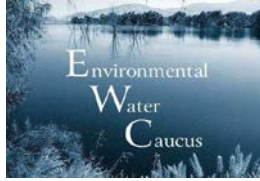
[http://www.schlosserlawfiles.com/~hoopa/CVPIA-True-up_August-Workshop_08.25.20%20\(002\).pdf](http://www.schlosserlawfiles.com/~hoopa/CVPIA-True-up_August-Workshop_08.25.20%20(002).pdf)

February 14, 2020 Westlands WD pushes to limit mitigation costs to just Restoration Fund payments despite statutory obligations to the contrary. <https://calsport.org/news/wp-content/uploads/WWD-Response-to-CVPIA-BPG.pdf>

¹² August 13, 2020, the Hoopa Valley Tribe (Hoopa) sued the Trump Administration for failure to protect Hoopa's fishing & water rights in the Trinity River. [*Hoopa Valley Tribe v. United States Bureau of Reclamation*, No. 1:20-cv-01814-DAD-EPG (E.D. Calif.)]



AQUALLIANCE
DEFENDING NORTHERN CALIFORNIA WATERS



CA Save Our Streams Council



April 27, 2020

Ernest Conant,
Regional Director
California-Great Basin Reg.Fed Bldg.
2800 Cottage Way
Sacramento CA 95825-1898

Erma Leal
Repayment Specialist - SCCAO-445
Dept. of Interior | Bureau of Reclamation
Interior Region 10 - California - Great Basin
South-Central California Area Office

Via email and Regular Mail

Re: Comments on WIIN Act Final Conversion Contract (“Final Modified Contract”) between the U.S. Bureau of Reclamation (Reclamation) and Westlands Water District (Westlands): Fails to Comply with Reclamation policy and Federal and State Laws.

Dear Mr. Conant and Ms Leal;

Our organizations are providing comments on the Final Modified Contract, although this Contract still has not been released to the public. We previously submitted comments to Reclamation on the WIIN Act Draft Conversion Contracts between Reclamation and Westlands on January 6 and 7, 2020 (incorporated by reference).¹ The Draft Repayment Contracts,

¹ <http://calsport.org/news/wp-content/uploads/1-7-20-O-cmts-Reclamation-Westlands-k.pdf>

however, were actually draft templates with none of the critical exhibits, such that comments were necessarily incomplete. The following is a summary of our comments on the Final Modified Contract, with detailed comments on key topics attached.

This Final Modified Contract was executed on February 28, 2020, without public negotiations or public release of the final contract and its exhibits. We received a copy only through a Public Information Request. This contract will provide the Westlands with a base allocation of 12 million acre-feet over the first 10 years. This is the largest water services contract managed by Reclamation and will have major impacts on the environment.

This Final Modified Contract is riddled with gaps and undisclosed provisions, as detailed in attached comments. Millions of dollars to be repaid by Westlands are deleted without explanation. Sections of the proposed contract are missing and others remain undisclosed. Attachments are identified and referenced, but withheld and undisclosed. The true amount of water to be provided is not disclosed to water users in the Delta, North of the Delta, South of the Delta, the San Joaquin Valley and Southern California. True costs and subsidies are misrepresented or just omitted. Key examples include:

- Congressionally mandated water quality standards and protections are removed and instead left to the discretion of the functionary contracting officer and Westlands to the "extent feasible."
- Congressionally mandated limits on the water service area are left to the discretion of the functionary contracting officer and Westlands to modify. We know of no Reclamation regulation or law that grants such authority to a contracting officer to deliver water outside of the Congressionally designated service area. Further, this provision of the Contract directly contradicts the specific acreage specified for delivery to the San Luis Unit.²
- The Modified Final Contract fails to comply with (1) the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq., (2) the Endangered Species Act (ESA), 16 U.S.C. §1531 et seq., (3) Federal Reclamation law, (4) CEQA Public Resources Code 21000-21189 and CESA Cal. Fish & Game Code §§2050-2106.5, and (5) CVPIA in general and specifically Section 3404(c)(2) which requires that provisions of *law* be written as *contract terms* enforceable between the parties. These enforceable provisions of law required by the CVPIA are absent from the contract.
- The Contract evades water quality requirements specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986

<http://calsport.org/news/wp-content/uploads/PCL-et.-al.-Comments-on-WWD-Permanent-Contract-Conversion-Jan-6-2020.pdf>

² See PL 86-488: *Be it enacted by the Senate and House of Representatives of the United States of America in Congress That (a) for the principal purpose of furnishing water for the irrigation of approximately five hundred thousand acres of land in Merced, Fresno, and Kings Counties, California, hereinafter referred to as the Federal San Luis unit service area.* emphasis added.

(100 Stat. 3050) Federal Coordination Act ³ or other existing Federal laws, by omitting these water quality obligations and the obligation to meet repayment by 2030.

- New cost allocation formulas as of January 2020 and other Reclamation actions reduce the amount Westlands owes for repayment by over 120 million dollars.
- Reclamation law and regulations requiring public notification, recirculation, and public comment on the Modified Final Contract were ignored.
- Cumulative impacts are ignored. Reclamation is in the process of converting virtually all CVP water service contracts, about 77 of them, into permanent water repayment 9(d) contracts similar to the Westlands Contract.⁴ Pursuant to NEPA, “cumulative impact” “is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. . . .” (NEPA Regulations § 1508.7.) The cumulative environmental impacts of converting all of Reclamation’s contracts into permanent contracts will be enormous and adverse, but have not been considered.

The Final Modified Contract is substantially different from the incomplete draft contract made available for public review in October 2019. The public interest has been significant (see the 76 detailed comments in exhibit 5). Press reports of the secrecy, unexplained financial changes, and lack of public notification have been extensive.⁵ Given the significance of the alterations

³ <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg3050.pdf> See Section 101 Project Operation and Section 102 Reimbursable costs for salinity control.

⁴ On December 20, 2019, Reclamation gave public notice on its web site that 77 contractors had requested contract conversions. The same notice said that 14 of the contract conversions had already been negotiated and the public comment period on those contract conversions would close on February 19, 2020. The subject contracts were spread among the Central, Northern, and South Central California Area Offices. See: <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=69044>

⁵ See

1. ***Interior proposes coveted deal to ex-client of agency head*** Associated Press By Ellen Knickmeyer, November 8, 2019 <https://apnews.com/4527b2b31fcf452f8e6d35afcebc8cf2>
2. ***Interior Secretary Bernhardt’s previous job raises questions about a deal for his ex-client***, Los Angeles Times By Michael Hiltzikbusiness Columnist, Nov. 15, 2019 <https://www.latimes.com/business/story/2019-11-15/interior-secretary-westlands-water-deal>
3. ***California must help kill sleazy Westlands water deal*** Mercury News & East Bay Times Editorial Boards | <https://www.mercurynews.com/2019/11/15/editorial-westlands-water-deal-smells-of-politics/>
4. ***Feds set to lock in huge water contract for well-connected Westlands Water District*** 11-19-2019, Los Angeles Times, Boxall <https://www.latimes.com/environment/story/2019-11-11/westlands-water-district-federal-water-contract>
5. ***Interior Proposes Coveted Deal to Ex-Client of Agency Head*** *The Interior Department is proposing to award a contract for federal water in perpetuity to a powerful water district that used to employ Secretary David Bernhardt as a lobbyist.* US News and Reports <https://www.usnews.com/news/politics/articles/2019-11-07/interior-proposes-coveted-deal-to-ex-client-of-agency-head>
6. ***Groups slam Trump administration’s sweetheart water deal with Westlands Water District*** Dan Bacher, Friday November 08, 2019. <https://www.dailykos.com/stories/2019/11/8/1898102/-Groups-condemn-Trump-administration-s-sweetheart-water-deal-with-Westlands-Water-District>

and the extensive public interest, public review is required by Reclamation policy.⁶ At a minimum, according to Reclamation policy and regulation, the Regional Director is to furnish revised contracts to all parties who requested the contract in response to the initial public notice. This did not occur.

To execute this contract a Judge must validate it. However, according to Judge Alan Simpson, who denied the validation request after finding that some important pieces of information were missing from the proceedings, "*Given that the contract terms, including repayment terms, are not certain, and that the contract may be changed or modified, validation is not appropriate, at this time.*"⁷

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7. <https://www.restorethedelta.org/2019/11/15/breaking-news-ap-reveals-bernhardt-westlands-sweetheart-water-deal/>
 8. **Interior suggests ex-client of department head for major contract** The Hill By Marty Johnson - 11/08/19 <https://thehill.com/policy/energy-environment/469642-interior-proposes-coveted-deal-to-ex-client-of-agency-head>
 9. *Environmentalists Oppose Westlands' Bid to Secure Water.* GreenWire November 8, 2019 <https://gvwire.com/2019/11/08/environmentalists-oppose-westlands-bid-to-secure-water/>
 10. *Seeking stability, Westlands nears permanent water contract with Feds* Alex Tavlian <http://sjvsun.com/ag/westlands-is-seeking-a-permanent-water-contract-what-does-that-mean/> November 20, 2019,
 11. **Trump delivers on pledge for wealthy California farmers**, Associated Press, By ELLEN KNICKMEYER and ADAM BEAM February 18, 2020. <https://apnews.com/ddaf365a5b5528d4949b478e92daf98b>
 12. *Westlands Water District gets permanent U.S. contract for massive irrigation deliveries.* Los Angeles Times, Bettina Boxall, Feb. 28, 2020 <https://www.latimes.com/environment/story/2020-02-28/westlands-water-district-gets-permanent-u-s-contract-for-massive-irrigation-deliveries>
 13. **Feds Ink Deal with Water District Tied to Bernhardt**, March 3, 2020 /E&E News by Jeremy P. Jacobs <https://www.eenews.net/stories/1062498809/> *As of Sept. 30, 2018, Westlands owed about \$480.7 million to the federal...*
 14. **Judge rebuffs bid to lock in Westlands contract switch.** Jeremy P. Jacobs, E&E News, March 19, 2020 <https://www.eenews.net/greenwire/stories/1062646713?t=https%3A%2F%2Fwww.eenews.net%2Fstories%2F1062646713>
 15. **Hoopa Tribe strikes at interiors coveted Westlands Water District corporate deal**, NORTH COAST NEWS Tuesday, March 31, 2020. <https://krcrtv.com/north-coast-news/eureka-local-news/hoopa-tribe-strikes-at-interiors-coveted-westlands-water-district-corporate-deal> "*Reclamation should not approve this contract until appropriate provisions are included to protect water and fisheries that are lawfully reserved to the Hoopa Valley Tribe and citizens of the Trinity River watershed,*" Billings said. *The tribe said it has proposed contract language to protect the Trinity water and called upon Reclamation and its Central Valley Project contractors to meet their obligations under existing federal law to provide for Trinity River fishery restoration funding as part of their contract requirements.*

⁶ <https://www.law.cornell.edu/cfr/text/43/426.22> See also <https://www.federalregister.gov/documents/2019/03/14/2019-04703/quarterly-status-report-of-water-service-repayment-and-other-water-related-contract-actions> *At a minimum, the regional director will furnish revised contracts to all parties who requested the contract in response to the initial public notice.* emphasis added.

⁷ **Judge rebuffs bid to lock in Westlands contract switch** Jeremy P. Jacobs, E&E News reporter Published: Thursday, March 19, 2020 <https://www.eenews.net/greenwire/stories/1062646713?t=https%3A%2F%2Fwww.eenews.net%2Fstories%2F1062646713>

In view of the above shortcomings, the Final Modified Contract should be withdrawn and the public negotiation process started over with transparency and proper public notice. Our detailed comments that follow are necessarily incomplete because they are based on what could be publicly located. Our comments are submitted with the understanding that we reserve the right to supplement the comments and Reclamation will be obligated to consider them in good faith at such time as Reclamation provides full disclosure of the entirety of the Record and all relevant documents.



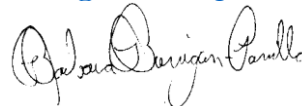
Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Mike Conroy
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
mike@ifrfish.org



John McManus
President
Golden State Salmon Association
john@goldengatesalmon.org




Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net

Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com

Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com

Lowell Ashbaugh
Conservation Chair
The Fly Fishers of Davis
ashbaugh.lowell@gmail.com

Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com

Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.org)
caleenwintu@gmail.com

Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net

Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers International
mrockwell1945@gmail.com

Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org

John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org

DETAILED COMMENTS ON THE MODIFIED FINAL CONTRACT

No Public Release of Final Modified Contract.

- Reclamation modified the draft contract template and finalized a permanent repayment contract (“Final Modified Contract” or “Contract”) with Westlands on February 28, 2020, to become effective on June 1, 2020 (Contract, Article 2(a), p. 12.).⁸
- A copy of the Final Modified Contract still has not been provided by Reclamation despite repeated requests.⁹ Nor is the contract available on Reclamation’s or Westlands’ websites.¹⁰ The failure to provide the Final Modified Contract to the public violates requirements of 43CFR 426.22(d).¹¹
- Our organizations were only able to secure copies of the Final Modified Contract and exhibits via a Public Records Act [Gov. Code, § 6250 et seq] request to Westlands dated March 3, 2016. Westlands responded to our request and provided the Final Modified Contract and exhibits via email on March 16, 2020.

Impacts of Diversions.

Water from the Trinity, Sacramento, and American Rivers, and the tributaries with dams owned by the Federal Government export these waters from the San Francisco Bay-Delta Estuary to serve water to the San Luis Unit (PL 86-488) of the CVP, where Westlands receives the majority of the exported water. Such deliveries have many adverse environmental impacts on the watershed, including the rivers and the San Francisco-San Joaquin Bay-Delta estuary.

Adverse impacts range from reducing freshwater flows and worsening already degraded Delta water quality; to further endangering and destroying endangered fish species and critical habitat;

⁸ See: <https://wwd.ca.gov/wwd-media/press-release-27/>

⁹ See <http://calsport.org/news/wp-content/uploads/WWD-Permanent-Contract-FOIA-Correspondence-10-19-4-2020.pdf> & <http://calsport.org/news/wp-content/uploads/Conant-Letter-Re-WWD-1-15-MAF-Contract-Conversion-10-29-19-.pdf>

¹⁰ A copy of the contract and exhibits was requested on October 29, 2020 from Ernest Conant and the contracting officer. In addition a FOIA request for the Contract was filed on October 28, 2019, Freedom of Information Act (FOIA) Request - BOR-2020-00031. On the April 17, 2020 the designated response date, BOR again delayed providing a copy of the contract and associated documents including summaries of public negotiation sessions and notices.

¹¹ <https://www.law.cornell.edu/cfr/text/43/426.22> See also <https://www.federalregister.gov/documents/2019/03/14/2019-04703/quarterly-status-report-of-water-service-repayment-and-other-water-related-contract-actions> *In the event modifications are made in the form of a proposed contract, the appropriate regional director shall determine whether republication of the notice and/or extension of the comment period is necessary. At a minimum, the regional director will furnish revised contracts to all parties who requested the contract in response to the initial public notice.*

to reducing freshwater flows worsening dangerous toxic algal blooms in the Delta; to adverse impacts on public health and safety in the Delta region; to adverse impacts on agriculture in the Delta. The environmental impacts of diverting this amount of water in perpetuity and exporting it to some set of lands outside of both the Congressionally authorized service area of the San Luis Unit and the State of California's authorized place of use under Reclamation's water right permits has not been analyzed nor legally sanctioned.

The Acreage in Westlands Identified to Receive Water in the Contract Exceeds Acreage Authorized by Congress Pursuant to the San Luis Act of 1960.

The Exhibit A to the Final contract – Map of Contractor’s Service Area— is not consistent with Congressional authorization and the map contained in the 1956 San Luis Unit Feasibility Study.¹² In 1960, Congress passed the San Luis Act, Pub. Law No. 86–488, 74 Stat. 156 (1960). Section 1(a) of the San Luis Act authorized Reclamation to “construct, operate, and maintain the San Luis unit as an integral part of the Central Valley Project,” in accordance with the 1956 Feasibility Study for the purpose of irrigating only 500,000 acres in the entire San Luis Unit in three counties—Merced, Fresno, and Kings. Emphasis added. We note PL 86-488 has not been amended.

The authorization for the San Luis Unit, Central Valley Project¹³ limits the gross service area to 500,000 acres of land and refers to the feasibility report¹⁴, which includes a map¹⁵ that clearly

¹² In 1956, the Bureau of Reclamation delivered to the United States Congress, “A Report on Feasibility of Water Supply Development” for the San Luis Unit (the 1956 Feasibility Report), which recommended constructing a group of water management facilities, called the San Luis Unit, as an addition to the Central Valley Project, in order to bring irrigation waters to an area of approximately 496,000 acres in the San Joaquin Valley. In 1960, Congress passed the San Luis Act, Pub. L. No. 86-488, 74 Stat. 156 (1960) authorizing water deliveries to 500,000 acres for the entire unit consistent with the Feasibility Report, see § 1(a). See:

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/LA_ND/part2rebuttal/land_299.pdf

and

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/LA_ND/part2rebuttal/land_302.pdf

¹³ In 1960, Congress passed the San Luis Act, Pub. Law No. 86–488, 74 Stat. 156 (1960). Section 1(a) of the San Luis Act authorized Reclamation to “construct, operate, and maintain the San Luis unit as an integral part of the Central Valley Project,” in accordance with the 1956 Feasibility Study for the purpose of irrigating only 500,000 acres in the entire San Luis Unit in three counties—Merced, Fresno, and Kings. Emphasis added. We note PL 86-488 has not been amended.

¹⁴ U.S. Dept Of the Interior, Feasibility Report (approved by President Roosevelt, December 2, 1935), reprinted in House Committee on Interior & Insular Affairs, Central Valley Project Documents-Part One: Authorizing Documents, H.R. Doc. No. 416, 84th Cong., 2d Sess. 563 (1956). The Feasibility Report, released in Sacramento in May 1955 and reported to Congress December 17, 1956.

¹⁵ *Ibid.* See the 1956 Feasibility Report page 36.

describes the location, size, and elevation of that service area. Subtracting out acreage for San Luis Water, Panoche and Pacheco Water Districts, leaves roughly 400,000 acres of eligible land within Westlands, according to the federal authorization and confirmed in the Special Task Force Report on the San Luis Unit [PL 94-46].

After subtracting the roughly 100,000 acres that has already been retired with taxpayer dollars and largely put to other industrial uses, that leaves approximately 300,000 acres in Westlands eligible to receive CVP San Luis Unit water exports.¹⁶ Yet, this Final contract would irrigate over 600,000 acres of land within Westlands as identified in Exhibit A of the contract. Under the contract, that acreage would be allocated between 2.2 and 1.7 ac/ft of water per acre. The inclusion of the additional acres to be irrigated represents 400,000 AF of additional unauthorized allocation of water to lands not authorized by Congress to receive federal CVP water under the San Luis Act. Without Congressional authorization, this contract arbitrarily takes water from other CVP contractors, communities, and the environment.

Public Law 86-488, authorizing the San Luis Unit, does not contain any provision authorizing an enlargement of the San Luis Unit Service area. The law is based on a feasibility study that was released in May 1955 and reported to Congress on December 17, 1956. It states that the service area is 496,000 acres and it establishes a long-term crop pattern for 440,000 acres.¹⁷ The Final contract also contradicts the December 30, 1961 Federal-State Agreement for the construction and operation of the joint-use facilities of the San Luis Unit.¹⁸

In simple terms, the Final contract enlarges the service area beyond the limit authorized by Congress. In addition to an unauthorized enlargement of the CVP contract service area, and thus an unauthorized increase in water allocation, the environmental and water quality impacts are not addressed in any NEPA documents or in any ESA consultation.

Exhibit A of the Final Contract shows inflated acreage of the district (over 600,000 acres) and associated inflated water deliveries to Westlands. This Exhibit A map documents an expansion

¹⁶ Special Task Force Report on San Luis Unit 1978 available online [see pages 18 and 20 for the finding of 500,000 gross acres authorized for all three districts finding an unauthorized expansion of more than 100,000 acres or 30%.] <http://babel.hathitrust.org/cgi/pt?id=umn.31951002836772c;view=1up;seq=35>. Also see Lloyd Carter's law review: <https://digitalcommons.law.ggu.edu/gguelj/vol3/iss1/3/>. And Friends of the Trinity water rights testimony before the State Water Resources Control Board: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/docs/FOTR/for_94.pdf

¹⁷ Ibid. See the 1956 Feasibility Report pg 91.

¹⁸ See pg 4 of the Federal State Contract which reads: "The 'Federal San Luis Unit service area' shall mean the area of approximately 500,000 acres in Merced, Fresno, and Kings Counties as described in the report of the Department of Interior entitled, "San Luis Unit Central Valley Project," dated December 17, 1956.. ...This agreement established that the federal service under this contract.

of acreage beyond what is Congressionally authorized.¹⁹ No statutory authority is provided for this arbitrary inflated acreage and water deliveries. The enlargement of the San Luis Unit service area and distribution canals exceed the construction and operations costs of the distribution and drainage facilities. The inflated water exports causes increased impacts from the areas of export including the Trinity and Sacramento Rivers and the Sacramento-San Joaquin Delta Estuary and Bay. Further the pollution created by irrigating these lands and constructing distribution systems has not been analyzed nor disclosed. After this contract was executed Reclamation issued a public notice in March 2020, that apparently negotiation and execution of a long-term repayment contract to provide reimbursement of costs related to the construction of drainage facilities.²⁰ No repayment costs or the funds necessary for Westlands to repay what is owed to satisfy the Federal Government's construction obligation to provide drainage service to lands within the San Luis Unit of the CVP including the Westlands WD service area have been included in this permanent water contract.

The Secretary is Required to Contract for the Delivery of Project Irrigation Water Only to Lands with Characteristics that Allow Delivery--this Final contract Violates that Mandate.

As stated above water is being provided outside of the Congressionally designated service area and no updated irrigable lands map has been provided. Public Law 99-546, 100 Stat. 3050. (Coordinated Operations Act) Sec. 305. § 4(c) of the Act requires, among other things, that the Secretary must show that lands receiving project water are capable of *"successful irrigability of those lands and their susceptibility to sustained production of agricultural crops by means of irrigation has been demonstrated in practice. Such proposal shall also include an investigation of soil characteristics which might result in toxic or hazardous irrigation return flows."* No such documentation and evidence has been provided in support of the proposed permanent water contract to irrigate these lands referenced in Exhibit A of the proposed contract. In fact, the San Luis Drainage Feature Re-evaluation EIS found that roughly 300,000 acres of the lands proposed for irrigation under this contract in Westlands are drainage-impaired²¹ and will generate "toxic or hazardous irrigation return flows" to ground or surface waters. Indeed, current practice results in some of these toxic flows being discharged to the California Aqueduct without proper Clean Water Act permits or consideration of hazardous conditions for fish and wildlife.²²

¹⁹ See Plate 1--Map of the Service Area & Plate 5 Map of Land Classification found in the 1956 Feasibility Report can be found online: <http://cdm15911.contentdm.oclc.org/cdm/ref/collection/p15911coll10/id/2106>

²⁰ <https://www.federalregister.gov/documents/2020/03/31/2020-06620/quarterly-status-report-of-water-service-repayment-and-other-water-related-contract-actions> @ #21.

²¹ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=61

²² <http://calsport.org/news/wp-content/uploads/PCL-et.-al.-Cmts-Re-WWD-Interim-Contract-12-14-19.pdf>
<http://calsport.org/news/wp-content/uploads/Conant-Burman-Ltr-Re-Extension-of-Cmt-Re-SLD-Discharges-Use-Agreement-12-10-19.pdf>
<http://calsport.org/news/wp-content/uploads/CBD-PCL-et.-al-Cmt-Ltr-Cross-Valley-Interim-Contract-12-12-2019.pdf>

Delivery of Project Water to Toxic Soils Obligates the Secretary to Provide Drainage, but Such Drainage is not Provided by the Final Contract.

Judge Hewitt ruled that under Westlands' interim contracts, the government was not obligated to provide drainage service, "*Because (Westlands) failed to show that drainage service was a bargained-for benefit of any of these contracts.*"²³ And yet, the Final permanent contract proposal obligates delivery of water to these lands that are unsuitable for irrigation and to other lands that would receive project water that are, however, outside of Congressional authorization,²⁴ but could obligate the federal government to furnish something that has been unattainable for decades—drainage.

The drainage obligation would not exist, however, if Project water deliveries to drainage-impaired lands is cut off because of the impracticability of irrigation. This alternative—cessation of irrigation water from unsuitable lands—is mandated by law and regulation.²⁵ The toxic drainage, groundwater pollution, and surface water pollution is created in large part by the Reclamation's deliveries of CVP water to these non-irrigable lands. Reducing water service instead of expanding it is the obvious and rational solution. Controlling or eliminating the supply of drainage water by eliminating deliveries to these identified toxic soils will control the demand for drainage and the enormous costs estimated at \$2.6 billion. Westlands' land uses have changed significantly²⁶ within the proposed contract acreage. These land use changes together with cessation of delivery to these lands impracticable of

http://calsport.org/news/wp-content/uploads/PCL-et-al_Comments-on-DEA-for-GBP-Stormwater-Plan_12-23_-2019-.pdf

²³ Westlands Water District v. United States, 12-12C (Fed. Cl. 2013) United States Court of Federal Claims Filed: January 15th, 2013 Docket Number: 12-12C

²⁴ See San Luis Act of 1960 Section 1(a) *for the principal purpose of furnishing water for the irrigation of approximately five hundred thousand acres of land in Merced, Fresno, and Kings Counties, California, hereinafter referred to as the Federal San Luis unit service area.*
<https://www.govinfo.gov/content/pkg/STATUTE74/pdf/STATUTE-74-Pg156.pdf>

²⁵ Continuing to provide project water to these toxic soils would require approval from Congress to increase the authorized appropriation cap under the San Luis Act. Also see Reclamation Directives and Standards PEC P12 for required continuing investigations into land classification and suitability for irrigation for the delivery of project water.

²⁶ Industrial uses including massive utility land conversion in thousands of acres has replaced irrigated agricultural uses and yet the contract is silent regarding the municipal and industrial rates and interest owed on these land use changes along with water use changes that are restricted to 5 AF per quarter section. See the maps referenced in previous comments: <http://calsport.org/news/wp-content/uploads/PCL-et.-al.-Cmts-Re-WWD-Interim-Contract-12-14-19.pdf> See also <https://www.solarpowerworldonline.com/2020/03/westlands-solar-park-california-construction-begins/> And June 25, 2019 Kings County solar projects advance <https://sierra2thesea.net/energy/kings-county-solar-projects-advance>

irrigation without generating pollution must be considered. The unauthorized financial obligation inferred by issuing this permanent water contract has not been addressed.²⁷

Failure to Comply with NEPA.

An EIS must be prepared by Reclamation before entering into a contract with Westlands. The reason is that the contract would be a major federal action significantly affecting the quality of the human environment. (42 U.S.C. § 4332(C.) “Actions include new and continuing activities, . . .” (NEPA Regulations § 1508.18(a).)²⁸ NEPA requires “that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter [NEPA], . . .” (42 U.S.C. §4332.)

NEPA processes must be integrated with other processes “at the earliest possible time to ensure that planning and decisions reflect environmental values, . . .” (NEPA Regulations § 1501.2.) Reclamation, however, has not prepared an EIS on the proposed contract. Reclamation *has not even prepared an environmental assessment* to determine whether an EIS must be prepared. (NEPA Regulations §§ 1501.3; 1508.9.) Reclamation has not made a “finding of no significant impact” on the action. (NEPA Regulations § 1508.13.) Reclamation has not instituted the required “scoping” process and has not published a notice of intent in the Federal Register. (NEPA Regulations § 1501.7.) Reclamation has not prepared a categorical exclusion or notice thereof on the contract. (NEPA Regulations § 1508.4.) The subject action would not in any event qualify for a categorical exclusion. Consequently, Reclamation has not furnished the public any information whatsoever, by which to evaluate the potential environmental consequences of the contract and the water diversions and deliveries authorized by it. Reclamation also has not furnished the public any information whatsoever, by which to evaluate the *cumulative* environmental impacts of all of the contract conversions in Reclamation’s pipeline and the water diversions and deliveries authorized by them. Reclamation has not prepared a single EIS on the related contract conversions (NEPA Regulations § 1502.4(a) and has not prepared a broad “program” EIS on the contract conversions in its pipeline. (NEPA Regulations § 1502.4(b.) Reclamation has not prepared any “environmental document” on its action. (NEPA Regulations §1508.10.)

²⁷ The 2008 SLDFR Feasibility Report sent to Congress explained that “Federal interest is established either by legislation or through an evaluation of a proposed action relative to the agency’s mission” and that, to be federally implementable, an action “must be feasible as defined by the Economic and Environmental Principles and Guidelines (Principles and Guidelines). The Principles and Guidelines require Federal actions contribute to the national economic development (NED).” The 2008 Feasibility Report continued: The San Luis Act of 1960 as amended establishes the Reclamation’s Federal interest in the proposed action. However, the requirement for a net positive contribution to the Nation’s economy cannot be met by either of the two action alternatives. The 2008 SLDFR Feasibility Report concluded the action alternative selected by the Bureau was not appropriate for implementation according to the government’s own accepted standards.

²⁸ The NEPA Regulations are codified at 40 C.F.R. §1500 et seq.

The EIS section on “alternatives” “is the heart of the environmental impact statement.” (NEPA Regulations § 1502.14.) The alternatives section, should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public. (NEPA Regulations § 1502.14.)

An environmental assessment also must include discussion of alternatives. Reclamation must prepare an EIS or first prepare an environmental assessment and then an EIS, which must “Rigorously explore and objectively evaluate all reasonable alternatives, . . .” to the action. (NEPA Regulations § 1502.14(a.) The EIS will necessarily include alternatives that reduce deliveries of project water in order to increase freshwater flows and begin to restore watershed rivers and the Delta.

The Ninth Circuit Court of Appeals reversed a district court decision denying environmental plaintiffs’ summary judgment because the challenged environmental document issued by Reclamation under NEPA, “did not give full and meaningful consideration to the alternative of a reduction in maximum water quantities.” (*Pacific Coast Federation of Fishermen’s Assn’s v. U.S. Dept. of the Interior*, 655 Fed. Appx. 595, 2016 WL 3974183*3 (9th. Cir., No. 14-15514, July 25, 2016) (Not selected for publication).) “Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion and the agency did not adequately explain why it eliminated this alternative from detailed study.” (*Id.* at *2.) Reclamation’s “reasoning in large part reflects a policy decision to promote the economic security of agricultural users, rather than an explanation of why reducing maximum contract quantities was so infeasible as to preclude study of its environmental impacts.” (*Id.* at *3.)

The requirement under NEPA to consider the alternative of reducing exports to increase flows through the Delta is so obvious that the Ninth Circuit’s decision was not selected for publication because no new legal analysis was required to reach the decision. The decision pertained to interim two-year contract renewals. If the alternative of reducing exports must be considered during renewal of two-year interim contracts, it most assuredly must be considered before entering into permanent contracts. Moreover, “an alternative may be reasonable, and therefore required by NEPA to be discussed in the EIS, even though it requires legislative action to put it into effect.” *Kilroy v. Ruckelshaus*, 738 F.2d 1448, 1454 (9thCir. 1984.)

Reclamation has failed to proceed in the manner required by NEPA with this contract conversion. Reclamation proceeded with FINAL contract agreements with Westlands to convert the contract renewal contracts to permanent repayment contracts without having first prepared and issued an EIS.

Examples of Environmental Issues Ignored by Reclamation’s Failure to Prepare an EIS or even an Environmental Assessment.

The NEPA Regulations give guidance on whether an action “significantly” affects the quality of the human environment. “‘Significantly’ as used in NEPA requires considerations of both

context and intensity:” (NEPA Regulations § 1508.27.) Ten factors are listed in § 1508.27(b) 1-10 in evaluating intensity meaning severity of the impact.

1508.27(b)(2) The degree to which the proposed action affects public health or safety

The water deliveries to Westlands diminish freshwater flows through the Delta which decreases water supplies and water quality and worsens the amount and frequency of toxic algal blooms in the Delta. That is one of the ways by which the action affects public health and safety.

(3) Unique characteristics of the geographic area

The Delta already fails to meet established water quality standards and is an ecologically critical area. The water deliveries to Westlands exacerbate the decline of the Delta.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of the contract will be highly controversial because of the worsening water supply and water quality crisis in the Delta. The controversy is evidenced by the recent article in the Los Angeles Times entitled *Feds set to lock-in huge water contract for well-connected Westlands Water District* (Bettina Boxall, Los Angeles Times November 11, 2019)²⁹.

The new contract doesn't include the water reduction. Nor does it contain provisions for reassessing delivery amounts if Westlands retires land on its own without a drainage settlement.

The Westlands contract is highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks

Because Reclamation has failed to engage in any NEPA environmental analysis whatsoever, the impacts of the contract are highly uncertain.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

About 77 contractors started negotiations to convert the contracts. Converting the Westlands contract would, therefore, establish a precedent for future actions with significant effects.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

²⁹ See: <https://www.latimes.com/environment/story/2019-11-11/westlands-water-district-federal-water-contract>

The Westlands contract conversion is related to other contract conversions in the pipeline that would have cumulatively significant impacts.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat

Endangered winter-run Chinook salmon, threatened spring-run Chinook salmon, Central Valley steelhead, Green Sturgeon, and Delta smelt continue to decline because of the reductions in water quality and flows resulting in rising temperatures, increased salinity, and sedimentation. CVP water deliveries harm the fish by reducing water flows and worsen the contamination of San Joaquin Valley surface waters, groundwater, and soils with pollutants including selenium.

(10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment

It appears that the contract would violate Reclamation Law by enlarging the service area and water quantities beyond the limits authorized by Congress. Reclamation's refusal to prepare an EIS appears designed to facilitate the violation of reclamation law by not providing any information whatsoever by which the public can evaluate how much land will remain in production for how long and how much land will be retired from agricultural production and when. And how much land will be converted to municipal and industrial uses.

Reclamation's Action is Discretionary.

Our organizations have not seen any communication from Reclamation explaining why the Westlands contract was finalized without completing any NEPA review. Reclamation does refer in "whereas" clauses in the draft contract to the Water Infrastructure Improvements for the Nation Act (Pub. L.) 114-322, 130 Stat. 1628), Section 4011 (a-d) and (f) (WINN Act.) The contract recites,

WHEREAS, 4011(a)(1) provides that 'upon request of the contractor, the Secretary of the Interior *shall* convert any water service contract in effect on the date of enactment of this subtitle and between the United States and a water users' Association [Contractor] to allow for prepayment of the repayment contract pursuant to paragraph (2) *under mutually agreeable terms and conditions.*' (Draft Contract, 8th Whereas clause, p. 4; also, 20th Whereas clause, p. 8.) (Emphasis added.)

Reclamation may contend that the WINN Act including use of the word "shall" makes entry into the conversion contracts non-discretionary and thus not subject to NEPA. As provided by WINN Act section 4011(a)(1), however, the terms and conditions *must be mutually agreeable* meaning they must be agreeable to the Secretary of the Interior, as well as to the contractor. That means under the plain language of the Act, the Secretary of the Interior retains discretion because the terms and conditions of the contracts must be agreeable to him. In *Aluminum Co. of America v. Central Lincoln Util. Dist.*, 467 U.S. 380, 397 (1984), the Supreme Court held,

Because the Regional Act does not comprehensively establish the terms on which power is to be supplied to DSIs [direct-service industrial customers] under the new contracts, it is our view that the Administrator has broad discretion to negotiate them.

NEPA cases have rejected efforts by agencies to avoid complying with NEPA by contending their actions are non-discretionary, when there is some discretion.³⁰ The Secretary of the Interior has discretion to determine contract terms and conditions that are agreeable to him. That being the case, Reclamation has failed to comply with NEPA by converting the Westlands water contract without completing environmental review before that contract was finalized.

Failure to Comply with CVPIA.

NEPA Compliance is also Required by the Central Valley Project Improvement Act before entering into Conversion Contracts.³¹ Savings language in the WINN Act (section 4012(a)(2) requires, “This subtitle shall not be interpreted or implemented in a manner that— [omitted] (2) affects or modifies any obligation under the Central Valley Project Improvement Act [CVPIA] (Public Law 102-575; 106 Stat. 4706), except for the savings provisions for the Stanislaus River predator management program expressly established by section 11 (d) and provisions in section 11(g); [omitted]”

The CVPIA was enacted in 1992 to reduce adverse environmental impacts of Central Valley Project (CVP) operations and to modify State water right permits to included fish and wildlife as a purpose of the project. The CVPIA requires preparation of an EIS before Reclamation renews any long-term water service contract. (CVPIA §§ 3402(a), 3404(c)(1.) That requirement has not been eliminated by the WINN Act.

Further the contract does not contain within the contract terms explicit language that is enforceable between the parties as required by CVPIA Section 3404(c)(2). This section requires that provisions of *law* be written as *contract terms* enforceable between the parties. Exhibit D, which previously was not available to the public for comment, provides no repayment for required Trinity River Division (TRD) facilities or CVPIA restoration activities. Enforceable contract provisions of *law* that by law must be written as *contract terms* enforceable between the parties include for example:

- *Section 3406(b)(2), which authorizes and directs the dedication of up to 800 thousand AF (TAF) of CVP water for environmental purposes.*

³⁰ Such cases include *Forelaws on Board v. Johnson*, 743 F.2d 677 (9th Cir. 1984.)

³¹ Section 3404(c) of the CVPIA requires that an EIS be completed before Reclamation can renew any long-term repayment or water service contract for a period of 25 years. Reclamation defines "long term contract" as a "*contract with a term of more than 10 years.*" See <https://www.usbr.gov/recman/pec/pec-p05.pdf> By these definitions any contract term longer than 10 years is by Reclamation's own definition 'a long-term contract.' A conversion to a permanent contract fits the definition of a long-term contract. Thus, federal law requires a full EIS before entering into permanent repayment contracts. Congress determined that long-term contracts would have a significant effect on the environment such that an EIS is required.

- *Section 3406(b)(23), which addresses restoration efforts for the Trinity River Division (TRD).*
- *Section 3406(d), which requires firm CVP water supplies amounting to 480 TAF to be delivered to federal, state and some private wildlife refuges.*

At page 7, lines 13-16, of the reporter’s transcript of the February 27, 2020 Westlands' validation proceeding, Westlands' Daniel O’Hanlon states that “Exhibit D . . . is the repayment obligation . . . the total represents Westlands’ share of the construction costs of the Central Valley Project.”³² However, most of the CVP project elements necessary to provide water to Westlands have been omitted from repayment contrary to Reclamation law:

- What about repayment for the capital costs of the Trinity River Division (TRD) and other CVP facilities that convey water 400 miles to Westlands?
- Has the TRD’s capital cost been fully retired?
- If not, then why is there no repayment allocated to WWD for its share of the remaining capital costs of the TRD and other conveyance facilities?
- Why aren’t those constructions costs that are “not reflected in such schedules”(see *section 4011(a)(2)*) pursuant to WINN Act paragraphs A and B required to be repaid and thus included in exhibit D?

In addition Reclamation has failed to prepare an EIS before entering into the contract with Westlands. CVPIA Section 3404(a), precludes the issuance of any new short term, temporary, or long term CVP contracts for any purpose other than fish and wildlife without NEPA compliance.

Judicial Confirmation of the Contract Amendments Has Not Been Obtained.

Westlands has failed to obtain from the court a ruling with regard to the validity of this contract.³³ To protect the United States, Reclamation law³⁴ and specifically the Act of May 15, 1922, requires state court to validate the contract. Section 1 of the Act of May 15, 1922, which states in part:

..that no contract with an irrigation district under this act shall be binding on the United States until the proceedings on the part of the district for the authorization of the execution of the contract with the United States shall have been confirmed by decree of a court of competent jurisdiction, or pending appellate action if ground for appeal be laid.

³² IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA IN AND FOR THE COUNTY OF FRESNO
 ·Before the Honorable ALAN M. SIMPSON, Judge, Department 502 Reporter's Transcript 2-27-2020 Job # 610275.

³³ Superior Court Of The State Of California County Of Fresno, Central Division, Case No. 19CECG03887, Validation Of Contract Date: January 28, 2020

³⁴ See 43 U.S.C §511(1976) Section 46 of the Omnibus Adjustment Act of 1926 and 43 U.S.C. §423 (1976).

The Act of May 15, 1922 requires the judicial confirmation of contracts with irrigation districts. This has not occurred.

Failure to Comply with the Coordinated Operations Act of 1986³⁵

The modified Final Contract omits the obligation of Westlands and the United States to deliver Project water in accordance with water quality standards specified in PL 99-546. This language was omitted from the Final Contract: "*water quality standards specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or other existing Federal laws.*" Instead the quality of water and operations are left to the Contracting Officer instead of specific reference to required water quality protection levels. Congress directed that the United States and its Contractors operate the CVP *in conformity with State water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta and Estuary* and to operate the CVP *so that water supplied at the intake of the Contra Costa Canal is of a quality equal to the water quality standards contained in the Water Right Decision 1485 of the State of California Water Resources Control Board, dated August 16, 1978, except under limited conditions.* We know of no law that authorizes Reclamation to change this Congressional direction in a contract. This substantially changes the terms of the contract and obligations to meet state water quality standards. Changing the water quality protection standards to some undefined term as "what is feasible" also has significant environmental impact and has not been analyzed nor the endangered species impacts considered. This is a significant change to the final contract and received no public notice.

This is from the draft contract release:

QUALITY OF WATER

16. (a) Project facilities used to deliver Project Water to the Contractor pursuant to this Contract shall be operated and maintained to enable the United States to deliver Project Water to the Contractor in accordance with the water quality standards specified in subsection 2(b) of the Act of August 26, 1937 (50 Stat. 865), as added by Section 101 of the Act of October 27, 1986 (100 Stat. 3050) or other existing Federal laws. (emphasis added)

This is from the Final modified contract:

PROTECTION OF WATER AND AIR QUALITY

(a) The Contractor, without expense to the United States, will care for, operate and maintain transferred works in a manner that preserves the quality of the water at the highest feasible level as determined by the Contracting Officer.

(b) The United States will care for, operate and maintain reserved works in a manner that preserves the quality of the water at the highest level possible as determined by the Contracting Officer. (emphasis added)

³⁵ <https://www.govinfo.gov/content/pkg/STATUTE-100/pdf/STATUTE-100-Pg3050.pdf> See Section 101 and Section 102

Also required under Section 102 of Public Law 99-546—OCT. 27, 1986 100 STAT. 3051, the contract needs to provide for repayment of D-1485 salinity costs and complying with State water quality standards. The modified Final contract does not include these reimbursements and repayment of these costs.

Failure to Comply with CEQA.

Public Resources Code Section 21151, which provides that EIRs are required for certain projects, notes that a Categorical Exclusion is not allowed when:

1. The project site is environmentally sensitive as defined by the project's location. A project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant.
2. The project and successive projects of the same type in the same place will result in cumulative impacts;
3. There are "unusual circumstances" creating the reasonable possibility of significant effects.

The final contract amendments contain significant changes to compliance with State water quality standards, the amount of land disturbance and water exports that were not previously disclosed in the draft contract that was made available for public comment. Our previous comments have also described significant groundwater contamination and downstream cumulative impacts. The toxic runoff, drainage, and effects of drainage treatment and disposal, including but not limited to, fish, wildlife, air emissions, transportation and other impacts, have not been disclosed. The final contract is also silent with regard to paying for these water quality costs and protections. Without a proven drainage solution, water quality impacts from irrigation of toxic soils in Westlands have far reaching impacts outside of the district and in downstream waters.³⁶ Therefore, there clearly are significant effects to the environment associated with the issuance of permanent water contracts and, therefore, a full EIR under CEQA needs to be completed along with compliance with federal and state endangered species laws.

Further any full EIR for long term contracts should include information on the relationships between irrigation in the San Luis Unit (including Westlands) and groundwater movement downslope, in terms of flow and water quality. The USEPA has noted previously that such an environmental review should provide information on the San Luis Unit's role in groundwater

³⁶ The Department of Interior's Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant. The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational performance criteria. In addition, the USBR was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, USBR spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals.[see <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luis-demonstrationtreatmentplant>]

accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife.³⁷ Absent this information, the public and decision makers are left in the dark as to significant impacts and required mitigation measures, such as “*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*” The effects of toxic pollution from Westlands caused by irrigation enabled by the proposed permanent water contracts are significant and complex and must be addressed in a comprehensive EIR.

Finally, consideration and analysis of a full range of project alternatives is needed to prevent significant impacts. We have raised these issues in the past, and they are even more pertinent today. They include first the failure to study “the alternative of a reduction in maximum interim contract water quantities. By failing to study this alternative, the Westlands defies the *PCFFA* Court’s instruction that Reclamation must “give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities.” *PCFFA*, 655 Fed. Appx. at 599. Second, the CEQA exemption fails to disclose – let alone analyze as required – the massive environmental impacts of diverting this water from the Delta and applying to contaminated soils. Third, an accurate map of the land uses that will be receiving water under these contracts is needed to determine the impacts of converting these agricultural areas to other uses, including utilities³⁸. And, fourth, there needs to be an assessment of the ability of existing agricultural users to pay the significant amounts of debt required under the contract conversion process. This required debt load predictably will change land uses and the likely shift to industrial uses must be disclosed and analyzed. Lastly, no information is provided as to how this debt will be repaid and the impacts on existing agricultural and industrial operations, especially during severe prolonged droughts and climate change, will be managed. These critical shortcomings leave decision-makers and the public in the dark.

³⁷ See <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

³⁸ See WWD 2008 Bond Debt Statement: 30,065,000 Westlands Water District adjustable Rate Refunding Revenue Certificates of Participation, Series 2008a _ Westlands Water District Notes To Financial Statements Years Ended FEBRUARY 28, 2007 AND 2006 @ page 31: “*In February and March 2005, the District acquired approximately 8,750 acres of land within the Broadview Water District, which is substantially all of Broadview’s irrigable acreage. In conjunction with the acquisition, the District initiated the process to annex all of Broadview’s lands and will seek a permanent assignment of Broadview’s Central Valley Project Water Contract totaling 27,000 acre-feet to the District from the Bureau of Reclamation. Of this water supply, the District plans to annually make available 6,000 acre-feet of entitlement to the Naval Air Station – Lemoore pursuant to the Supplemental Water Allocation Agreement between the District and NASL.*” See this 2016 overview of transmission lines, towers and land conversion maps for Westlands WD: http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI_02/TN210903_20160330T140735_Daniel_Kim_Comments_WSP_comments_to_RETI_20_plenary_group_meeti.pdf & <http://web.energycauity.com/REProject.aspx?id=16887>

Failure to comply with California Endangered Species Act (CESA) or Federal Endangered Species Act (ESA)

This final modified contract contains significant changes which have not been analyzed nor disclosed to the general public for review and comment. As emphasized in our December 14, 2019 comments Westlands' CVP Interim Contracts and our January 7, 2020, comments on Westlands' CVP Repayment contract conversions for Westlands, and January 21, 2020 comments on proposed adoption of a Categorical Exemption under CEQA, areas within the project site, and downstream habitats known to be habitats for endangered species that are sensitive to selenium contamination and salt. Specifically, impacts from these water contract deliveries and drainage contamination may occur to the following State and Federally-listed species:

- San Joaquin kit fox (*Vulpes macrotis mutica*) State Threatened (ST) and Federally Endangered (FE),
- Tipton kangaroo rat (*Dipodomys nitratooides nitratooides*) SE and FE,
- Nelson's antelope squirrel (*Ammospermophilus nelsoni*) ST,
- California Least Tern (*Sterna antillarum browni*) SE and FE,
- Swainson's hawk (*Buteo swainsoni*) ST,
- tricolored blackbird (*Agelaius tricolor*) ST, the federally endangered
- blunt-nosed leopard lizard (*Gambelia sila*) SE and FE,
- giant garter snake (*Thamnophis gigas*) ST and FT, and,
- San Joaquin woollythreads (*Monolopia congdonii*) FE and Rare Plant Rank (CRPR) 1 B.2,
- Green sturgeon (*Acipenser medirostris*) FT
- Central Valley spring-run chinook salmon (*Oncorhynchus tshawytscha*) FT
- Steelhead trout (*Oncorhynchus mykiss*) FT
- Buena Vista lake ornate shrew (*Sorex ornatus relictus*) FE

Impacts may also occur to State candidate species (CS) and State species of special concern (SSC):

- American badger (*Taxidea taxus*) State SSC,
- Tulare grasshopper mouse (*Onychomys torridus tularensis*), State SSC,
- burrowing owl (*Athene cunicularia*) State SSC,
- San Joaquin coachwhip (*Masticophis flagellum ruddocki*) State SSC,
- crotch bumble bee (*Bombus crotchii*) the State CS, and,
- Munz's tidy-tips (*Layia munzii*) CRPR 1 B.2.

These concerns were previously raised in in regard to the issuance of two-year interim contracts.³⁹ These previously identified impacts are now be further compounded by a permanent contract and yet, no compliance with the CESA or the Federal ESA have been provided. Further, Senator Feinstein noted with the passage of the WIIN Act, "... the bill's savings clause that prevents the legislation from violating state or federal environmental laws including the *Endangered Species Act* and biological opinions..."⁴⁰

Final Contract References Compliance with ESA Without Compliance.

The Final contract states on Lines 359-362 that the Contractor shall "*comply with requirements applicable to the Contractor in biological opinion(s) prepared as a result of a consultation regarding the execution of any water service contract between the Contracting Officer and the Contractor in effect immediately prior to the Effective Date of this Contract undertaken pursuant to Section 7 of the Endangered Species Act of 1973 (ESA)...*" Yet no ESA consultation has been completed on these contracts nor has there been a consultation that identifies Westlands as an Applicant under the ESA. As denoted on page 2-12 of the USFWS ESA Section 7 Handbook,⁴¹

For purposes of this discussion, the Federal action involves the approval of a permit or license sought by the applicant, together with the activities resulting from such permission. The action agency determines applicant status, including requests arising from prospective applicants in early consultations. The action agency also determines how the applicants are to be involved in the consultation, consistent with provisions of section 7(a)(3), (b) and (c) of the Act and the section 7 regulations.

Reclamation has failed to proceed in the manner required by ESA and Westlands has failed to proceed in the manner required by CESA with this contract conversion. Reclamation has failed to complete an ESA consultation and Westlands has failed to consult under CESA before the contract was finalized. Even language in the Final contract suggests that ESA consultations would be completed and that Westlands would comply with applicable provisions of biological opinions. Without Applicant status, there are no applicable provisions in an ESA consultation for Westlands. This contract provision is a mirage designed to evade federal ESA requirements. Reclamation failed to request Applicant status for Westlands, so the language in the Contract suggesting that there are applicable provisions in biological opinions is inappropriate and misleading.

³⁹ See Environmental Advocate Comment Letter Re Interim Contract Renewal WWD Santa Clara.pdf John Buse, Center for Biological Diversity February 6, 2018. See <http://calsport.org/news/wp-content/uploads/Environmental-Advocate-Comment-Letter-Re-Interim-Contract-Renewal-WWD-S....pdf>

https://www.restorethedelta.org/wp-content/uploads/2020.01.21-CBD-PCL-et-al_Objects-to-CEQA-Exemption-for-Westlands-Perman....pdf

⁴⁰ see <https://www.feinstein.senate.gov/public/index.cfm/pressreleases?ID=FF5C94EB-667A-4DEC-A0A4-296AB5027BE4>

⁴¹ See: https://www.fws.gov/endangered/esa-library/pdf/esa_section7_handbook.pdf

Insufficient Information is Provided to Initiate ESA Consultation

Exhibit C of the final contract fails to provide an accurate updated water needs assessment and instead provides an amorphous methodology that defers the water needs assessment to some vague time in the future. As noted in previous communication on San Luis Unit water contract renewals from USFWS⁴² to Reclamation the water needs assessment information is outdated and insufficient. USFWS wrote in 2004:

However, the Service believes that the BA inadequately describes: the specific area that may be affected by the action, the manner in which the action may affect any listed species or critical habitat, the effects of related actions, and any cumulative effects. We are therefore not initiating consultation on this project until such a time as the information requested below is provided. Based on the information provided in your BA and in our files, we believe the proposed action has the potential to adversely affect listed species and their critical habitat as described in Table 6 of the BA, and attached to this memo and request that Reclamation provide the additional information requested to initiate formal consultation on this project. In addition to the species included in Table 6, we believe that water deliveries to SLU contractors may also affect groundwater and surface water quality outside of the SLU which could affect delta smelt downstream in the San Joaquin River and Delta.... The Service therefore requests that Reclamation update the water needs assessment for Westlands Water District to reflect the reduced irrigated acreage within the District, and provide such water needs assessment to the Service with a request for formal consultation on this project. Reclamation should revise the water needs assessments for Pacheco, Panoche and Westlands WD's to reflect a more recent baseline of water usage within these districts. Reclamation should further revise the water needs assessment for WWD to include a reduction in irrigated acreage as a result of permanent land retirement within the district...

The final contract still does not contain an accurate up to date water needs assessment. Substantial changes have occurred since this 2004 USFWS information request including over 102,000 acres of land retirement, changes to municipal and industrial uses including roughly 20,000 acres slated for solar utility uses.⁴³ Reclamation needs to provide an accurate water needs assessment for WWD that includes the reduction in irrigated acreage as a result of permanent land retirement within the district.

⁴² See <http://calsport.org/news/wp-content/uploads/04-I-2958-SLU-LTCR-Insuff-Memo.pdf>

Assistant Field Supervisor, Sacramento Fish and Wildlife Office Endangered Species Division to Chief Resources management Division BOR, November 22, 2004, *Request for Additional Information to Initiate Formal Section 7 Endangered Species Act (ESA) Consultation on Execution of Long-Term Water Service Contract Renewals between the United States and Eight Water Service Contractors of the Central Valley Project's San Luis Unit*. pg 1,2 &12

⁴³ See <https://wwd.ca.gov/wp-content/uploads/2017/12/westlands-solar-park.pdf>

Effects of Drainage from Westlands Caused by Imported Irrigation Water from the CVP are Significant and Complex and Must be Addressed in a Comprehensive EIS.

Federal and State law prohibit degradation of the waters of the State and Nation. The proposed contract conversions would allow the continued delivery of CVP water to lands known to create pollution when applied to irrigate these soils without data or substantive environmental analysis of the effects of drainage contamination from Westlands or Reclamation. This drainage pollution can deform fish and wildlife, impair reproduction, and reduce survival. These adverse impacts affect trust resources including migratory birds, anadromous fish, and federally and state listed species. Continued delivery of water to these soils, as contemplated by this contract renewal, will degrade the waters of the State and Nation. The USEPA, in their comments on San Luis Unit Long Term Contract Renewals (@ pg 4 of Attachment A), concluded that, “*the Drainage solutions and features relied upon to implement these solutions should not be separated from the implementation of long-term water contracts.*”⁴⁴ Yet that is exactly what Reclamation has done in with this contract conversion for Westlands.⁴⁵

The USEPA in their comment letter on the Draft EIS and Supplemental Information for Renewal of Long Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006, @ pg 5 and 6 of Attachment A) found that, “*Subsurface drainage flow comes in part from the Westlands Water District and other water districts upgradient of the northerly [San Luis Unit] districts with high selenium/Total Dissolved Solids (TDS) concentrations ([USBR SLDFR] Plan Formulation Report Addendum, July 2004).*” EPA recommended that the FEIS for San Luis Unit Long Term Contracts should include information on the relationships between irrigation in the San Luis Unit (including Westlands) and groundwater movement downslope, in terms of flow and water quality. EPA further noted that Reclamation should provide information on the San Luis Unit’s role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as “*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*”⁴⁶

Cumulative Impacts of Project Water Deliveries are Significant.

Reclamation and Westlands failed to consider the effects of other past, present, and reasonably foreseeable future actions that could result in cumulative impacts on the

⁴⁴ [Ibid.](#)

⁴⁵ <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68443> USBR October 25, 2019 Reclamation releases draft repayment contract for Central Valley Project contractor. And Reclamation extends the public comment period for the released draft repayment contract for Central Valley Project contractors <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68567>

⁴⁶ <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

biological resources of the study area before finalizing Westlands permanent contract. Reclamation concluded, for the last Westlands' interim contract renewals that there would only be minimal cumulative impacts to biological resources over a 2-year period.⁴⁷ However, that rationale does not extend to a contract executed permanently. Further, these conclusions of finding minimal cumulative impacts to biological resources are dependent on the timely implementation of future agricultural drainage service, habitat restoration, land acquisition and retirement, water conservation, and CVPIA programs including implementation of Fish and Wildlife Habitat Restoration Programs under Sections 3406 b(2), b(3) and 3406 d(1) and d(2).

The 2019 Draft EA for Westlands interim contracts references the Programmatic EIS for CVPIA which identified these restoration programs necessary to remediate adverse impacts of these contract renewals⁴⁸. Yet, some important ecosystem restoration provisions of CVPIA, such as acquisition of full Level 4 refuge water supplies, have lacked funding for adequate implementation. Purchase of environmental water under the CVPIA b(3) program has also fallen substantially short of targeted needs due to inadequate funding mechanisms. This unmet need may increase in the future as market prices for water continue to rise with demand. Further, past and present efforts to meet water quality standards in the San Joaquin Basin have been significantly hampered by the lack of adequate fresh water supplies. The USEPA recommended, in their comments on the DEIS and Supplemental Information for San Luis Unit Long Term Contracts (@ pg 6 of Attachment A) that, "The cumulative impacts analysis in the FEIS should be based on the past and present trends of supplies available for redirection to meet restoration and refuge needs in the area, including Trinity Restoration needs. Where information is available, the analysis should reflect the actual implementation status of CVPIA restoration actions."⁴⁹ Further as noted previously, the portion of these costs as well as, the obligation for payment need to be included in the contract as an enforceable provision.

Examples of actions that should be reviewed in a Cumulative Effects analysis include:

CVP water assignments

In October 2019, Reclamation released a draft EA on new water assignments from Mercy Springs and Fresno Slough WDs (both Delta-Mendota Unit CVP contractors) to Angiola Water District.⁵⁰ Angiola WD is a non-CVP contractor in the Tulare Basin that is outside of

⁴⁷ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=41301

⁴⁸ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41303

⁴⁹ <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁵⁰ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=33881

the CVP Place of Use (POU) as established by the SWRCB.⁵¹ Allocating federal water outside of the State permitted Place of Use, and without consideration of CVPIA fish and wildlife restoration programs is not consistent with state or federal laws.

James ID commented on the DEA for this partial water assignment in October 2019.⁵² Comments included:

1. Proposed action will cause unrecoverable land subsidence;
2. the action will create additional flood risk;
3. the action will alter historical groundwater flows between the Delta-Mendota and the Kings Groundwater Subbasins;
4. the action will prevent the Kings Groundwater Subbasin from achieving sustainability;
5. the action will impact surface water quality deliveries to CVP and Settlement Contract Water Contractors; and,
6. the DEA fails to satisfy the requirements of NEPA.

Aqueduct pump-ins from Westlands

Polluted groundwater from Westlands is being pumped into the California Aqueduct as part of a Warren Act Contract approved by USBR in 2015 despite records showing elevated levels of selenium, arsenic, and boron in this groundwater.⁵³ The California Department of Water Resources conducts monthly monitoring of the California Aqueduct and has documented occurrences of elevated levels of concern for selenium at Check 21 near Kettleman City (station number KA017226), especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct. Some of these monthly water quality samples have exceeded the US EPA's November 2018 proposed selenium objectives for protection of aquatic fish and wildlife. These proposed objectives include a lentic water quality objective of 1.5 µg/L (lentic meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps), which would be the applicable selenium objective for Kern National Wildlife Refuge and other wetlands that are fed by water from the Aqueduct.⁵⁴

⁵¹ https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/eirs/eir1999_ccpou/docs/ccpoufeir.pdf

⁵² Comments for James ID on the Partial Assignment from Mercy Springs to Angiola begins on pdf page 23 of FEA: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=42646

⁵³ https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=21021

⁵⁴ Federal Selenium Criteria for Aquatic Life and Aquatic Dependent Wildlife Applicable to California Docket RIN, 2040-AF79 EPA-HQ-OW-2018-0056 FRL-9989-46-OW. These selenium criteria established lentic and lotic water values, and bird egg and fish tissue values. See: <https://www.regulations.gov/document?D=EPA-HQ-OW20180056-0001>.

The 50 µg /L drinking water selenium objective that is currently applicable to water in the California Aqueduct is not protective of fish and wildlife resources that use water from the Aqueduct. Kern National Wildlife Refuge receives their refuge water supplies from the California Aqueduct. Endangered species, such as the federally listed as endangered Buena Vista Lake Shrew, are likely to be impacted from cumulative levels of selenium in this source water contaminated by Westlands' groundwater discharges. The once-a-month water quality sampling is insufficient to capture selenium spikes that accumulate downstream, or to assess the bioaccumulation in the food chain.⁵⁵

Water Transfers and Exchanges that could benefit or involve Westlands

Mendota Pool Group 20 Year Exchange Program

Reclamation and Westlands jointly prepared an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Mendota Pool Group (MPG) 20-Year Exchange Program. The MPG proposes to pump non-CVP groundwater into the Mendota Pool in exchange for CVP water, which would otherwise be delivered to the Mendota Pool.

The EIS/EIR evaluates up to 25,000 acre-feet of water per year (AFY) of groundwater to be pumped into the Mendota Pool and exchanged for 25,000 acre-feet of CVP water which would be delivered to Westlands. This project would be implemented through a series of exchange agreements over a 20-year period between Reclamation and the MPG as authorized by Section 14 of the Reclamation Project Act of 1939 (53 Stat. 1197; 43 U.S.C., subsection 389) and the Warren Act of 1911 (36 STAT.925; 43 U.S.C., subsection 523), and 34 U.S.C. §3408(d). These Exchange Agreements would supplement Westlands CVP water deliveries. The Project also includes construction of an 85-acre groundwater recharge facility just west of Mendota Pool.

CDFW commented on the NOP for MPG 20 Year Exchange Program in 2013.⁵⁶ CDFW was very concerned about salt loading into the Mendota Pool conveyance system and water supplies for the Mendota Wildlife Area. The Mendota Pool/Fresno Slough is the only water conveyance system available for Reclamation to deliver Level 2 and Level 4 Refuge Water supplies to Mendota WA. CDFW provided the following concerns of this project:

1. Continuing water quality degradation and impacts to associated biological (both terrestrial and aquatic) resources within the Mendota Pool/Fresno Slough.
2. Degradation of the quality of Refuge water supplies and related water quality impacts to wildlife habitats with the Department's Mendota WA.
3. Subsidence of the Mendota Dam and levees that allow the Mendota Pool to function.

⁵⁵ Selenium & Arsenic concentrations in the California Aqueduct, downstream of where groundwater has been pumped into the canal, have increased markedly in 2015 and in the case of Arsenic are approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L.

See http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

⁵⁶ 2013 CDFW comments on NOP for MPG starting on page 5 of Appendix B:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41116

4. Water delivery impacts, such as delivery schedules, for Level 2 and 4 water supplies to the Mendota WA.

CDFW commented on the MPG DEIS/R in 2019. CDFW identified sections of the DEIR/S that do not adequately identify or mitigate all of the Project's significant, or potentially significant, impacts on biological resources...In addition, because of these issues, CDFW has concerns that USBR and WWD may not have the basis to approved the project or make "findings" as required by CEQA unless the environmental document is modified to eliminate and/or mitigate significant impacts as feasible (CEQA Guidelines, § § 15704, 15091 & 15092). Increases in Total Dissolved Solids from groundwater pumped into Mendota Pool could adversely affect the federally and State listed giant garter snake. Further, groundwater overdraft and subsidence has adversely affected water conveyance in the Mendota Wildlife Area.⁵⁷

James ID submitted comments on the MPG DEIS/R on January 14, 2019.⁵⁸ James ID commented that their district "*would bear the brunt of significant direct, indirect, and cumulative water quality degradation and other impacts caused by the Project, given its southerly position relative to Project discharges, which become more degraded as they flow towards JID's point of diversion...the EIS/EIR fails to consider or require any mitigation or alternative to protect JID. Indeed, the EIS/EIR essentially fails to analyze and ignores water quality impacts to JID, including associated impacts to crops, soils, and groundwater within the district that is relied upon by its growers. Such failure of evaluation and analysis is prejudicial because it precludes very relevant information about the environmental consequences of the project from being presented to or know by the public and decionmakers, including lead and responsible agencies. Because of such deficiencies, ... the EIS/EIR fails to comply with NEPA and CEQA and must be revised and recirculated before the proposed Project can be considered for approval...*" James ID sued Westlands in March 2020 over the MPG Exchange Program.⁵⁹

Long Term Water Transfer Program (formerly known as North to South Water Transfer Program). Revised Final EIS/R completed in September 2019.⁶⁰ USBR is federal lead agency, San Luis and Delta Mendota WA is State lead agency. Aqualliance legally challenged these transfers in 2015, ultimately forcing Reclamation to revise the NEPA and FWS to revise the ESA

⁵⁷ 2019 CDFW comments on the MPG DEIS/R starting on page 504 of the FEIS:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41117

⁵⁸ See James ID comments on DEIS/R starting on page 565 of FEIS:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41118

⁵⁹ See: <https://sjvwater.org/district-sues-to-stop-salty-water-exchange/>

⁶⁰ See: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=40932

consultation.⁶¹ Reclamation issued a revised Final EIS in September 2019 and signed a ROD on 4/7/2020.⁶²

Groundwater banking

Agricultural Aquifer Storage and Recovery Program

In August 2019, Westlands filed a Mitigated Negative Declaration (MND) for the Agricultural Aquifer Storage and Recovery (Ag-ASR) Program. The Ag-ASR Program will be implemented within Westland's 600,000+ acre service area on the west side of the San Joaquin Valley. With the Ag-ASR Program, surface water from existing sources will be recharged into groundwater aquifers through groundwater wells during times when surplus or supplemental surface water is available, and later extracted by landowners for irrigation when it is needed. The Ag-ASR Program includes the incremental additions of about 20 well conversions per year for recharge with a conservatively high target of 400 operational Ag-ASR wells over the next 15 to 20 years. Most infrastructure is already in place.

Imported surface water within the Westside Subbasin will be derived largely from CVP water deliveries and smaller amounts from flood flows off the Kings River. Surface water from the San Luis Canal and from the Kings River, diverted from a location near the upstream end of the Mendota Pool, would be the main sources of supply for the Project. The Project would average up to 29,000 acre-feet annually. The Project proposes to import surface water from the Kings River by diverting from a location near the upstream end of the Mendota Pool.

CDFW provided comments on the MND on September 30, 2019.⁶³ CDFW voiced concern regarding adequacy of mitigation measures for the following special status plant and wildlife species and habitats “*known to occupy the Project area: the State threatened and federally endangered San Joaquin kit fox (Vulpes macrotis mutica), the State and federally endangered Tipton kangaroo rat (Dipodomys nitratooides nitratooides), the State and federally endangered and State fully protected blunt-nosed leopard lizard (Gambelia sila), the State threatened Swainson's hawk (Buteo swainsoni), the State threatened Nelson's antelope squirrel (Ammospermophilus nelsoni), the State threatened tricolored blackbird (Agelaius tricolor), the federally endangered and California Rare Plant Rank (CRPR) 1 B.2 San Joaquin woollythreads (Monolopia congdonii), the CRPR 1 B.2 Munz's tidy-tips (Layia munzii), the State candidate crotch bumble bee (Bombus crotchii), and the State species of special concern American badger (Taxidea taxus), Tulare grasshopper mouse (Onychomys torridus tularensis), San Joaquin coachwhip (Masticophis flagellum ruddocki), and burrowing owl (Athene cunicularia).*”

CDFW recommended USFWS be consulted on impacts of this project: “*CDFW recommends consultation with the USFWS prior to any ground disturbance related to this Project due to potential impacts to Federal listed species. Take under the Federal Endangered Species Act*

⁶¹ See: www.aqualliance.net/wp-content/uploads/2018/02/AquAlliance10YearMSJ_Order021518.pdf

⁶² See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=18361

⁶³ See: <https://ceqanet.opr.ca.gov/2019089109/2/Attachment/6QMajD>

(ESA) is more stringently defined than under CESA; take under ESA may also include significant habitat modification or degradation that_ could result in death or injury to a listed species, by interfering with essential behavioral patterns such as breeding, foraging, or nesting.”

CDFW also noted that, “*Project-related diversions acquiring surface water from the Kings River watershed may impact additional riparian, wetland, fisheries and terrestrial (upland) wildlife species and habitats, including the Fresno Slough and Mendota Wildlife Area (MWA), and the San Joaquin River. Affected special status species and habitats vary depending upon location and may include, but are not limited to, the Federal threatened Central Valley DPS steel head (Oncorhynchus mykiss), the Federal and State threatened Central Valley spring-run ESU Chinook salmon (O. tshawytscha), the Federal candidate and State species of special concern Central Valley fall-run and late fall-run ESU Chinook salmon (O. tshawytscha), the State and Federal threatened giant garter snake (Thamnophis gigas), the State threatened Swainson's hawk, the State candidate tricolored blackbird, the State species of special concern burrowing owl and western pond turtle, and numerous additional special status species and habitats. The Project proposes to divert an average of up to 29,000 AF annually, and the Mendota Pool would be one of two main sources for this diversion amount. CDFW recommends revising the MND to identify potential impacts to riparian and other natural resources listed above due to surface flow diversion from the Kings River and Fresno Slough, and proposing measures that minimize and mitigate potential impacts to a less than significant level.”*

Conveyance of up to 50,00 acre-feet of Westlands Water District's 2017 Central Valley Project (CVP) water to Semitropic Water Storage District's Groundwater Bank

DWR will deliver up to 50,000 acre-ft of Westlands' 2017 CVP water to KCWA for storage in Semitropic's Groundwater Banking Program, under Article 55 of KCWA's long-term Water Supply Contract with DVR. The US Dept. of Interior's Bureau of Reclamation (Reclamation) will make Westlands' 2017 CVP water available for delivery by DWR to KCWA's turnout(s) at either Banks Pumping Plant or O'Neill Forebay by February 28, 2018. The return of water to Westlands is proposed to be delivered in two ways: 1) pump-in delivery to the CA Aqueduct at Reaches 10A, 12E, and/or 13B in exchange for a like amount concurrently delivered by DWR to the CVP portion of O'Neill Forebay; or 2) by delivery of KCWA's SWP Table A water to the CVP portion of O'Neill Forebay. The return of water from KCWA to Westlands must be completed by Dec. 31, 2028.⁶⁴

- Westlands is involved with a number of groundwater pump-ins, transfers and exchanges. These actions have adverse local effects as many involve substitution of higher quality surface water supplies with lower quality groundwater or commingling of poor quality groundwater with surface water supplies. These projects can cumulatively effect...The cumulative total potential water that would be made up by these actions is over 700,000 AF, although availability of some of these supplies rely on floodwater capture and are variable. (See Exhibit 3) The present, and reasonably foreseeable future groundwater pumping,

⁶⁴ See: <https://ceqanet.opr.ca.gov/2017051016/3>

exchanges and transfers that involve Westlands include Mendota Pool Group (MPG) Exchange⁶⁵

- Westlands San Luis Canal Pump-in Program⁶⁶
- Reclamation Approvals Associated with the Poso Creek Water Company's Multiyear Banking and Transfer Program⁶⁷
- Reclamation Approvals Associated with Harris Farms and Shows Family Farms Multiyear Banking and Transfer Program⁶⁸
- Westlands Water District 5-year Warren Act Contract for Kings River Flows in the San Luis Canal⁶⁹
- Firebaugh Canal Water District 5-Year Transfer Program, 2019-2023⁷⁰
- Delta-Mendota Canal Groundwater Pump-In Program Revised Design Constraints⁷¹
- San Joaquin River Exchange Contractors Water Authority, 25-Year Groundwater Pumping and Water Transfer Project⁷²
- Long Term Water Transfer Program⁷³
- Water transfers from the San Joaquin Exchange Contractors⁷⁴

Westlands is also planning and/or implementing a number of groundwater banking projects:

- Agricultural Aquifer Storage and Recovery Program⁷⁵
- Panoche Creek Groundwater Replenishment Project⁷⁶
- Pasajero Groundwater Replenishment Project⁷⁷

⁶⁵See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=36282

⁶⁶See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=21021

⁶⁷See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=28801

⁶⁸See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=32081

⁶⁹See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=29341

⁷⁰See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=36203

⁷¹See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=32781

⁷²See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=2771

⁷³See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=18361

⁷⁴ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=9086

⁷⁵ See: <https://ceqanet.opr.ca.gov/2019089109/2/Attachment/QdGzdr>

⁷⁶ See: <http://sldmwa.org/integrated-regional-water-management-plan/>

⁷⁷ Ibid.

Impacts outside of Westlands

Impacts of the execution of the Westlands contract go far beyond the district's boundary. The impacted area includes the zones of export including the Trinity and Sacramento Rivers and the Sacramento-San Joaquin Delta Estuary and Bay. The effects to these areas outside of the district's boundary can be profound and significant. For example, since 1964, Reclamation has been diverting Trinity River water 400 miles south to the San Luis Unit, including Westlands. These diversions have had a profound effect on fisheries, including a 90% decline in Trinity River fish populations. In 1984, Congress passed the Trinity River Basin Fish and Wildlife Management Act (Pub. L. No. 98-541) which recognized that Trinity River Division (TRD) operations substantially reduced instream flows in the Trinity River, resulting in degraded fish habitat and consequently a drastic reduction in anadromous fish populations. The 1984 Act directed the Secretary to develop a management program to restore fish and wildlife populations in the Basin to levels approximating those that existed immediately before TRD construction began. In 2000, the USDI signed a Record of Decision for the Trinity River Restoration Program. The TRRP ROD noted that "*Amendments to the 1984 Act redefined its restoration goals so that the fishery restoration would be measured not only by returning anadromous fish spawners, but also by the ability of dependent tribal and non-tribal fishers to participate fully in the benefits of restoration through meaningful harvest opportunities. (These restoration goals were reaffirmed through enactment of the Trinity River Fish and Wildlife Management Reauthorization Act of 1995, Pub. L. No. 104-143, May 15, 1996)*".⁷⁸

The San Francisco Bay and Delta ecosystem is also at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta including Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta are listed as impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).⁷⁹ Sources of selenium contamination include agricultural drainage from the Central Valley (Linares et al 2015; Presser and Luoma 2010).⁸⁰

Drainage Impacts

The Effects of Drainage from Westlands caused by irrigation enabled by the execution of this Final contract are Significant and Complex. The pollution created by irrigating drainage-impaired lands in Westlands, and the future implementation drainage management actions within the district have not been analyzed or disclosed. The USEPA noted in their comments on the San Luis Unit DEIS (@ pg 6 of Attachment A) that, "*continuing the current practices of managing agricultural drainage will have adverse impacts on groundwater and surface water quality, and beneficial uses including fish and wildlife, potential drinking water supplies, and agriculture.*"⁸¹ These adverse impacts affect trust resources including migratory birds, anadromous fish, and

⁷⁸ See: <https://www.trrp.net/DataPort/doc.php?id=227>

⁷⁹ See: https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

⁸⁰ See: <https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/etc.2775> & See: <https://pubs.usgs.gov/pp/p1646/>

⁸¹ See: <https://archive.epa.gov/region9/nepa/web/pdf/sanluis-deis.pdf>

federally and state listed species. Continued delivery of water to these soils, as contemplated by this Final contract, will degrade the waters of the State and Nation. The USEPA in their comments on San Luis Unit Long Term Contract Renewals (@ pg 4 of Attachment A) concluded that, “*the Drainage solutions and features relied upon to implement these solutions should not be separated from the implementation of long-term water contracts.*”⁸² Yet that is exactly what Reclamation has done.

Additionally, there is no disclosure of the effects of reallocation of water from retired lands in Westlands to upslope lands within District. The USEPA in their comments on the San Luis Unit Long Term Contracts Supplemental EIS (@ pg 3 of Attachment A) noted concern that “*redistribution of supplies from lands which are no longer in production to land currently dependent on groundwater could lead to expansion of drainage-impaired lands* (p. 84, “Land Retirement Final Report”, Feb. 1999). *Water redistributed upslope can create conditions of shallow groundwater in downslope areas, leading to more widespread drainage problems.*”⁸³ Some of the drainage impaired lands in Westlands have been permanently retired from irrigation and repurposed into a Master-planned energy park. CIM Group is repurposing 21,000 acres of selenium-contaminated and drainage-impaired farmland to accommodate solar PV generating facilities with a total generating capacity of approximately 2,000 MW with construction to be phased over 12 years. Water needs for solar O&M are approximately 0.5% of agricultural needs. Annual water consumption estimates for a 250 MW solar facility is 2.16 acre-feet per quarter-section (160 acres). For comparison, the average irrigation rate for agricultural lands within Westlands Water District is approximately 2.5 acre-feet per acre per year, or 400 acre-feet per quarter-section per year.⁸⁴ Water originally applied to the lands in the Solar Park are being reallocated for Ag use within the district.

Conclusion

In short, Reclamation and Westlands' have failed to comply with State and Federal laws including NEPA, CVPIA, CEQA, CESA and ESA under this contract conversion process. The public has been given a puzzle of dizzying complexity without the puzzle picture. Despite federal laws and rules, Reclamation did not provide the public with copies of the contract and thus, thwarted federal law. Westlands' proposed contract conversion must be withdrawn and restarted with full consideration of all similar contract conversions and their cumulative effects. The water contract conversion process must start with outreach to the 17-20 parties of interest that have thus far been excluded or contracted out under the proposal. Furthermore, all of these invisible draft contracts must be publicly disclosed and the critical exhibits must be provided to the public and those areas of origin that are most impacted by the water that is being taken and exported to Westlands.

⁸² Ibid.

⁸³ See: <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁸⁴ See: <https://wwd.ca.gov/wp-content/uploads/2017/12/westlands-solar-park.pdf>

Reclamation has failed to address reduction in exports, the expanded Service Area outside of Congressional boundaries, the irrigability of lands in Westlands, the cumulative effects such as groundwater pump-ins and exchanges, transfers along with the drainage impacts and conversion to municipal and industrial uses as contemplated under the conversion of this 9(e) contract to a 9(d) repayment contract that would be issued in perpetuity. Given the numerous potential environmental effects associated with Westlands water deliveries, a full EIS and ESA analysis must be completed prior to the execution of these new conversion contracts in perpetuity.

EXHIBITS:

1. Contract Conversions South of the Delta
2. Operation and Maintenance and Reconstruction Contracts
3. Pump-In Projects
4. Drainage Projects
5. Public Interest & Agency Comment Letters

Exhibit 1: Status of permanent contract conversions for south of the Delta and compliance with Federal laws.

Permanent Contract Conversion	Contractor	Quantity (acre-feet)	Contract Use	Contract Status	Contract Effective Date	Contract Conversion Compliance with Federal Laws		
						NEPA	ESA	CVPIA
San Luis Unit								
14-06-200-495A-IR1-P	Westlands WD	1,150,000	Ag/M&I	No public release of final, Executed 2/2	6/1/2020	NO	NO	NO
14-06-200-7773A-IR5	San Luis WD	125,080	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-7864A-IR5	Panoche WD	94,000	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
6-07-20-W0469-BA	Pacheco WD	10,080	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-4173-IR5	City of Coalinga	10,000	M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-4619A-IR5	City of Avenal	3,500	M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-7081A-IR3	City of Huron	3,000	M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-8033A-IR5	CDFW M&I Only for Mendota WA	10	M&I	No public release, In negotiation	TBD	NO	NO	NO
Subtotal		1,395,670						
Delta Mendota Canal Unit -- Assigned to Westlands								
14-06-200-336+30:365A-XXX-B	Westlands WD 2 -Way Mercy Springs WD Partial Contract Assignment with Santa Clara	6,260	Ag/M&I	No public release of final, Comment Closed 2/19/2020	TBD	NO	NO	NO
14-06-200-8092-XXX	Westlands WD DD #1, Broadview WD Contract Assignment	27,000	Ag/M&I	No public release of final, Comment Closed 2/19/2020	TBD	NO	NO	NO
7-07-20-W0055-XXX	Westlands WD DD#1 , Centinella WD Contract Assignment	2,500	Ag/M&I	No public release of final, Comment Closed 2/19/2020	TBD	NO	NO	NO
14-06-200-8018-XXX	Westlands WD DD #1, Widren WD Contract Assignment	2,990	Ag/M&I	No public release of final, Comment Closed 2/19/2020	TBD	NO	NO	NO
14-06-200-3365A-XXX-C	WWD DD #2, Mercy Springs WD Partial Contract Assignment	4,198	Ag/M&I	No public release of final, Comment Closed 2/19/2020	TBD	NO	NO	NO
14-06-200-7823J	Westlands WD, Oro Loma Partial Contract Assignment	4,000	Ag/M&I	Unkown	TBD	NO	NO	NO
Subtotal		46,948						
Delta Mendota Canal Unit								
14-06-200-7858A	City of Tracy	20,000	M&I	No public release, In negotiation				
7-07-20-W0045-LTR1	The Westside Irrigation District-- assigned to City of Tracy	5,000	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-4305A-LTR1	Banta Carbona Irrigation District	20,000	M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-785-LTR1	Byron Bethany Irrigation District	20,600		Unknown				
7-07-20-W0045-LTR1	The Westside Irrigation District	5,000	M&I	No public release, In negotiation	TBD	NO	NO	NO
3-07-20-W1124-LTR1	U.S. Department of Veterans Affairs, San Joaquin Valley National Cemetery	850	M&I	Unknown	?	NO	NO	NO
14-06-200-1072-LTR1	West Stanislaus Irrigation District	50,000	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-922-LTR1	Del Puerto Water District	140,210	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-7754-LTR1	Eagle Field WD	4,550	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-3365A-LTR1	Mercy Springs Water District-- 1300 AF assigned to Angiola WD(SWP)	2,842	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO

Permanent Contract Conversion	Contractor	Quantity (acre-feet)	Contract Use	Contract Status	Contract Effective Date	Contract Conversion Compliance with Federal Laws		
						NEPA	ESA	CVPIA
14-06-200-7823-LTR1	Oro Loma Water District	600	Ag/M&I	Unknown	?	NO	NO	NO
14-06-200-3598A-LTR1	Patterson Irrigation District	22,500	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
Subtotal		292,152						
Mendota Pool Unit								
14-06-200-7859A-LTR1	Coehlo Family Trust	2,080	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-4019A-LTR1	Fresno Slough Water District-- Assigned to Angiola WD(SWP)	4,000	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-700-A-LTR1	James Irrigation District	35,300	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
2-07-20-W0266-LTR1	Laguna Water District	800	M&I	Unknown	?	NO	NO	NO
14-06-200-3802A-LTR1	Reclamation District # 1606	228	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-701-A-LTR1	Tranquillity Irrigation District	13,800	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-3537A-LTR1	Tranquillity Public Utility District	70	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
Subtotal		56,278						
Contra Costa Canal								
I75r-3401A-LTR1	Contra Costa Water District	195,000	M&I	No public release, In negotiation	TBD	NO	NO	NO
Subtotal		195,000						
Cross Valley Canal								
14-06-200-8292A-IR17	County of Fresno	3,000	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-8293A-IR17	County of Tulare	5,308	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-8466A-IR17	Hills Valley Irrigation District	3,346	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-8601A-IR17	Kern-Tulare Water District	40,000	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-8237A-IR17	Lower Tule River Irrigation District	31,102	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-8238A-IR17	Pixley Irrigation District	31,102	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-8367A-IR17A	Rag Gulch Water District	13,300	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
14-06-200-8565A-IR17	Tri-Valley Water District	1,142	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
Subtotal		128,300						
Eastside Division (New Melones)								
6-07-20-W0329	Stockton East Water District	75,000	Ag/M&I	No public release, comment closes May 18, 2020	TBD	NO	NO	NO
4-07-20-W0330	Central San Joaquin Water Conservation District	80,000	Ag/M&I	No public release, comment closes June 8, 2020	TBD	NO	NO	NO
Subtotal		155,000						
San Felipe Division								
8-07-20-W0130	San Benito County WC and FCD	43,800	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
7-07-02-W0023A	Santa Clara Valley Water District	152,500	Ag/M&I	No public release, In negotiation	TBD	NO	NO	NO
Subtotal		196,300						

South of Delta Total (excluding SJR exchange contracts) 2,465,648

Exhibit 2: Status of Operations and Maintenance Contracts for south of the Delta and compliance with Federal laws.

Project Name	Contractor(s)	Project Description	Project Status	Project Effective Dates	Compliance with Federal Laws	
					NEPA	ESA
San Luis & Delta Mendota WA 35-Year Operation, Maintenance and Replacement Agreement	SLDMWA	Reclamation proposes to issue a 35-year OM&R agreement to the Authority, who will continue to operate, maintain, and replace all facilities covered under the current agreement.	CEC signed on 11/12/2019, draft Contract out for 15-day public comment thru 12/20/2019.	35-year Contract	YES, CEC	YES, USFWS 2005 BiOp (04-F-0368) for USBR's SCCAO O&M
Draft repayment contract for Central Valley Project Delta Division - C.W. "Bill" Jones Pumping Plant	SLDMWA	Contract between USBR and SLDMWA for the Repayment of Extraordinary Maintenance Costs for the C.W. "Bill" Jones Pumping Plant.	Draft contract out available for public comment thru May 29, 2020 , CEC signed 6/13/2019.	This Contract shall become effective on the date it is signed and shall remain in effect until the Authority has fully repaid its Repayment Obligation to the United States as described in Article 5 in the Contract.	YES, CEC	?

Exhibit 3: Status of Contracts for Pump-ins and other projects south of the Delta and compliance with Federal laws.

Project Name	Contractor(s)	Contract Quantity (acre-feet)	Maximum potential quantity (AF per Year)	Project Description	Project Status	Project Effective Dates	Compliance with Federal Laws		
							NEPA	ESA	CWA
Mendota Pool Group (MPG) Exchange	Mendota Pool Group, Westlands (State Lead Agency), Wonderful Orchards	Provides an exchange (groundwater for CVP water, CVP water delivered to WWD) of up to 25,000 AFY would be allocated to Westlands. Maximum of 400,000 AF of groundwater to be exchanged with CVP water to be delivered to Westlands WD over 20 years.	25,000	MPG landowners will annually pump a not-to-exceed total of 38,316 acre-feet per year, which includes up to 26,316 acre-feet per year for exchange and the remainder for irrigation on their lands around the Mendota Pool. Groundwater discharged into the Mendota Pool by MPG would be made available to Reclamation to satisfy existing CVP water.	Record of Decision signed January 2020.	20 Year Program 2020-2040	Yes	Yes for groundwater recharge facility only	Water Quality Commitments in EIS/R include: MPG discharge points into the Mendota Pool with TDS concentrations greater than 1,600 mg/L will not be pumped for exchange into the Pool (or greater than 1,200 mg/L during September, October, and November). Wells with selenium concentrations equal to or greater than 2 µg/L will be shut off.
Mercy Springs Partial Assignment and Fresno Slough Full Assignment of CVP Contract to Angiola WD	Mercy Springs, Fresno Slough and Westlands WDs	5,300 AFY	5,300	Permanent full assignment of Fresno Slough's CVP water contract (4000 AF) and the partial assignment of Mercy Springs Water Contract (1300 AF) to Angiola WD	FONSI signed March 4, 2020.	Fresno Slough and Mercy Springs Contracts are included in the WIIN Conversion Table	Yes	NO	Concerns raised regarding local groundwater conditions.
Westlands 2020-2025 San Luis Canal Pump-in Program	Westlands	up to 30,000 AFY of groundwater pumped into SLIC to be used by Westlands growers.	30,000	Would allow the water users in WWD to pump up to 30,000 acre-feet (AF) of pumped District groundwater (Non-Project Water) from different existing wells within Fresno and Kings counties into the San Luis Canal (SLC), a Federally owned facility, operated by the State of California, for conveyance when the District's contract water allocation entitlement from the United State Bureau of Reclamation(USBR) is 20 percent or less, annually from 2020 through 2025.	WWD RFP to prepare CEQA documentation due date was 3/17/2020. NEPA and CEQA expected in spring/summer 2020. Westlands CEQA for previous program covered 2017-2019	Would extend pump-in program for 5 years. Current Warren Act contract with USBR expires June 30, 2022.	YES for 5 years. See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=21021	Unlikely (No ESA consultation was completed for the previous pump in program)	TBD
Agricultural Aquifer Storage and Recovery Program (Ag-ASR)	Westlands	Based on the District's hydrogeology, long term modeling and planning assumptions, maximum recharge rates from the Pilot Study, and implementation of Ag-ASR in 400 wells, it is anticipated that water stored in Westlands' Ag-ASR Program could average as much as 29,000 feet (AF) annually.	29,000	With the proposed Project, surface water from existing sources would be recharged into groundwater aquifers during times when surplus or supplemental surface water is available, and later extracted by landowners for irrigation when it is needed. The Project includes the incremental additions of about 20 well conversions per year for recharge with a target of 400 operational aquifer storage and recovery (ASR) wells over the next 15 to 20 years.	Notice of Determination to adopt a MND on 10/8/2019.	Indefinite	N/A	NO	NO
Reclamation Approvals Associated with the Poso Creek Water Company's Multiyear Banking and Transfer Program	Westlands and San Luis WDs	Up to 50,000 AFY	50,000	Transfers of up to 50,000 AF per year of available CVP water supplies over a 9-year period. Transfers of CVP water would be from CVP contractors to Poso Creek members either for direct agricultural use on member lands located within Westlands, San Luis, Wheeler Ridge, and Semitropic or for banking in Semitropic and/or the Kern Water Bank for later use on member lands within those same districts. Westlands has stored surplus water in various groundwater banks including Semitropic (SWSD) and Wheeler Ridge (WRM).	FONSI signed 7/10/2017. Last year's Water Exchange was noticed by Westlands via a NOE.	2017-2025	YES	NO	NO
Water transfers from the San Joaquin Exchange Contractors	Various recipients including Westlands, refuges, Santa Clara, KCWA, etc.	25-Year Transfer/Exchange Program from 2014-2038. Authorizes transfer of up to 150,000 AFY. In 2019, Westlands received 80,000 AF of SJ Exchange Contractor Transfer Water	150,000	Exchange and/or transfer of up to 150,000 AFY for 25 years from the San Joaquin River Exchange Contractors Water Authority (SIRECWA) to San Joaquin Valley public and private wetlands, and south of Delta agricultural, municipal and industrial users in Alameda, Contra Costa, Fresno, Kern, Kings, Madera, Merced, Monterey, San Joaquin, San Benito, Santa Clara, Santa Cruz, Stanislaus, and Tulare counties. The water for the Transfer Program is developed by the SIRECWA by means of a suite of actions consisting of the following: tailwater recapture, temporary land fallowing, reductions in deep water percolation and applied water efficiency improvements.	ROD signed 7/30/2013. Last year's transfer to Westlands was noticed via a NOE	2014-2038	YES EIS/R in 2014	YES only on incremental difference between the 25 year transfer program and the previous 10 year program	NO
Long Term Water Transfer Program	Certain SLDMWA member agencies, Contra Costa WD and EBMUD	Limited to 250,000 AF to be transferred in any given year.	250,000	Covers a range of potential water transfers from water contractors north of the Delta to CVP water contractors south of the Delta.	Revised Final EIS/R completed in September 2019. ROD signed 4/7/2020.	Revised Final EIS/R covers 5 years, 2020-2024.	YES	YES	?
Crescent Canal Project	Westlands	Would provide an additional 15,500 AF of water from Kings River flood flows when available.	15,500	Westlands Water District (WWD) is proposing this project to enhance water supply reliability of WWD. The Crescent Canal is 22 miles long, and flows northwest from the Main Diversion off the Kings River. The purpose of the Project is to capture flood flows from the Kings River via the Crescent Canal and deliver flood flows to WWD.	Listed as "Planning" stage and medium priority in SLDMWA Westside-San Joaquin IRWMP Update 2018.	TBD	TBD	TBD	Would divert some Kings River floodflows reducing flows to the San Joaquin River.

Project Name	Contractor(s)	Contract Quantity (acre-feet)	Maximum potential quantity (AF per Year)	Project Description	Project Status	Project Effective Dates	Compliance with Federal Laws		
							NEPA	ESA	CWA
Lateral 13 Intertie Project	Westlands	Up to 8,500 AF via water transfers from Tranquility ID.	8,500	WWD Lateral 13 Intertie Project (Project) connects Lateral 13 to the Tranquility Irrigation District's (TID) Slough Canal for water supply reliability. WWD is proposing to convey transfers (up to 8,500 AF) from TID via the Project.	Listed as "Under Design" and medium priority in SLDMWA Westside-San Joaquin IRWMP Update 2018.	TBD	TBD	?	?
Lateral Inter-Connection Project	Westlands	Not specified		WWD is proposing the Lateral Inter-Connection project which connects laterals 4, 5, and 6 to achieve a higher efficiency distribution system for the area meet water demands and provide operational flexibility.	Listed as "Under Design" and medium priority in SLDMWA Westside-San Joaquin IRWMP Update 2018.	TBD	TBD	?	?
Panoche Creek Groundwater Replenishment Project	Westlands	Not specified		The proposed project consists of a recharge basin conveyance, and a groundwater well to recover the stored water. The proposed project consists of conveying excess flood flows which are all available approximately every 4-5 years surplus water and any other type of eligible water available from local water conveyance facilities to a proposed recharge basin that will percolate into the groundwater aquifers for future use.	Listed as "Planning" stage and medium priority in SLDMWA Westside-San Joaquin IRWMP Update 2018.	TBD	TBD	TBD	Selenium may be a constituent of concern in flood flows in Panoche Creek.
Pasajero Groundwater Replenishment Project	Westlands	Capacity is up to 10,800 AF over a 6-month period to capture floodflows from Los Gatos Creek watershed.	10,800	The proposed Pasajero Groundwater Replenishment Project would be located near the city of Coalinga just north of Los Gatos Creek. The project consists of a 60-acre recharge basin, conveyance, and a groundwater well to recover the stored water, as needed. The recharge basin will store excess flood flows which are available approximately every 4-5 years surplus water and any other type of eligible water available.	Listed as "Planning" stage and medium priority in SLDMWA Westside-San Joaquin IRWMP Update 2018.	TBD	TBD	TBD	Los Gatos Creek is within the Atlas Coalinga Mine Superfund area over asbestos contamination.
Reclamation Approvals Associated with Harris Farms and Shows Family Farms Multiyear Banking and Transfer Program	Westlands and San Luis WDs	Up to 15,000 AFY of CVP water to be banked in Semitropic or Kern WB	15,000	Reclamation proposed to approve a series of transfers of up to 15,000 AF per year of available CVP water supplies over a 9-year period from CVP contractors to Harris Farms, Inc. and Shows Family Farms, LP either for direct agricultural use on their lands located within Westlands, San Luis, and Semitropic or for banking in Semitropic and/or the Kern Water Bank for later use on their lands within those same districts.	FONSI signed 6/4/2018.	2018-2026	YES	NO	NO
Westlands Water District 5-year Warren Act Contract for Kings River Flows in the San Luis Canal	Westlands	Up to 50,000 AFY of Kings River flood flows in the San Luis Canal	50,000	Westlands has an agreement with the Water Association for Kings River flood flows and is able to take the flood flows off the Fresno Slough via laterals 6-1 and 7-1. However, many of the parcels that could be serviced by these two laterals within Westlands have been retired. Therefore, in 2011 Westlands requested approval from Reclamation to convey up to 50,000 afy of Kings River flood flows in the San Luis Canal over a 5-year period.	FONSI signed 8/4/2017.	2017-2022	YES	NO	NO
Firebaugh Canal Water District 5-Year Transfer Program, 2019-2023	Firebaugh Canal WD, and Pacheco, San Luis and Westlands WDs	Up to 7,500 AFY	7,500	Firebaugh Canal Water District (Firebaugh), has requested approval from Reclamation for a series of annual transfers between 2019 and 2023 of up to 7,500 acre-feet per year (AFY) of its Central Valley Project (CVP) water supply to Pacheco Water District (Pacheco), San Luis Water District (San Luis), and Westlands Water District (Westlands) hereafter referred to as the Transfer Recipient Districts. To make Firebaugh's CVP water supplies available for the transfers, Firebaugh landowners would pump groundwater from three wells to meet in-district demands.	FONSI signed 5/7/2019.	2019-2023	YES	NO	NO
Delta-Mendota Canal Groundwater Pump-in Program Revised Design Constraints	Banta Carbona ID, Byron-Bethany ID, West Stanislaus ID, and Del Puerto, Mercy Springs, Panoche, Pacheco, and San Luis WDs	Up to 50,000 AFY	50,000	Five-year Warren Act Contracts to the Delta-Mendota Canal Pump-in Program Participating Districts that include additional design constraints to address their potential contribution to subsidence along the Delta-Mendota Canal. The purpose of the project is to provide additional water supplies for CVP contractors located along the DMC.	FONSI signed 5/7/2018.	2018-2022	YES	NO	NO
San Joaquin River Exchange Contractors Water Authority, 25-Year Groundwater Pumping and Water Transfer Project	San Joaquin Exchange Contractors to CVP south of Delta contractors.	Up to 20,000 AFY	20,000	Twenty-five year program to transfer of up to 20,000 acre-feet of substitute water from the Exchange Contractors to other Central Valley Project contractors. The water would consist of a maximum of 15,000 acre-feet of developed water from ground water pumping and a maximum of 20,000 acre-feet from a combination of conservation measures: temporary land fallowing and ground water pumping. Reclamation approves and/or executes short-term and/or long-term temporary water transfers or	FONSI signed 1/14/2008.	2008-2033	YES	NO	NO
Total Maximum Potential AF			716,600						

Exhibit 4: Status of Drainage projects south of the Delta and compliance with Federal laws.

Project Name	Contractor(s)	Project Description	Project Status	Project Effective Dates	Compliance with Federal Laws		
					NEPA	ESA	CWA
Kaljjan Drainage Reuse Project	SLWD	The Project is located within the San Luis Water District approx. 9 miles south of Los Banos. The Project will reclaim drain water from the Charleston Drainage District for blending and permit conveyance of other supplies for beneficial use. Project will augment the District's supply and increase reliability enable the conveyance of flood water for beneficial use reduce poor quality drain water discharges to the San Joaquin River (SJR) system and free up capacity in the SJR Water Quality Improvement Project.	In development	TBD	TBD	TBD	?
Westlands Upper Aquifer Groundwater Supply Pilot Project	Westlands WD	The pilot project will extract groundwater from the upper aquifer using a private well and the water will be treated to remove dissolved solids (TDS). The goal is to produce product water with TDS equivalent to the water quality in the San Luis Canal. The water user will pump the product water into Lateral 7 and use the treated reject water to grow Jose Tall Wheat Grass on District owned land. The pilot project will evaluate costs of treating upper aquifer groundwater and will track reduction in shallow groundwater levels around groundwater well and Jose tall wheat grass.	Uncertain	Assume this will be implemented over a short time period (1 year)? Project funding is small \$20,000. Was discussed during WWD Board Meeting.	NO	NO	NO
Widren Water District Pilot Project Extension	Widren WD	Widren constructed a Reverse Osmosis Treatment Plant to extract and treat their shallow drainage water for use within an in-district Reuse Area. Product water is discharged into the DMC for transfer for exchange. In 2019 Reclamation issued a 3-year Warren Act contract/Exchange Agreement to Widren Water District for the introduction and conveyance of up to 1,000 acre-feet of Reverse Osmosis-treated groundwater (non-Project water) into the Delta-Mendota Canal as well as potential storage in San Luis Reservoir.	In 2017, Reclamation completed an EA/FONSI (EA-16-035) for this pilot project which included issuance of a 1-year Warren Act contract/Exchange Agreement and a 25-year land use authorization for installation, operation, and maintenance of a pipeline connection to an existing discharge facility on the Delta-Mendota	March 2019-March 2022	YES	NO	NO
Westlands Upper Aquifer Groundwater Supply Pilot Project	Westlands WD	This pilot project is being conducted in cooperation with a Westlands water user. The pilot project will extract groundwater from the Upper Aquifer using a private well and the water will be treated to remove dissolved solids from the product water. The goal is to produce product water with total dissolved solids concentration equivalent to the water quality in the San Luis Canal. The water user will pump the product water into Lateral 7 and use the treated reject water to grow Jose Tall Wheat Grass on District owned land. The pilot project will evaluate costs of treating upper aquifer groundwater and will track reduction in shallow groundwater levels around groundwater well and Jose tall wheat grass.	Uncertain	Assume this will be implemented over a short time period (1 year)? Project funding is small \$20,000. Was discussed during WWD Board Meeting.	NO and because it is a "pilot project" probably no CEQA either.	NO	NO
10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area	SLDMWA, Panoche Drainage District	Under the Proposed Action, Reclamation will allow the SLDMWA to continue to introduce and convey up to 150 cfs of stormwater commingled with drainage through the San Luis Drain for 10 years.	FONSI Signed 12/31/2019	1/1/2020 - 12/31/2029	YES	YES	NO NPDES permit. State issued WDR to be reopened in 2 years.
Grasslands Channel Enlargement	SLDMWA, Panoche Drainage District	The Grassland Bypass Project currently is limited to a capacity of 150 cfs. The proposed project will increase the capacity of the Grassland Bypass Channe (GBC) to 300 cfs by enlarging the inlet and outlet connections of the system. Maximum historic storm flows are approximately 250 cfs.	Not included in 2019 CEQA/NEPA for 10 Year Use Agreement for the San Luis Drain. Listed as "low" priority in SLDMWA Westside-San Joaquin IRWMP Update 2018	TBD	TBD	TBD	TBD
Westlands Solar Park	Westlands	Master-planned energy park in Westlands on drainage-impaired lands managed by CIM Group. CIM Group is repurposing 21,000 acres of selenium-contaminated and drainage-impaired farmland to accommodate solar PV generating facilities with a total generating capacity of approximately 2,000 MW with construction to be phased over 12 years.	12-year buildout. Final EIR completed in December 2017: https://wwd.ca.gov/wp-content/uploads/2017/12/westlands-solar-park.pdf	Indefinite	N/A	?	N/A

Exhibit 5:

Documents Adopted by Reference: Public Interest & Comments Incorporated by Reference [All Documents can be found in the record of earlier contract renewals, earlier NEPA processes and in some cases on the BOR website.]

- 1. January 21, 2020, CBD et. al. Re: Objection to Adoption of Westlands Water District Board of Directors Distribution District #1 & #2 Resolution Nos. 101-20, 102-20, 103-20 and 104-20 Because of: (1) Insufficient Public Notice and Inadequate Project Description and (2) Failure to Comply with the California Environmental Policy Act (CEQA), the Central Valley Project Improvement Act (CVPIA), and state and federal Endangered Species Acts. Westlands Water District Board of Directors.**
- 2. January 7, 2020, PCL et. al. Re: Written Comments on WIIN Act Draft Repayment Contracts between Bureau of Reclamation and Westlands Water District. Ernest Conant, Bureau of Reclamation Regional Director Mid-Pacific Regional Office, and Erma Leal, Repayment Specialist, Bureau of Reclamation.**
- 3. January 6, 2020, PCL et al. Re: Comments Westlands WD Conversion Contract for 1.15 MAF & Exhibits under the WIIN Act § 4011. Brenda Burman, Bureau of Reclamation Commissioner, Ernest Conant, Bureau of Reclamation Regional Director Mid-Pacific Regional Office, and Erma Leal, Repayment Specialist, Bureau of Reclamation.**
- 4. January 2, 2020, “Conservation, Fishing and Tribal Comments on Bureau of Reclamation Mid-Pacific Region December 2019 Central Valley Project Final Cost Allocation Study” to Brenda Burman, Commissioner, USBR from PCL et al [20 Conservation, Fishery, Tribal and Community Organizations].**
- 5. December 23, 2019, “Comments on the Draft EA on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grassland Drainage Area (Draft EA – 19-029) – A Comprehensive EIS is Required and Compliance with the Clean Water Act” to Rain Emerson, USBR from PCL et al [20 Conservation, Fishery, Tribal and Community Organizations].**
- 6. December 20, 2019, “Comments on draft Agreement between US Bureau of Reclamation and San Luis & Delta Mendota Water Authority Operations and Maintenance Activities” to USBR from PCL et al [20 Conservation, Fishery, Tribal and Community Organizations].**
- 7. December 14, 2019, PCL et. al. Re: Interim Renewal Contract for Central Valley Project Water Contracts for Westlands Water District (Draft EA-19-043)—An abuse of discretion and failure to comply with federal law. Colin Davis, Bureau of Reclamation, South-Central California Area Office.**

- 8. December 12, 2019, “Comments on Draft Environmental Assessment Cross-Valley Contractors Interim Renewal Contracts (Draft EA-19-0441)--An abuse of discretion and failure to comply with federal law” to Colin Davis, USBR from Center for Biodiversity et al [17 Conservation, Fishery and Community Organizations].**
- 9. December 10, 2019, “New Information Regarding Deformities in Sacramento Splittail and Drinking Water Quality Raise Significant National Issues for Consideration in the Draft Environmental Assessment for the proposed 10-Year Agreement to Use the San Luis Drain for Discharges to the San Joaquin River and San Francisco-Bay Delta by the San Luis & Delta-Mendota Water Authority--We Seek a Public Hearing, an EIS and Extended Comment Period--2 Weeks Is Insufficient.” Letter to Brenda Burman, Commissioner and Ernest Conant, California-Great Basin Regional Director, USBR from PCL et al [8 Conservation and Fishery Organizations].**
- 10. November 5, 2019, “Comments on Tentative Waste Discharge Requirements (WDRs) for Surface Water Discharges from the Grassland Bypass Project in Merced and Fresno Counties” to Ashley Peters, Central Valley Regional Water Quality Control Board from PCFFA et al [22 Conservation, Fishery, Tribal and Community Organizations].**
- 11. October 29, 2019, PCL et. al. Re: Westlands WD Conversion Contract for 1.15 MAF Exhibits under the WIIN Act § 4011. Ernest Conant, Bureau of Reclamation Regional Director Mid-Pacific Regional Office.**
- 12. September 9, 2019, “Coalition Comments on Grassland Bypass Project Long-Term Storm Water Management Plan EIR Addendum and Initial Study--A Full EIR-EIS is Required” to Joseph C. McGahan, Drainage Coordinator, San Luis and Delta Mendota Water Authority, Sue McConnell, Central Valley Regional Water Quality Control Board, and Rain Emerson, USBR from PCL et al [21 Conservation, Fishery, Tribal and Community Organizations].**
- 13. July 31, 2019, “Comments of PCFFA and IFR on Grassland Bypass Project Long-Term Storm Water Management Plan, 2020 – 2035” to Karl Longley, Chairman, Central Valley Regional Water Quality Control Board and Ernest Conant, Regional Director, USBR Mid Pacific Region.**
- 14. March 28, 2019, “Comments on Federal Selenium Criteria for Aquatic Life and Aquatic-Dependent Wildlife Applicable to California, Docket RIN, 2040-AF79 EPA-HQ-OW-2018-0056 FRL-9989-46-OW.” To USEPA from PCL et al [18 Conservation, Fishery, Tribal and Community Organizations].**

- 15. January 16, 2018, Steve Volker, "Comments of PCFFA, SFCBOA, IFR and NCRA on 16 Central Valley Project Interim Renewal Contracts for Cross Valley Canal, Delta Division and American River Division" Brenda Burman, Commissioner Bureau of Reclamation; Quentin Branch, Kate Connor Bureau of Reclamation, David Murillo, Regional Director Mid-Pacific Regional Office.**
- 16. January 12, 2018, PCL et. al. Re: Interim Renewal Contract for Central Valley Project Water Contracts for Westlands Water District (EA17-021& FONSI-15-023A1)--An abuse of discretion and failure to comply with federal law. Brenda Burman, Commissioner Bureau of Reclamation; Quentin Branch, Kate Connor Bureau of Reclamation, David Murillo, Regional Director Mid-Pacific Regional Office.**
- 17. November 20, 2017 Comments of Fishery Organizations Opposing H.R. 1769, the San Luis Drainage Resolution Act.**
- 18. April 6, 2017 Comments of Fishery Organizations to Rain Emerson USBR on on Draft EA/FONSI for the Central Valley Project Interim Renewal Contracts for Westlands Water District, Santa Clara Valley Water District, and Pajaro Valley Water Management Agency 2016-2018.**
- 19. February 6, 2017, Environmental Advocates et. al. Re: Comments EA-17-021, FONSI-15023A & Renewal of Six Interim Contracts for Westlands, Santa Clara et. al. Brenda Burman Commissioner of Reclamation David Murillo Mid-Pacific Regional Director Michael Jackson, Area Manager, SCC-100 South-Central California Area Office, Paul Souza Pacific Southwest Region Regional Director USFWS.**
- 20. August 8, 2016 Comments from the Bay Institute, Contra Costa Water Agency, Contra Costa Water District, Defenders of Wildlife, and Natural Resources Defense Council to Alicia Forsythe USBR on Northerly District Agreement, San Luis Unit.**
- 21. August 8, 2016 Comments from the Bay Institute and Defenders of Wildlife to Alicia Forsythe USBR on Northerly District Agreement, San Luis Unit.**
- 22. August 8, 2016 Coalition of Environmental Organizations concerned about water bird and wetland habitats Comments to Alicia Forsythe USBR on Northerly District Agreement, San Luis Unit.**
- 23. August 8, 2016 Coalition of Environmental, Environmental Justice, Tribal and Fishing Organizations Comments to Alicia Forsythe USBR on Northerly District Agreement, San Luis Unit.**

- 24. June 30, 2015 Comments from Pacific Advocates to Karl Longley Central Valley Regional Water Quality Control Board on Draft Waste Discharge Requirements for the Grassland Bypass Project.**
- 25. June 25, 2015 Coalition of Environmental, Environmental Justice, Tribal and Fishing Organizations Comments to Karl Longley Central Valley Regional Water Quality Control Board on Draft Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project.**
- 26. June 25, 2015 The Bay Institute Comments to Margaret Wong, Central Valley Regional Water Quality Control Board on Waste Discharge Requirements for SLDMWA and USBR – Surface Water Discharges from the GBP.**
- 27. June 22, 2015, Comments of the Pacific Coast Federation of Fishermen's Associations to Margaret Wong, Central Valley Regional Water Quality Control Board Requesting Denial of Proposed Waste Discharge Requirements for for Surface Water Discharges from the Grassland Bypass Project.**
- 28. June 30, 2014, Coalition Of Environmental, Environmental Justice, Tribal and Fishing Organizations Comments to Karl Longley Central Valley Regional Water Quality Control Board on Draft Waste Discharge Requirements for the Grassland Bypass Project.**
- 29. June 4, 2014, Institute for Fisheries Resources (IFR COALITION) Comments on Proposed CVP Cost Allocation Methodology: A recipe for continuing deficits and failure to repay taxpayers, Brooke Miller-Levy Project Manager, Bureau of Reclamation.**
- 30. April 2, 2014, PCL et. al. Subject: "Final Record of Decision and Final Environmental Assessment [FEA] for Westlands Water District et. al. Central Valley Project Interim Contract Renewals for Approximately 1.2 MAF of water" Rain Emerson Bureau of Reclamation, South-Central California Area Office.**
- 31. March 29, 2014, "Subject: Final Record of Decision and Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water. Rain Emerson Bureau of Reclamation, South-Central California Area Office.**
- 32. February 13, 2014 "Coalition of Environmental, Environmental Justice, Tribal and Fishing Organizations' Comments In Opposition To The Grassland Drainer Proposal To Discharge Selenium And Other Pollutants To Broadview Water District Lands—Another Kesterson In The Making". EWC letter to Sally Jewell, Secretary of Interior; Rod McInnis NMFS Regional Administrator & Jared Blumenfeld, USEPA Regional IX Administrator.**

33. **January 13, 2014, "The Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim Contract Renewals" Rain Emerson, Bureau of Reclamation, South-Central California Area Office.**
34. **January 9, 2014, "The EA for Westlands Water District Central Valley Project Interim Contract Renewals listed below & the Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) Number EA-13-023, *Central Valley Project Interim Renewal Contracts for Westlands Water District, Santa Clara Valley Water District, and Pajaro Valley Water Management Agency 2014 – 2016.* Rain Emerson, Bureau of Reclamation, South-Central California Area Office."**
35. **December 21, 2013 "Comments On the Draft Environmental Assessment (DEA 13-026) for the 10 year 100,000 Acre Feet of Proposed Water Transfer/Exchange Program from the Arvin-Edison Water Storage District (AEWSD) to Metropolitan Water District (MWD) & Draft Finding of No Significant Impact (FONSI 13-026)" To Chuck Siek, Bureau of Reclamation From PCL et. al. [13 Conservation, Fishery and Community Organizations.]**
36. **November 26, 2013 "Grasslands Bypass Project -- Violations of the Endangered Species Act and Reduced Monitoring Threaten Endangered Species and Public Health" To Secretary of Interior Sally Jewell, Rod McInnis Regional Administrator, National Marine and Fisheries Service; Jared Blumenfeld Regional IX Administrator, EPA. [From CWIN et. al. and 15 Conservation, Fishery and Community Organizations.]**
37. **November 1, 2013, Central Valley Project Interim Contract Renewals: Pajaro Valley Water Management Agency, Westlands Water District Distribution District No. 1, and Santa Clara Valley Water District 14-06-200-3365 AIR14-B Tracy, City of (The West Side) 7-07-20-W0045-IR14-B Tracy, City of (Banta-Carbona) 14-06-200-4305A-IR14-B Westlands Water District Distribution District 1 (Widren) 14-06-200-8018-IR14-B Westlands Water District Distribution District 1 (Centinella) 7-07-20-W0055-IR14-B Westlands Water District Distribution District 1 (Broadview) 14-06-200-8092-IR14 Westlands Water District Distribution District 2 (Mercy Springs) 14-06-200-3365A-IR14-C Westlands Water District 14-06-200-495A-IR4 Tracy, City of 14-06-200-7858A-IR1. EWC et. al letter to Karen Hall Bureau of Reclamation.**
38. **April 22, 2013 Comments on GBP Revised Monitoring Plan To Stacy Brown USBR from 14 Conservation, Fishery and Community Organizations.**
39. **March 26, 2012, "Comments on CVP Interim Renewal Contracts for three Delta Division and five San Luis Unit interim water service renewal contracts for: Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District (five contracts) 2012 to 2014 and Environmental Documents." To Hon. David J. Hayes, Donald R. Glaser, Michael L. Connor, Hilary**

Tompkins and Michael Jackson from PCFFA et. al [13 Conservation, Fishery and Community Organizations.]

- 40. February 13, 2012 “Comments on FONSI-070-103 Long-term Warren Act Contract and License for Delta Lands Reclamation District No. 770 EA-07-103.” To Rain Healer, USBR, From 11 Conservation, Fishery and Community Organizations.**
- 41. January 20, 2012, “Delta Division, San Luis Unit and Cross Valley CVP Interim renewal contracts—Comments of the Hoopa Valley Tribe on draft EA-11-049 and EA-11011 and FONSI 11-049 and FONSI 11-011” To Rain Healer, Bureau of Reclamation, South-Central California Area Office, from Leonard E. Masten Jr. Chairman Hoopa Valley Tribe.**
- 42. January 18, 2012, “Comments on Draft EA/FONSI for Oro Loma Water District Partial Assignment of Central Valley Project Water to Westlands Water District FONSI-11-092” To Rain Healer, Bureau of Reclamation, South-Central California Area Office, from 12 Conservation, Fishery and Community Organizations.**
- 43. January 5, 2012, “Comments on Draft EA/FONSI for Three Delta Division and Five San Luis Unit Water Service interim Renewal Contracts 2012-2014” To Rain Healer, Bureau of Reclamation, South-Central California Area Office from Stephen Volker on behalf of 4 Tribal, Conservation, Fishery and Community Groups.**
- 44. November 16, 2011, Notice Inviting Public Comment on BDCP MOA to Hon. Kenneth Salazar, Secretary John Laird, Secretary from 190 Conservation, Fishery and Community Organizations.**
- 45. November 15, 2011 “Full Environmental Impact Statement Needed for San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District [FONSI-10-030]” To Donald Glaser, Bureau of Reclamation, Regional Director Mid-Pacific Region, from 13 Conservation, Fishery and Community Organizations.**
- 46. October 17, 2011 “Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District’s San Joaquin River Improvement Project (SJRIP) FONSI-10-030” To Rain Healer, Bureau of Reclamation, South-Central California Area Office, from 8 Conservation, Fishery and Community Organizations.**
- 47. September 7, 2011 “Closure of Grassland Bypass Project (GBP) Data Collection and Review Team (DCRT) Meetings to Selected Members of the Public.” To Michael L. Connor USBR Commissioner from 11 Conservation, Fishery and Community Organizations.**

48. August 11, 2011 “Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project.” To Michael C. S. Eacock (Chris), Donald R. Glaser, USBR and Ren Lohofener USFWS et. al from 7 Conservation, Fishery and Community Organizations.
49. May 5, 2011 “Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities” To Deputy Interior Secretary Hayes from 16 Conservation, Fishery and Community Organizations.
50. February 28, 2011 “Scoping Comments Proposed Ten Year North to South Water Transfer of CVP and Non CVP Water Using State Water Project (SWP) and Central Valley Water Project (CVP) Facilities” To Brad Hubbard, USBR et. al from 10 Conservation, Fishery and Community Organizations.
51. December 13, 2010 Comments on the Draft Finding of No Significant Impact [FONSI] San Luis Water District’s [SLD] and Panoche Water District’s [PWD] Water Service Interim Renewal Contracts 2011-2013 FONSI-10-070. To Rain Healer, USBR from 8 Conservation, Fishery and Community Organizations.
52. November 16, 2010 “Letter to Senator Feinstein on Long Term Solution to Westlands Drainage Problem” To Commissioner Connor from Environmental Working Group.
53. July 30, 2010 “San Joaquin River Central Valley Selenium Basin Plan Waiver, 303 (d) Delisting of San Joaquin River for Selenium and the California Toxics Rule” To Jared Blumenfeld, USEPA from 16 Conservation, Fishery and Community Organizations.
54. July 16, 2010 Letter to Tom Glover, Westlands Deputy District Manager, Re RE: Opposition to Negative Declaration for the Westlands Water District and San Luis Water District Transfers and Related Exchanges Project. Eastside to Westside 57,500 acre feet.[Updated] From Zeke Grader et.al. From 13 Conservation, Fishery and Community Organizations.
55. July 3, 2010 Letter to Brad Hubbard Bureau of Reclamation, “Comments on Draft DEIS/EIR for proposed new transfer program that would provide for the transfer and/or exchange of up to 150,000 acre-feet of water from the San Joaquin River Exchange Contractors Water Authority [SJEC]1 to several potential users— Westlands Water District, SWP Contractors, Kern Water Bank and other users for over 25 years—2014-2038.” Adam Lazar Center for Biological Diversity et. al. and 11 Conservation, Fishery and Community Organizations.
56. May 19, 2010 Letter to Donald Glaser, USBR From David Ortmann, Pacific Coast Management Council.

57. **March 2, 2010 “Final Scoping Comments for Westlands Water District [Westlands] Proposed “Conveyance of Non-project Groundwater from the Canal-side project using the California Aqueduct”. The project proposes to discharge up to 100,000-acre feet of groundwater into the State Water Project California Aqueduct, a Drinking Water Supply for Approximately 20 Million People”. To Russ Freeman, Westlands WD, from 14 Conservation, Fishery and Community Organizations.**
58. **February 18, 2010 “Comments Re Two Year Interim Renewal Central Valley Project Water Service Contracts: Westlands Water District [WWD] Contracts 14-06-200-8237AIR13; 14-06-200-8238A-IR13; WWD DD1-Broadview 14-06-200-8092-IR12; WWD DD1 Centinella 7-07-20-W0055-IR12-B; WWD1 Widren 14-06-200-8018-IR12-B; WWD DD2 Mercy Springs 14-06-200-3365A-IR12-C. To Karen Hall, USBR, from 11 Conservation, Fishery and Community Organizations.**
59. **January 29, 2010 “Comments of The Bay Institute and NRDC on Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for the San Luis Unit interim renewal contracts (Central Valley Project, California)” To Rain Healer, USBR, from Hamilton Candee.**
60. **January 29, 2010 “Comments on Draft EA/FONSI on San Luis Interim Contract Renewal” To Rain Healer, USBR from California Water Information Network and California Sportfishing Protection Alliance.**
61. **January 29, 2010 “Comments on Draft EA/FONSI on San Luis Interim Contract Renewal” To Rain Healer, USBR from PCL, Friends of the River & Sierra Club.**
62. **January 29, 2010 “Comments on Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts” To Rain Healer, USBR from Joseph Membrino for Hoopa Valley Tribe.**
63. **September 18, 2007 “Comments on Draft Environmental Assessment (EA) and seven Draft Findings of No Significant Impact (FONSI) for the proposed execution of seven San Luis Unit interim renewal water service contracts.” To Judi Tapia, USBR from Hamilton Candee, NRDC.**
64. **September 7, 2007 “Comments on San Luis Unit Interim Renewal Contracts.” To Sheryl Carter, USBR from California Water Information Network.**
65. **April 17, 2006: “Final NRDC-TBI Comments on Long-Term Water Service Renewal Contract for Westlands Water District.” To Richard Stevenson, USBR from Hamilton Candee NRDC.**
66. **April 8,2006: “Comments on DEIS and Draft Supplemental Information for San Luis Unit Renewal Contracts – Part II.” To Shane Hunt, USBR from The Bay Institute and NRDC.**

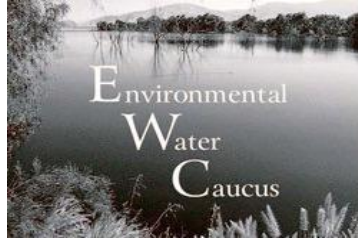
67. **September 15, 2005: “Supplemental NRDC Comments on Westlands contract - ESA & NEPA issues.” To Richard Stevenson, USBR from Hamilton Candee, NRDC.**
68. **September 14, 2005: “Additional Comments on Draft Renewal Contract for Westlands Water District.” To Richard Stevenson, USBR from Hamilton Candee, NRDC.**
69. **August 31, 2005: “NRDC Supplemental Comments on Drainage DEIS.” To Claire Jaquemin, USBR, from Hamilton Candee NRDC.**
70. **August 4, 2005: “Comments on Proposed CVP Long Term Water Service Renewal Contract for Westlands Water District.” To Richard Stevenson, USBR from Hamilton Candee for NRDC and TBI.**
71. **January 21, 2005: “NRDC – TBI Comments on Draft EIS for San Luis Unit Renewal Contracts.” To Joe Thompson, USBR from NRDC and TBI.**
72. **December 17, 2004: “Further Additional Comments of NRDC and Bay Institute on Draft EA/FONSI for DMC Unit Renewal Contracts.” To Joe Thompson, USBR from NRDC and TBI.**
73. **December 16, 2004: “Comments on Draft EA/FONSI for DMC Unit Renewal Contracts.” To Joe Thompson, USBR from NRDC and TBI.**
74. **December 14, 2004: “NRDC Comments on Draft EA/FONSI for DMC Unit Renewal Contracts.” To Joe Thompson, USBR from Hamilton Candee, NRDC.**
75. **January 9, 2001: “Comments on Proposed CVP long Term Renewal Contracts for Friant, Hidden Buchanan, Cross-Valley, Feather River and Delta-Mendota Canal Units.” To David Hayes, Deputy Secretary of Interior et. al. from Hamilton Candee NRDC.**
76. **December 7, 2000: “Comments on the Draft EA on long-term renewal of Central Valley Project water service contracts prepared by the Bureau of Reclamation.” To Al Candlish, USBR, from Hamilton Candee NRDC.**

Agency Comments and ESA Consultations adopted by reference:

1. **June 25, 2015: “USFWS Comments on the May 2015 Draft Waste Discharge Requirements for the Surface Water Discharges from the Grassland Bypass Project and the Discharges to Groundwater from the Growers in the Grassland Drainage Area.” To Margaret Wong, Central Valley Regional Water Quality Control Board, from Jennifer Norris, USFWS.**

- 2. November 13, 2014: “USFWS Response to Questions from Congressman George Miller on a Proposed Settlement on San Joaquin Valley Drainage.” From Ren Lohofener, USFWS Region 8 Regional Director.**
- 3. November 10, 2014: “USEPA Response to Questions from Congressman George Miller on a Proposed Settlement on San Joaquin Valley Drainage.” From Jared Blumenfeld, Regional Administrator, USEPA Region 9.**
- 4. August 26, 2014: “USEPA Comments on Draft Environmental Impact Statement for the Bay Delta Conservation Plan, San Francisco Bay Delta, California (CEQ# 20130365).” To Will Stelle, Regional Administrator West Coast Region National Marine Fisheries Service from USEPA Region 9.**
- 5. June 4, 2012: “USFWS ESA Consultation on San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche” To: Dave Hyatt, USBR from Ken Sanchez, USFWS.**
- 6. September 22, 2010: “NMFS Comment Letter – San Joaquin River Selenium Control Plan Basin Plan Amendment” To: Ms. Jeanine Townsend, Clerk to the State Water Resources Control Board from Howard Brown, NMFS.**
- 7. September 22, 2010: “USFWS Comment Letter – San Joaquin River Selenium Control Plan Basin Plan Amendment” To: Ms. Jeanine Townsend, Clerk to the State Water Resources Control Board from Susan K. Moore, USFWS.**
- 8. May 8, 2010: “USFWS Comments on the March 2010 Draft Staff Report Concerning the Proposed Basin Plan Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins to Address Selenium Control in the San Joaquin River Basin.” To Gail Cismowski, Central Valley Regional Water Quality Control Board, from David Harlow, USFWS.**
- 9. December 18, 2009: “USFWS ESA Consultation on the Proposed Continuation of the Grassland Bypass Project, 2010 – 2019.”**
- 10. August 27, 2007: “USFWS Comments on Draft EA/IS for 25-Year Groundwater Pumping/Water Transfer Project for the San Joaquin River Exchange Contractors Water Authority.” Letter to Robert Eckart, USBR from Michael Hoover, USFWS.**
- 11. April 17, 2006: “EPA Comments on the Draft Environmental Impact Statement (DEIS) and Supplemental Information for Renewal of Long Tenn Contracts for San Luis Unit Contractors (CEQ# 050411 and 060056).” Letter to Kirk Rogers, USBR from USEPA.**
- 12. March 6, 2006: USFWS Fish and Wildlife Coordination Act Report to USBR for the San Luis Drainage Feature Re- Evaluation.**

- 13. December 8, 2000: “Comments on Proposed Long-Term Contracts and Associated Environmental Assessments.” Letter to Alan R. Candlish and Bill Luce, USBR, from Deanna Wieman, USEPA.**
- 14. January 8, 1999: “Review of USBR’s Notice of Intent for Long-term Contract Renewal, Central Valley Project, California.” Letter to Alan R. Candlish, USBR, from Deanna Wieman, USEPA.**



February 15, 2020

Ernest Conant, Regional Director
through fmorales@usbr.gov
Bureau of Reclamation
Sacramento, CA

Erma Leal, Repayment Specialist
eleal@usbr.gov
South-Central California Area Office
Bureau of Reclamation

Lucille Billingsley, Repayment Supervisor
lbillingsley@usbr.gov
Georgiana Gregory, Repayment Supervisor
ggregory@usbr.gov
Central California Area Office
Bureau of Reclamation

all via email

Re: Written Comments on WIIN Act Draft Repayment Contracts between Bureau of Reclamation and Water Contractors in the Delta and American River Divisions

Dear Regional Director Conant, Repayment Supervisors Billingsley and Gregory, Repayment Specialist Leal, and Bureau of Reclamation:

By this letter our public interest organizations comment, pursuant to the National

Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq., the Endangered Species Act (ESA), 16 U.S.C. §1531 et seq., and Reclamation law, on the Bureau of Reclamation's (Reclamation) draft agreements with Central Valley Project (CVP) water contractors (hereinafter referred to as "Water Contractors") to convert renewal contracts to *permanent* repayment contracts.¹

In order to proceed in the manner required by law, Reclamation must prepare an Environmental Impact Statement (EIS) under NEPA, and must engage in consultation under the ESA with the National Marine Fisheries Service and U.S. Fish and Wildlife Service before converting the contracts. Reclamation, however, has not complied with NEPA by either preparing an EIS on each individual contract, or by preparing a broad "program" EIS on the direct and cumulative environmental consequences of converting all of the contracts.

The contracts we refer to in this letter are the five contracts in the Delta Division, and eight contracts in the American River Division on which public comments are due by February 17, 2020. These contracts are identified on pages 10-11, following the signatures, at the end of this letter. The five Delta Division contracts lock-in deliveries of 42,948 acre-feet of water per year, which added to the Westlands Water District contract for 1,150,000 acre-feet per year that was the subject of our January 7, 2020, comment letter results in a total of 1,192,948 acre-feet of water per year. The total water locked in by the American River Division contracts is 606,200 acre-feet per year. The total water locked in by both the Delta Division and American River Division contracts is *1,799,148 acre feet* of water per year.

Reclamation Must Comply with NEPA Before entering into the Contracts

Reclamation presently plans to enter into the contracts with the Water Contractors without any compliance with NEPA. The public comment period closes February 17, 2020. Pursuant to the contracts, Reclamation would be obligated to deliver almost 2 million acre-feet of water to the Water Contractors each year. Forever. The contracts are *permanent*. Such deliveries have many adverse environmental impacts on the watershed, including the rivers and the San Francisco-San Joaquin Bay-Delta estuary. Adverse impacts range from reducing freshwater flows and worsening already degraded Delta water quality; to further endangering and destroying endangered fish species and critical habitat; to by reducing freshwater flows worsening dangerous toxic algal blooms in the Delta; to adverse impacts on public health and safety in the Delta region; to adverse impacts on agriculture in the Delta.

Consumptive water rights claims are *5 ½ times more* than available supply.

¹ AquAlliance, California Water Impact Network, California Sportfishing Protection Alliance, Center for Biological Diversity, Environmental Water Caucus, Friends of the River, Planning and Conservation League, Restore the Delta, and Sierra Club California join in this letter.

Permanent contracts in the absence of any environmental review whatsoever is a thoughtless recipe for disaster. Especially in the face of reduced runoff, increasing sea level rise and salinity intrusion due to climate change while ignoring progress with such measures as water conservation and recycling.

Reclamation is in the process of converting virtually all contracts, about 75 of them, into permanent contracts similar to the draft Westlands contract.² Our organizations commented on the Westlands Water District contract conversion in our comment letter of January 7, 2020. Pursuant to NEPA, “cumulative impact” “is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. . . .” (NEPA Regulations § 1508.7.) The cumulative environmental impacts of converting all of Reclamation’s contracts into permanent contracts will be enormous and adverse.

An EIS or at least an environmental assessment (EA) must be prepared by Reclamation before entering into any of the contracts. The reason is that each contract would be a major federal action that may significantly affect the quality of the human environment. (42 U.S.C. § 4332(C.) “Actions include new and continuing activities, . . .” (NEPA Regulations § 1508.18(a).)³ NEPA requires “that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter [NEPA], . . .” (42 U.S.C. §4332.)

NEPA processes must be integrated with other processes “at the earliest possible time to ensure that planning and decisions reflect environmental values, . . .” (NEPA Regulations § 1501.2.) Reclamation, however, has not prepared an EIS on the proposed contracts. Reclamation *has not even prepared an EA* to determine whether an EIS must be prepared. (NEPA Regulations §§ 1501.3; 1508.9.) Reclamation has not made a “finding of no significant impact” on the actions. (NEPA Regulations § 1508.13.) Reclamation has not instituted the required “scoping” process and has not published a notice of intent in the Federal Register. (NEPA Regulations § 1501.7.) Reclamation has not prepared a categorical exclusion or notice thereof on the contracts. (NEPA Regulations § 1508.4.) The subject actions would not in any event qualify for a categorical exclusion. Consequently, Reclamation has not furnished the public any information whatsoever, by which to evaluate the potential environmental consequences of the contracts and the water diversions and deliveries authorized by them. Reclamation also has not furnished the public any information whatsoever, by which to evaluate the *cumulative* environmental impacts of all of the contract conversions in Reclamation’s pipeline and the water diversions and deliveries authorized by them. Reclamation has not

² On December 20, 2019, Reclamation gave public notice on its web site that 75 CVP contractors had requested contract conversions. [A copy of the Notice is attached.](#) The subject contracts were spread among the Central, Northern, and South Central California Area Offices.

³ The NEPA Regulations are codified at 40 C.F.R. §1500 et seq.

prepared a single EIS on the related contract conversions (NEPA Regulations § 1502.4(a) and has not prepared a broad “program” EIS on the contract conversions in its pipeline. (NEPA Regulations § 1502.4(b.) Reclamation has not prepared any “environmental document” on its action. (NEPA Regulations §1508.10.)

The EIS section on “alternatives” “is the heart of the environmental impact statement.” (NEPA Regulations § 1502.14.) The alternatives section,

should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public. (NEPA Regulations § 1502.14.)

An environmental assessment also must include discussion of alternatives. Reclamation must prepare an EIS or first prepare an environmental assessment and then an EIS, which must “Rigorously explore and objectively evaluate all reasonable alternatives, . . .” to the action. (NEPA Regulations § 1502.14(a.) The EIS will necessarily include alternatives that reduce deliveries of project water in order to increase freshwater flows and begin to restore watershed rivers and the Delta.

The Ninth Circuit Court of Appeals reversed a district court decision denying environmental plaintiffs’ summary judgment because the challenged environmental document issued by Reclamation under NEPA, “did not give full and meaningful consideration to the alternative of a reduction in maximum water quantities.” (*Pacific Coast Federation of Fishermen’s Assn’s v. U.S. Dept. of the Interior*, 655 Fed.Appx. 595, 2016 WL 3974183*3 (9th. Cir., No. 14-15514, July 25, 2016) (Not selected for publication).) “Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion and the agency did not adequately explain why it eliminated this alternative from detailed study.” (*Id.* at *2.) Reclamation’s “reasoning in large part reflects a policy decision to promote the economic security of agricultural users, rather than an explanation of why reducing maximum contract quantities was so infeasible as to preclude study of its environmental impacts.” (*Id.* at *3.)

The requirement under NEPA to consider the alternative of reducing exports to increase flows through the Delta is so obvious that the Ninth Circuit’s decision was not selected for publication because no new legal analysis was required to reach the decision. The decision pertained to interim two-year contract renewals. If the alternative of reducing exports must be considered during renewal of two-year interim contracts, it most assuredly must be considered before entering into permanent contracts. Moreover, “an alternative may be reasonable, and therefore required by NEPA to be discussed in the EIS, even though it requires legislative action to put it into effect.” *Kilroy v. Ruckelshaus*, 738 F.2d 1448, 1454 (9thCir. 1984.)

Reclamation will fail to proceed in the manner required by NEPA if it enters into the contracts without having first prepared and issued an EIS.

Reclamation's Action is Discretionary

We have not seen any communication from Reclamation explaining why it is proceeding to enter into the contracts as if there is no NEPA statute. Reclamation does refer in “whereas” clauses in the draft contract, for example, for the East Bay Municipal Utility District (the first American River division contract listed on page 10, below) to the Water Infrastructure Improvements for the Nation Act (Pub. L.) 114-322, 130 Stat. 1628), Section 4011 (a-d) and (f) (WINN Act.) The contract recites,

WHEREAS, 4011(a)(1) provides that ‘upon request of the contractor, the Secretary of the Interior *shall* convert any water service contract in effect on the date of enactment of this subtitle and between the United States and a water users’ Association [Contractor] to allow for prepayment of the repayment contract pursuant to paragraph (2) *under mutually agreeable terms and conditions.*’ (Draft Contract, 7th Whereas clause, p. 3.) (Emphasis added.)

Reclamation may contend that the WINN Act including use of the word “shall” makes entry into the conversion contracts non-discretionary and thus not subject to NEPA. As provided by WINN Act section 4011(a)(1), however, the terms and conditions *must be mutually agreeable* meaning they must be agreeable to the Secretary of the Interior, as well as to the contractor. That means under the plain language of the Act, the Secretary of the Interior retains discretion because the terms and conditions of the contracts must be agreeable to him. In *Aluminum Co. of America v. Central Lincoln Util. Dist.*, 467 U.S. 380, 397 (1984), the Supreme Court held,

Because the Regional Act does not comprehensively establish the terms on which power is to be supplied to DSIs [direct-service industrial customers] under the new contracts, it is our view that the Administrator has broad discretion to negotiate them.

NEPA cases have rejected efforts by agencies to avoid complying with NEPA by contending their actions are non-discretionary, when there is some discretion.⁴

The Secretary of the Interior has discretion to determine contract terms and conditions that are agreeable to him. That being the case, Reclamation must comply with NEPA before, not after, converting the water contracts.

NEPA Compliance is also Required by the Central Valley Project Improvement Act Before entering into Conversion Contracts

Savings language in the WINN Act (section 4012(a)(2) requires,

⁴ Such cases include *Forelaws on Board v. Johnson*, 743 F.2d 677 (9th Cir. 1984.)

This subtitle shall not be interpreted or implemented in a manner that—

[omitted]

(2) affects or modifies any obligation under the Central Valley Project Improvement Act [CVPIA] (Public Law 102-575; 106 Stat. 4706), except for the savings provisions for the Stanislaus River predator management program expressly established by section 11 (d) and provisions in section 11(g);

[omitted]

The CVPIA was enacted in 1992 to reduce adverse environmental impacts of CVP operations. The CVPIA requires preparation of an EIS before Reclamation renews any long-term water service contract. (CVPIA §§ 3402(a), 3404(c)(1.) That requirement has not been eliminated by the WINN Act.

Reclamation must prepare an EIS before entering into the contracts.

Examples of Environmental Issues Ignored by Reclamation’s Failure to Prepare an EIS or even an Environmental Assessment

The NEPA Regulations give guidance on whether an action “significantly” affects the quality of the human environment. “‘Significantly’ as used in NEPA requires considerations of both context and intensity.” (NEPA Regulations § 1508.27.) Ten factors are listed in § 1508.27(b) 1-10 in evaluating intensity meaning severity of the impact.

1508.27(b)(2) The degree to which the proposed action affects public health or safety

The water deliveries to the contractors diminish freshwater flows through the Delta which decreases water supplies and water quality and worsens the amount and frequency of toxic algal blooms in the Delta. That is one of the ways by which the action affects public health and safety. We attach and incorporate by this reference Restore the Delta’s January 6, 2020 comment letter to Emma Leal on the Westlands contract conversion. That letter provides more detail on the pollution and algal bloom issues in the Delta resulting from CVP diversions of freshwater flows.

(3) Unique characteristics of the geographic area

The Delta already fails to meet established water quality standards and is an ecologically critical area. The water deliveries exacerbate the decline of the Delta.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of the contracts will be highly controversial because of the worsening water supply and water quality crisis in the Delta. The controversy is evidenced by the recent article in the Los Angeles Times entitled *Feds set to lock-in huge water contract for well-connected Westlands Water District* (Bettina Boxall, Los Angeles Times November 11, 2019). According to pertinent information in the article,

In California, about 70 Central Valley Project contractors-- most of them farm irrigation districts-- have started negotiations to convert the contracts, according to the reclamation bureau, which oversees a vast irrigation project that greened the Central Valley with copious amounts of federally subsidized water deliveries.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks

Because Reclamation has failed to engage in any NEPA environmental analysis whatsoever, the impacts of the contracts are highly uncertain.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

About 75 contractors started negotiations to convert the contracts. Converting these contracts in the pipeline would, therefore, establish a precedent for future actions with significant effects.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

The contract conversions are related to other contract conversions in the pipeline that would have cumulatively significant impacts.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat

Endangered winter-run Chinook salmon, threatened spring-run Chinook salmon, Central Valley steelhead, Green Sturgeon, and Delta smelt continue to decline because of the reductions in water quality and flows resulting in rising temperatures, increased salinity, and sedimentation. CVP water deliveries harm the fish by reducing water flows and worsen the contamination of surface waters, groundwater, and soils with pollutants including selenium.

(10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment

The contract conversions threaten violation of federal and state law and requirements imposed for protection of the environment.

Reclamation must prepare an EIS, or an EA followed by an EIS before entering into the contracts..

Reclamation must Comply with the Endangered Species Act Before entering into the Contracts

Savings language in the WINN Act (section 4012(a)(3) requires,

This subtitle shall not be interpreted or implemented in a manner that—

[omitted]

(3) overrides, modifies, or amends the applicability of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) or the application of the smelt and salmonid biological opinions to the operation of the Central Valley Project or the State Water Project;

[omitted]

Endangered Species Act (ESA) section 7, 16 U.S. §1536(a)(2) requires consultation to ensure that an agency action is not likely to jeopardize the continued existence of any endangered species or result in destruction or adverse modification of its critical habitat. After initiation of the required consultation the agency shall not make any irreversible or irretrievable commitment of resources with respect to the action which has the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures. (16 U.S.C. § 1536 (d.)

Reclamation must enter into the required ESA consultation and not enter into the contracts until ESA compliance has been completed.

Conclusion

Reclamation must comply with NEPA and the ESA before entering into the contracts. That means Reclamation must prepare an EIS and enter into ESA consultation before entering into the contracts

Contacts for this comment letter are Conner Everts, Facilitator, Environmental Water Caucus (310) 804-6615 or connere@gmail.com , or Robert Wright, Counsel, Sierra Club California (916) 557-1104 or bwrightatty@gmail.com . We would do our best to answer any questions you may have.

Sincerely,



E. Robert Wright, Counsel
Sierra Club California



Kathryn Phillips, Director
Sierra Club California



Barbara Barrigan-Parrilla, Executive
Director, Restore the Delta



Conner Everts, Facilitator
Environmental Water Caucus



John Buse, Senior Counsel
Center for Biological Diversity



Carolee Krieger, Executive Director
California Water Impact Network



Barbara Vlamis, Executive Director
AquAlliance



Bill Jennings, Executive Director
California Sportfishing Protection
Alliance



Eric Wesselman
Executive Director
Friends of the River



Jonas Minton, Senior Water Policy
Advisor
Planning and Conservation League

cc: Michael C. LeBarre, Chief, Contracts Administration Branch
MLebarre@usbr.gov South-Central California Area Office, Bureau of Reclamation

LIST OF CONTRACTS COMMENTED ON BY THIS LETTER

Delta Division Total Acre Feet 1,192,948

Acre Feet Each Contract

-Contract No. 14-06-200-8092-XXX (Broadview Assignment) 27,000

CONTRACT BETWEEN THE UNITED STATES AND WESTLANDS WATER DISTRICT DISTRIBUTION DISTRICT NO. 1 PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 7-07-20-W0055-XXX (Centinella Assignment) 2,500

CONTRACT BETWEEN THE UNITED STATES AND WESTLANDS WATER DISTRICT DISTRIBUTION DISTRICT NO. 1 PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 14-06-200-3365A-XXX-C (Mercy Springs Partial Assignment) 4,198

CONTRACT BETWEEN THE UNITED STATES AND WESTLANDS WATER DISTRICT DISTRIBUTION DISTRICT NO. 2 PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 14-06-200-3365A-XXX-B (Mercy Springs 2-way Partial Assignment) 6,260

CONTRACT BETWEEN THE UNITED STATES AND SANTA CLARA VALLEY WATER DISTRICT AND WESTLANDS WATER DISTRICT DISTRIBUTION DISTRICT NO. 1 PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 14-06-200-8018-XXX (Widren Assignment) 2,990

CONTRACT BETWEEN THE UNITED STATES AND WESTLANDS WATER DISTRICT DISTRIBUTION DISTRICT NO. 1 PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Irrigation and M&I Contract No. 14-06-200-495A-XXX 1,150,000

CONTRACT BETWEEN THE UNITED STATES AND WESTLANDS WATER DISTRICT PROVIDING FOR PROJECT WATER SERVICE SAN LUIS UNIT AND DELTA DIVISION AND FACILITIES REPAYMENT

American River Division Total Acre Feet 606,200

Acre Feet Each Contract

-Contract No. 14-06-200-5183A-LTR1-P {00038005;5} CCAO 11-15-2019 CCAO 11-20-2019 CCAO 12-03-2019 CCAO 12-11-2019 CCAO 12-16-2019	Freeport	133,000
	Site 5 American R.	150,000
	Station 666+50 Folsom S. Canal	150,000
	TOTAL	433,000

Acre Feet Each Contract

CONTRACT BETWEEN THE UNITED STATES AND EAST BAY MUNICIPAL UTILITY DISTRICT PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 6-07-20-W1372B-P CCAO 11-15-2019 CCAO 11-19-2019 CCAO 12-02-2019 CCAO 12-11-2019 CCAO 12-16-2019 7,000

CONTRACT BETWEEN THE UNITED STATES AND CITY OF FOLSOM PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 14-06-200-3474A-IR1-P CCAO 11-15-2019 CCAO 11-20-2019 CCAO 12-03-2019 CCAO 12-11-2019 CCAO 12-16-2019 32,000

CONTRACT BETWEEN THE UNITED STATES AND THE CITY OF ROSEVILLE PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 14-06-200-5082A-IR1-P CCAO 11-15-2019 CCAO 11-20-2019 CCAO 12-03-2019 CCAO 12-11-2019 CCAO 12-16-2019 35,000

CONTRACT BETWEEN THE UNITED STATES AND PLACER COUNTY WATER AGENCY PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 14-06-200-5198B-IR1-P CCAO 11-15-2019 CCAO 11-20-2019 CCAO 12-02-2019 CCAO 12-11-2019 CCAO 12-16-2019 30,000

CONTRACT BETWEEN THE UNITED STATES AND SACRAMENTO COUNTY WATER AGENCY PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 6-07-20-W1372-P CCAO 11-15-2019 CCAO 11-20-2019 CCAO 12-03-2019 CCAO 12-11-2019 CCAO 12-16-2019 15,000

CONTRACT BETWEEN THE UNITED STATES AND SACRAMENTO COUNTY WATER AGENCY PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 14-06-200-5198A-IR1-P CCAO 11-15-2019 CCAO 11-20-2019 CCAO 12-02-2019 CCAO 12-11-2019 CCAO 12-16-2019 30,000

CONTRACT BETWEEN THE UNITED STATES AND SACRAMENTO MUNICIPAL UTILITY DISTRICT PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

-Contract No. 6-07-20-W1373-LTR1-P CCAO 11-15-2019 CCAO 11-20-2019 CCAO 12-02-2019 CCAO 12-11-2019 CCAO 12-16-2019 24,200

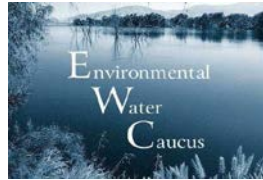
CONTRACT BETWEEN THE UNITED STATES AND SAN JUAN WATER DISTRICT PROVIDING FOR PROJECT WATER SERVICE AND FACILITIES REPAYMENT

Total Delta and American River Divisions 1,799,148 acre feet

Attachments:

Bureau of Reclamation December 20, 2019 Notice

Restore the Delta January 6, 2020 comment letter on Westlands contract conversion



CA Save Our Streams Council



January 21, 2020

Westlands Water District Board of Directors
Westlands Distribution District #1 & #2
Westlands District's Fresno Office
3130 N. Fresno Street,
Fresno, CA 93703

Re: Objection to Adoption of Westlands Water District Board of Directors Distribution District #1 & #2 Resolution Nos. 101-20, 102-20, 103-20 and 104-20 Because of:

- (1) Insufficient Public Notice and Inadequate Project Description and**
- (2) Failure to Comply with the California Environmental Policy Act (CEQA), the Central Valley Project Improvement Act (CVPIA), and state and federal Endangered Species Acts.**

Via email [jgutierrez@wwd.ca.gov] & [bormonde@westlandswater.org] and fax 559-241-6286

The Center for Biological Diversity, Planning Conservation League and other signatory organizations to this letter object to the proposed adoption of Westlands Water District's Distribution Districts #1 & #2 (Westlands) Board of Directors Resolution Nos. 101-20, 102-20, 103-20 and 104-20. These Resolutions, if approved, would adopt Notices of Statutory Exemption (NOE) and Categorical Exemption (CE) under the California Environmental Quality Act for four federal Central Valley Project (CVP) contracts for Westlands Distribution District #1 and one CVP contract for Westlands Distribution District #2:

The Westland's Board of Directors Agenda Item #4 for a Meeting on January 21, 2020 note the following for Distribution District #1: *“Consider Recommendation that the Board of Directors Adopt Resolution Nos. 101-20, 102-20, 103-20 and 104-20, Authorizing the Filing of Notices of Statutory Exemption and Categorical Exemption from the California Environmental Quality Act for Approval of and Authorization to Execute the Contracts Between the United States and Westlands Water District Distribution District No. 1 Providing for Project Water Service and Facilities Repayment, Authorizing Approval and Execution of the Contracts Between the United States and Westlands Water District Distribution District No. 1 Providing for Project Water Service and Facilities Repayment, and Authorizing Actions In Furtherance Thereof”*¹

And Agenda Item #4 for Distribution District #2: *“Consider Recommendation that the Board of Directors Adopt Resolution Nos. 101-20, Authorizing the Filing of Notices of Statutory Exemption and Categorical Exemption from the California Environmental Quality Act for Approval of and Authorization to Execute the Contract Between the United States and Westlands Water District Distribution District No. 2 Providing for Project Water Service and Facilities Repayment, Authorizing Approval and Execution of the Contract Between the United States and Westlands Water District Distribution District No. 2 Providing for Project Water Service and Facilities Repayment, and Authorizing Actions In Furtherance Thereof”*²

Insufficient Public Notice and Inadequate Project Description.

The above Notices are agenda items for the Westlands' January 21, 2020 Board Meeting, but no further information is provided on these contracts. The public does not have an adequate description of the project, the NOEs, the CEs, or the actual Board Resolutions. It is unclear whether these Board Resolutions apply to CVP Interim Contract Renewals (which were publicly noticed on December 20, 2019 on <https://ceqanet.opr.ca.gov>) or if these Notices pertain to proposed conversions of CVP contracts to repayment contracts pursuant to section 4011 of the Water Infrastructure Improvements for the Nation Act (“WIIN Act”). Further, there is no information provided that justifies the Exemptions under CEQA. We can only conclude that Westlands' proposed Board Resolutions are procedurally flawed and substantively mistaken.

For much of the last decade the undersigned have commented on Westlands' two-year interim contracts, seeking disclosure of the environmental impacts, including threats to endangered species and water pollution, and yet none of the undersigned or their representatives received notice of the "public negotiations" for the permanent repayment contract or this proposed Westlands' action. Our most recent comments addressed the numerous problems with Westlands CVP contract renewals, including submission of comments on Westlands Interim Contracts dated December 14, 2019³ and comments on the proposed Westlands conversion of contract to a repayment contract dated January 6, 2020⁴. As these

¹ <https://wwd.ca.gov/wwd-agenda/distribution-district-no-1/>

² <https://wwd.ca.gov/wwd-agenda/distribution-district-no-2/>

³ <http://calsport.org/news/wp-content/uploads/PCL-et.-al.-Cmts-Re-WWD-Interim-Contract-12-14-19.pdf>

⁴ <http://calsport.org/news/wp-content/uploads/PCL-et.-al.-Comments-on-WWD-Permanent-Contract-Conversion-Jan-6-2020.pdf>

comments are relevant to the Westlands proposed Board Resolutions, we incorporate these comments by reference and are included in the links provided in the footnotes below.

Failure to Comply with CEQA, CVPIA, and state and federal Endangered Species Acts.

Public Resources Code Section 21151, which provides that EIRs are required for certain projects, notes that a Categorical Exclusion is not allowed when:

1. The project site is environmentally sensitive as defined by the project's location. A project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant.
2. The project and successive projects of the same type in the same place will result in cumulative impacts;
3. There are "unusual circumstances" creating the reasonable possibility of significant effects.

As emphasized in our comments on Westlands' CVP Interim Contracts and Westlands' CVP Repayment contract conversions for Westlands, areas within the project site and downstream habitats are known to be habitats for endangered species that are sensitive to selenium contamination and salt sterilization and will likely be adversely affected by these water contract deliveries. Specifically, impacts may occur to the California Least Tern, giant garter snake (*Thamnophis gigas*), blunt-nosed leopard lizard (*Gambelia sila*), San Joaquin kit fox (*Vulpes macrotis mutica*), and San Joaquin woolly-threads (*Monolopia congdonii*). These concerns were previously raised in regard to the issuance of two-year interim contracts.⁵ These previously identified impacts will now be further compounded by a permanent contract and yet no compliance with the California Endangered Species Act or Federal Endangered Species Act have been provided.

Previous comments also describe significant groundwater contamination and downstream cumulative impacts. The toxic runoff, drainage, and effects of drainage treatment and disposal, including but not limited to, fish, wildlife, air emissions, transportation and other impacts, have not been disclosed. Without a proven drainage solution, water quality impacts from irrigation of toxic soils in Westlands have far reaching impacts outside of the district and in downstream waters.⁶ Therefore, there clearly are significant effects to the environment associated with the issuance of permanent water contracts considered in these Board Resolutions and, therefore, a full EIR under CEQA needs to be completed along with compliance with federal and state endangered species laws.

If indeed the proposed resolutions sanction the exemption from environmental review for the conversion of these contracts⁷ to long term permanent contracts, the Board of Directors of Westlands will have failed

⁵ See Environmental Advocate Comment Letter Re Interim Contract Renewal WWD Santa Clara.pdf John Buse, Center for Biological Diversity February 6, 2018.

⁶ The Department of Interior's Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant. The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational performance criteria. In addition, the USBR was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, USBR spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals.[see <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luis-demonstration-treatment-plant>]

⁷ The notice to the public did not include a description of the project that is the subject of the CEQA exemption.

to comply with the Central Valley Project Improvement Act, which requires full environmental review of any long term contract.⁸ Further any full EIR for long term contracts should include information on the relationships between irrigation in the San Luis Unit (including Westlands) and groundwater movement downslope, in terms of flow and water quality. EPA has noted previously that such an environmental review should provide information on the San Luis Unit's role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Absent this information, the public and decision makers are left in the dark as to significant impacts and required mitigation measures, such as "*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*" The effects of toxic pollution from Westlands caused by irrigation enabled by the proposed permanent water contracts are significant and complex and must be addressed in a comprehensive EIR.

Finally, consideration and analysis of a full range of project alternatives is needed to prevent significant impacts. We have raised these issues in the past, and they are even more pertinent today. They include first the failure to study "the alternative of a reduction in maximum interim contract water quantities. By failing to study this alternative, the Westlands EA defies the *PCFFA* Court's instruction that Reclamation must "give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities." *PCFFA*, 655 Fed.Appx. at 599. Second, the CEQA exemption fails to disclose – let alone analyze as required – the massive environmental impacts of diverting this water from the Delta and applying to contaminated soils. Third, an accurate map of the land uses that will be receiving water under these contracts is needed to determine the impacts of converting these agricultural areas to other uses, including utilities.⁹ And, fourth, there needs to be an assessment of the ability of existing agricultural users to pay the significant amounts of debt required under the contract conversion process. This required debt load predictably will change land uses and the likely shift to industrial uses must be disclosed and analyzed. Lastly, no information is provided as to how this debt will be repaid and the

⁸ Section 3404(c) of the CVPIA requires that an EIS be completed before Reclamation can renew any long-term repayment or water service contract for a period of 25 years. Reclamation defines "long term contract" as a "contract with a term of more than 10 years." See <https://www.usbr.gov/recman/pec/pec-p05.pdf> By these definitions any contract term longer than 10 years is by Reclamation's own definition 'a long-term contract.' A conversion to a permanent contract fits the definition of a long-term contract. Thus, federal law requires a full EIS before entering into permanent repayment contracts. No such analysis has been prepared and by the same rules a full EIR is also required. Congress determined that long-term contracts would have a significant effect on the environment such that an EIS is required. As Senator Feinstein noted with the passage of the WIIN Act, .." the bill's savings clause that prevents the legislation from violating state or federal environmental laws including the *Endangered Species Act* and biological opinions..."see <https://www.feinstein.senate.gov/public/index.cfm/press-releases?ID=FF5C94EB-667A-4DEC-A0A4-296AB5027BE4>. Westlands' cannot evade this duty by claiming a CEQA exemption.

⁹ See WWD 2008 Bond Debt Statement: 30,065,000 Westlands Water District adjustable Rate Refunding Revenue Certificates Of Participation, Series 2008a _ Westlands Water District Notes To Financial Statements Years Ended FEBRUARY 28, 2007 AND 2006 @ page 31: "*In February and March 2005, the District acquired approximately 8,750 acres of land within the Broadview Water District, which is substantially all of Broadview's irrigable acreage. In conjunction with the acquisition, the District initiated the process to annex all of Broadview's lands and will seek a permanent assignment of Broadview's Central Valley Project Water Contract totaling 27,000 acre-feet to the District from the Bureau of Reclamation. Of this water supply, the District plans to annually make available 6,000 acre-feet of entitlement to the Naval Air Station – Lemoore pursuant to the Supplemental Water Allocation Agreement between the District and NASL.*" See this 2016 overview of transmission lines, towers and land conversion maps for Westlands WD: http://docketpublic.energy.ca.gov/PublicDocuments/15-RETI02/TN210903_20160330T140735_Daniel_Kim_Comments_WSP_comments_to_RETI_20_plenary_group_meeti.pdf & <http://web.energyacuity.com/REProject.aspx?id=16887>

impacts on existing agricultural and industrial operations, especially during severe prolonged droughts and climate change, will be managed. These critical shortcomings leave decision-makers and the public in the dark.

In short, procedurally and substantively Westlands' adoption of the CEQA exemption for these contracts would not comply with state and federal laws. We urge Westlands to withdraw these Board Resolutions, and complete a full EIR analysis of these contracts as required. Under this contract conversion process, the public has been given a puzzle of dizzying complexity without the puzzle picture. Westlands' proposed contract conversion must be withdrawn and restarted with full consideration of all similar contract conversions and their cumulative effects. The water contract conversion process must start with outreach to the 17-20 parties of interest that have thus far been excluded or contracted out under the proposal. Furthermore, all of these invisible draft contracts must be publicly disclosed and the critical exhibits must be provided to the public and those areas of origin that are most impacted by the water that is being taken and exported to Westlands.

Thank you for considering these comments. Please make sure the undersigned are included in any future Westlands actions with regard to CVP contract renewals and/or conversion of CVP contracts pursuant to Section 4011 of the WIIN Act. If you have any questions please contact John Buse, Senior Counsel Senior Attorney, Center for Biological Diversity, 1411 K St. NW, Washington, D.C. 20005 jbuse@biologicaldiversity.org.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



John Buse
Senior Counsel
Center for Biological Diversity
jbuse@biologicaldiversity.org



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.org)
caleenwintu@gmail.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



John McManus
President
Golden State Salmon Association
john@goldengatesalmon.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



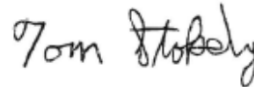
Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers Int.
mrockwell1945@gmail.com



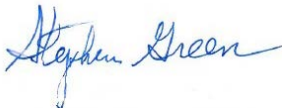
Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



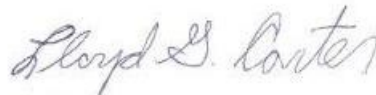
Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.com)
connere@gmail.com



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net

Documents Adopted By Reference: Public Interest & Comments Incorporated by Reference [All Documents can be found in the record of earlier contract renewals, earlier NEPA processes and in some cases on the BOR website.]

1. 1-29-10 “ Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts” To Rain Healer from Joseph Membrino for Hoopa Valley Tribe.
2. 1-29-10 “Comments of The Bay Institute and NRDC on Draft Environmental Assessment (EA) and Draft Findings of No Significant Impact (FONSI) for the San Luis Unit interim renewal contracts (Central Valley Project, California)” To Rain Healer from Hamilton Candee
3. 2-18-2010 “Comments Re Two Year Interim Renewal Central Valley Project Water

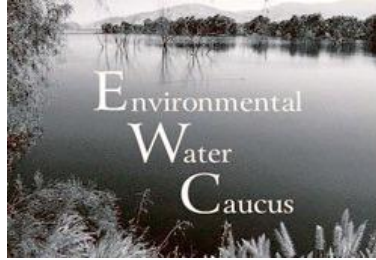
Service Contracts: Westlands Water District [WWD] Contracts 14-06-200-8237AIR13; 14-06-200-8238A-IR13; WWD DD1-Broadview 14-06-200-8092-IR12; WWD DD1 Centinella 7-07-20-W0055-IR12-B; WWD1 Widren 14-06-200-8018-IR12-B; WWD DD2 Mercy Springs 14-06-200-3365A-IR12-C. To Karen Hall, USBR, from 11 Conservation, Fishery and Community Organizations.

- 4. 3-2-2010 “Final Scoping Comments for Westlands Water District [Westlands] Proposed “Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct”. The project proposes to discharge up to 100,000 acre feet of groundwater into the State Water Project California Aqueduct, a Drinking Water Supply for Approximately 20 Million People”. To Russ Freeman from 14 Conservation, Fishery and Community Organizations.**
- 5. 5-19-10 Letter to Donald Glaser, USBR From David Ortmann, Pacific Coast Management Council**
- 6. 7-30-2010 “San Joaquin River Central Valley Selenium Basin Plan Waiver, 303 (d) Delisting of San Joaquin River for Selenium and the California Toxics Rule” To Jared Blumenfeld, EPA from 16 Conservation, Fishery and Community Organizations.**
- 7. 9-22-2010 USFWS “Comment Letter – San Joaquin River Selenium Control Plan Basin Plan Amendment” To: Ms. Jeanine Townsend, Clerk to the Board from Susan K. Moore.**
- 8. 11-16-2010 “Letter to Senator Feinstein on Long Term Solution to Westlands Drainage Problem” To Commissioner Connor from Environmental Working Group.**
- 9. 12-13-2010 Comments on the Draft Finding of No Significant Impact [FONSI] San Luis Water District’s [SLD] and Panoche Water District’s [PWD] Water Service Interim Renewal Contracts 2011-2013 FONSI-10-070. To Rain Healer, USBR, From 8 Conservation, Fishery and Community Organizations.**
- 10. 2-28-2011 “Scoping Comments Proposed Ten Year North to South Water Transfer of CVP and Non CVP Water Using State Water Project (SWP) and Central Valley Water Project (CVP) Facilities” To Brad Hubbard, USBR et. al from 10 Conservation, Fishery and Community Organizations.**
- 11. 5-5-11 “Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities” To Deputy Interior Secretary Hayes from 16 Conservation, Fishery and Community Organizations.**
- 12. 8-11-2011 “Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project.” To Michael C. S. Eacock (Chris), Donald R. Glaser, USBR and Ren Lohofener USFWS et. al from 7 Conservation, Fishery and Community Organizations.**
- 13. 10-17-2011 “Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District’s San Joaquin River Improvement Project (SJRIP) FONSI-10-030” To Rain Healer, USBR from 8 Conservation, Fishery and Community Organizations.**

14. 11-15-2011 “Full Environmental Impact Statement Needed for San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District [FONSI-10-030]” To Donald Glaser from 13 Conservation, Fishery and Community Organizations.
15. 11-16-2011 Notice Inviting Public Comment on BDCP MOA to Hon. Kenneth Salazar, Secretary John Laird, Secretary from 190 Conservation, Fishery and Community Organizations.
16. 1-5-2012 “Comments on Draft EA/FONSI for Three Delta Division and Five San Luis Unit Water Service interim Renewal Contracts 2012-2014” To Rain Healer from Stephen Volker on behalf of 4 Tribal, Conservation, Fishery and Community Groups.
17. 1-18-2012 “Comments on Draft EA/FONSI for Oro Loma Water District Partial Assignment of Central Valley Project Water to Westlands Water District FONSI-11-092” To Rain Healer, USBR from 12 Conservation, Fishery and Community Organizations.
18. 1-20-2012 “Delta Division, San Luis Unite and Cross Valley CVP Interim renewal contracts—Comments of the Hoopa Valley Tribe on draft EA-11-049 and EA-11011 and FONSI 11-049 and FONSI 11-011” To Rain Healer, USBR from Leonard E. Masten Jr. Chariman.
19. 3-26-2012 “Comments on CVP Interim Renewal Contracts for three Delta Division and five San Luis Unit interim water service renewal contracts for: Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District (five contracts) 2012 to 2014 and Environmental Documents.” To Hon. David J. Hayes, Donald R. Glaser, Michael L. Connor, Hilary Tompkins and Michael Jackson from PCFFA et. al [13 Conservation, Fishery and Community Organizations.]
20. November 1, 2013 EWC et. al to Karen Hall Bureau of Reclamation Central Valley Project Interim Contract Renewals: Pajaro Valley Water Management Agency, Westlands Water District Distribution District No. 1, and Santa Clara Valley Water District 14-06-200-3365A-IR14-B Tracy, City of (The West Side) 7-07-20-W0045-IR14-B Tracy, City of (Banta-Carbona) 14-06-200-4305A-IR14-B Westlands Water District Distribution District 1 (Widren) 14-06-200-8018-IR14-B Westlands Water District Distribution District 1 (Centinella) 7-07-20-W0055-IR14-B Westlands Water District Distribution District 1 (Broadview) 14-06-200-8092-IR14 Westlands Water District Distribution District 2 (Mercy Springs) 14-06-200-3365A-IR14-C Westlands Water District 14-06-200-495A-IR4 Tracy, City of 14-06-200-7858A-IR1
21. March 29, 2014, "Subject: Final Record of Decision and Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water. Rain Emerson Bureau of Reclamation.
22. January 9, 2014, "The EA for Westlands Water District Central Valley Project Interim Contract Renewals listed below & the Finding of No Significant Impact (FONSI) is

supported by Reclamation's Environmental Assessment (EA) Number EA-13-023, *Central Valley Project Interim Renewal Contracts for Westlands Water District, Santa Clara Valley Water District, and Pajaro Valley Water Management Agency 2014 – 2016*. Rain Emerson Bureau of Reclamation."

23. January 13, 2014, "The Environmental Assessment [EA] for Westlands Water District et. al. Central Valley Project Interim Contract Renewals" Rain Emerson. Bureau of Reclamation.
24. February 13, 2014 "Coalition Of Environmental, Environmental Justice, Tribal and Fishing Organizations' Comments In Opposition To The Grassland Drainer Proposal To Discharge Selenium And Other Pollutants To Broadview Water District Lands—Another Kesterson In The Making". EWC letter to Sally Jewell, Secretary of Interior; Rod McInnis NMFS Regional Administrator & Jared Blumenfeld, Regional IX Administrator
25. April 2, 2014, PCL et. al. Subject: "Final Record of Decision and Final Environmental Assessment [FEA] for Westlands Water District et. al. Central Valley Project Interim 6 Contract Renewals for Approximately 1.2 MAF of water" Rain Emerson Bureau of Reclamation
26. June 4, 2014, Institute for Fisheries Resources (IFR COALITION) Comments on Proposed CVP Cost Allocation Methodology: A recipe for continuing deficits and failure to repay taxpayers, Brooke Miller-Levy Project Manager, Bureau of Reclamation.
27. February 6, 2017, Environmental Advocates et. al. Re: Comments EA-17-021, FONSI-15-023A & Renewal of Six Interim Contracts for Westlands, Santa Clara et. al. Brenda Burman Commissioner of Reclamation David Murillo Mid-Pacific Regional Director Michael Jackson, Area Manager, SCC-100 South-Central California Area Office, Paul Souza Pacific Southwest Region Regional Director USFWS.
28. January 12, 2018, PCL et. al. Re: Interim Renewal Contract for Central Valley Project Water Contracts for Westlands Water District (EA17-021& FONSI-15-023A1)--An abuse of discretion and failure to comply with federal law. Brenda Burman, Commissioner Bureau of Reclamation; Quentin Branch, Kate Connor Bureau of Reclamation, David Murillo, Regional Director Mid-Pacific Regional Office.
29. January 16, 2018, Steve Volker, "Comments of PCFFA, SFCBOA, IFR and NCRA on 16 Central Valley Project Interim Renewal Contracts for Cross Valley Canal, Delta Division and American River Division" Brenda Burman, Commissioner Bureau of Reclamation; Quentin Branch, Kate Connor Bureau of Reclamation, David Murillo, Regional Director Mid-Pacific Regional Office



January 7, 2020

Ernest Conant, Regional Director
through fmorales@usbr.gov via email
Bureau of Reclamation
Sacramento, CA

eal@usbr.gov via email
Erma Leal, Repayment Specialist
Bureau of Reclamation
Fresno, CA

Re: Written Comments on WIIN Act Draft Repayment Contracts between Bureau of Reclamation and Westlands Water District

Dear Regional Director Conant, Repayment Specialist Leal and Bureau of Reclamation:

By this letter our public interest organizations comment, pursuant to the National Environmental Policy Act (NEPA), 42 U.S.C. section 4321 et seq., the Endangered Species Act (ESA), 16 U.S.C. §1531 et seq., and Reclamation law, on the Bureau of

Reclamation's (Reclamation) draft agreements with Westlands Water District (Westlands) to convert Westlands' renewal contracts to repayment contracts.¹

In order to proceed in the manner required by law, Reclamation must prepare an Environmental Impact Statement (EIS) under NEPA, and must engage in consultation under the ESA with the National Marine Fisheries Service and U.S. Fish and Wildlife Service before converting Westlands' contracts.

Reclamation Must Comply with NEPA Before entering into a Contract with Westlands

Reclamation presently plans to enter into the contract with Westlands with the contract being permanent, and becoming effective March 1, 2020. (Draft Contract, Article 2(a), p. 13.)² The public comment period closes January 8, 2020. Pursuant to the contract, Reclamation would be obligated to deliver 1,150,000 acre-feet of Project Water to Westlands each year. (Draft Contract, Article 3(a). p. 14.) Such deliveries have many adverse environmental impacts on the watershed, including the rivers and the San Francisco-San Joaquin Bay-Delta estuary. Adverse impacts range from reducing freshwater flows and worsening already degraded Delta water quality; to further endangering and destroying endangered fish species and critical habitat; to by reducing freshwater flows worsening dangerous toxic algal blooms in the Delta; to adverse impacts on public health and safety in the Delta region; to adverse impacts on agriculture in the Delta.

Moreover, Reclamation is in the process of converting virtually all contracts, about 77 of them, into permanent contracts similar to the draft Westlands contract.³ Pursuant to NEPA, "cumulative impact" "is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. . . ." (NEPA Regulations § 1508.7.) The cumulative environmental impacts of converting all of Reclamation's contracts into permanent contracts will be enormous and adverse.

An EIS must be prepared by Reclamation before entering into a contract with Westlands. The reason is that the contract would be a major federal action significantly affecting the quality of the human environment. (42 U.S.C. § 4332(C.) "Actions include

¹ AquAlliance, California Water Impact Network, California Sportfishing Protection Alliance, Center for Biological Diversity, Environmental Water Caucus, Friends of the River, Planning and Conservation League, Restore the Delta, and Sierra Club California join in this letter.

² Reclamation released the draft repayment contract for a public comment period on October 24, 2019.

³ On December 20, 2019, Reclamation gave public notice on its web site that 77 contractors had requested contract conversions. A copy of the Notice is attached. The same notice said that 14 of the contract conversions had already been negotiated and the public comment period on those contract conversions would close on February 19, 2020. The subject contracts were spread among the Central, Northern, and South Central California Area Offices.

new and continuing activities, . . .” (NEPA Regulations § 1508.18(a).)⁴ NEPA requires “that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter [NEPA], . . .” (42 U.S.C. §4332.)

NEPA processes must be integrated with other processes “at the earliest possible time to ensure that planning and decisions reflect environmental values, . . .” (NEPA Regulations § 1501.2.) Reclamation, however, has not prepared an EIS on the proposed contract. Reclamation *has not even prepared an environmental assessment* to determine whether an EIS must be prepared. (NEPA Regulations §§ 1501.3; 1508.9.) Reclamation has not made a “finding of no significant impact” on the action. (NEPA Regulations § 1508.13.) Reclamation has not instituted the required “scoping” process and has not published a notice of intent in the Federal Register. (NEPA Regulations § 1501.7.) Reclamation has not prepared a categorical exclusion or notice thereof on the contract. (NEPA Regulations § 1508.4.) The subject action would not in any event qualify for a categorical exclusion. Consequently, Reclamation has not furnished the public any information whatsoever, by which to evaluate the potential environmental consequences of the contract and the water diversions and deliveries authorized by it. Reclamation also has not furnished the public any information whatsoever, by which to evaluate the *cumulative* environmental impacts of all of the contract conversions in Reclamation’s pipeline and the water diversions and deliveries authorized by them. Reclamation has not prepared a single EIS on the related contract conversions (NEPA Regulations § 1502.4(a) and has not prepared a broad “program” EIS on the contract conversions in its pipeline. (NEPA Regulations § 1502.4(b.) Reclamation has not prepared any “environmental document” on its action. (NEPA Regulations §1508.10.)

The EIS section on “alternatives” “is the heart of the environmental impact statement.” (NEPA Regulations § 1502.14.) The alternatives section,

should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public. (NEPA Regulations § 1502.14.)

An environmental assessment also must include discussion of alternatives. Reclamation must prepare an EIS or first prepare an environmental assessment and then an EIS, which must “Rigorously explore and objectively evaluate all reasonable alternatives, . . .” to the action. (NEPA Regulations § 1502.14(a.) The EIS will necessarily include alternatives that reduce deliveries of project water in order to increase freshwater flows and begin to restore watershed rivers and the Delta.

⁴ The NEPA Regulations are codified at 40 C.F.R. §1500 et seq.

The Ninth Circuit Court of Appeals reversed a district court decision denying environmental plaintiffs' summary judgment because the challenged environmental document issued by Reclamation under NEPA, "did not give full and meaningful consideration to the alternative of a reduction in maximum water quantities." (*Pacific Coast Federation of Fishermen's Assn's v. U.S. Dept. of the Interior*, 655 Fed.Appx. 595, 2016 WL 3974183*3 (9th Cir., No. 14-15514, July 25, 2016) (Not selected for publication).) "Reclamation's decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of discretion and the agency did not adequately explain why it eliminated this alternative from detailed study." (*Id.* at *2.) Reclamation's "reasoning in large part reflects a policy decision to promote the economic security of agricultural users, rather than an explanation of why reducing maximum contract quantities was so infeasible as to preclude study of its environmental impacts." (*Id.* at *3.)

The requirement under NEPA to consider the alternative of reducing exports to increase flows through the Delta is so obvious that the Ninth Circuit's decision was not selected for publication because no new legal analysis was required to reach the decision. The decision pertained to interim two-year contract renewals. If the alternative of reducing exports must be considered during renewal of two-year interim contracts, it most assuredly must be considered before entering into permanent contracts. Moreover, "an alternative may be reasonable, and therefore required by NEPA to be discussed in the EIS, even though it requires legislative action to put it into effect." *Kilroy v. Ruckelshaus*, 738 F.2d 1448, 1454 (9th Cir. 1984.)

Reclamation will fail to proceed in the manner required by NEPA if it enters into the Westlands contract without having first prepared and issued an EIS.

Reclamation's Action is Discretionary

We have not seen any communication from Reclamation explaining why it is proceeding to enter into the Westlands contract as if there is no NEPA statute. Reclamation does refer in "whereas" clauses in the draft contract to the Water Infrastructure Improvements for the Nation Act (Pub. L.) 114-322, 130 Stat. 1628), Section 4011 (a-d) and (f) (WINN Act.) The contract recites,

WHEREAS, 4011(a)(1) provides that 'upon request of the contractor, the Secretary of the Interior *shall* convert any water service contract in effect on the date of enactment of this subtitle and between the United States and a water users' Association [Contractor] to allow for prepayment of the repayment contract pursuant to paragraph (2) *under mutually agreeable terms and conditions.*' (Draft Contract, 8th Whereas clause, p. 4; also, 20th Whereas clause, p. 8.) (Emphasis added.)

Reclamation may contend that the WINN Act including use of the word "shall" makes entry into the conversion contracts non-discretionary and thus not subject to

NEPA. As provided by WINN Act section 4011(a)(1), however, the terms and conditions *must be mutually agreeable* meaning they must be agreeable to the Secretary of the Interior, as well as to the contractor. That means under the plain language of the Act, the Secretary of the Interior retains discretion because the terms and conditions of the contracts must be agreeable to him. In *Aluminum Co. of America v. Central Lincoln Util. Dist.*, 467 U.S. 380, 397 (1984), the Supreme Court held,

Because the Regional Act does not comprehensively establish the terms on which power is to be supplied to DSIs [direct-service industrial customers] under the new contracts, it is our view that the Administrator has broad discretion to negotiate them.

NEPA cases have rejected efforts by agencies to avoid complying with NEPA by contending their actions are non-discretionary, when there is some discretion.⁵

The Secretary of the Interior has discretion to determine contract terms and conditions that are agreeable to him. That being the case, Reclamation must comply with NEPA before, not after, converting the water contracts.

NEPA Compliance is also Required by the Central Valley Project Improvement Act Before entering into Conversion Contracts

Savings language in the WINN Act (section 4012(a)(2) requires,

This subtitle shall not be interpreted or implemented in a manner that—

[omitted]

(2) affects or modifies any obligation under the Central Valley Project Improvement Act [CVPIA] (Public Law 102-575; 106 Stat. 4706), except for the savings provisions for the Stanislaus River predator management program expressly established by section 11 (d) and provisions in section 11(g);

[omitted]

The CVPIA was enacted in 1992 to reduce adverse environmental impacts of Central Valley Project (CVP) operations. The CVPIA requires preparation of an EIS before Reclamation renews any long-term water service contract. (CVPIA §§ 3402(a), 3404(c)(1).) That requirement has not been eliminated by the WINN Act.

Reclamation must prepare an EIS before entering into the contract with Westlands.

⁵ Such cases include *Forelaws on Board v. Johnson*, 743 F.2d 677 (9th Cir. 1984.)

Examples of Environmental Issues Ignored by Reclamation's Failure to Prepare an EIS or even an Environmental Assessment

The NEPA Regulations give guidance on whether an action “significantly” affects the quality of the human environment. “‘ Significantly’ as used in NEPA requires considerations of both context and intensity.” (NEPA Regulations § 1508.27.) Ten factors are listed in § 1508.27(b) 1-10 in evaluating intensity meaning severity of the impact.

1508.27(b)(2) The degree to which the proposed action affects public health or safety

The water deliveries to Westlands diminish freshwater flows through the Delta which decreases water supplies and water quality and worsens the amount and frequency of toxic algal blooms in the Delta. That is one of the ways by which the action affects public health and safety.

(3) Unique characteristics of the geographic area

The Delta already fails to meet established water quality standards and is an ecologically critical area. The water deliveries to Westlands exacerbate the decline of the Delta.

(4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.

The effects of the contract will be highly controversial because of the worsening water supply and water quality crisis in the Delta. The controversy is evidenced by the recent article in the Los Angeles Times entitled *Feds set to lock-in huge water contract for well-connected Westlands Water District* (Bettina Boxall, Los Angeles Times November 11, 2019). According to pertinent information in the article,

The deal would entitle Westlands to annual deliveries that are roughly double what the entire city of Los Angeles uses in a year.

But even partial deliveries result in huge quantities of water flowing from the ailing Sacramento-San Joaquin Delta to hundreds of thousands of district acres farmed by some of California's wealthiest growers.

Long-term control would also allow Westlands to make lucrative water sales to thirsty cities and other agricultural agencies, although district officials say they have no intent to do so.

The prospect of Westlands having a permanent call on so much water for so much water-- regardless of how many salted-up, badly drained acres the district may eventually take out of production or convert to solar farms-- is reviving long-standing criticisms of its contract with the U.S. Bureau of Reclamation.

‘What they’re doing is locking in on a seemingly permanent basis an inflated baseline for themselves at a time when we know they’re going to be irrigating less land in the future. It is just hard to see how that’s in the public’s interest,’ said Rep. Jared Huffman (D-San Rafael), who is demanding more contract details in his role as chairman of a House natural resources subcommittee.

In contrast, the so-called repayment contract the Bureau now proposes to award Westlands would not expire, permanently locking in the terms, including the amount of 1.15 million acre-feet of water.

In California, about 70 Central Valley Project contractors-- most of them farm irrigation districts-- have started negotiations to convert the contracts, according to the reclamation bureau, which oversees a vast irrigation project that greened the Central Valley with copious amounts of federally subsidized water deliveries.

The size of Westlands’ water contract has long been controversial in light of the soil problems that plague the 600,000-acre district. Much of it sits atop a clay layer, which prevents water from draining easily and concentrates toxic metals, including naturally occurring selenium.

In the early 1980s, wastewater from Westlands’ fields poisoned waterfowl at the Kesterson National Wildlife Refuge, setting off a long legal battle over its drainage.

The new contract doesn’t include the water reduction. Nor does it contain provisions for reassessing delivery amounts if Westlands retires land on its own without a drainage settlement.⁶

The Westlands contract is highly controversial.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks

Because Reclamation has failed to engage in any NEPA environmental analysis whatsoever, the impacts of the contract are highly uncertain.

(6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

About 77 contractors started negotiations to convert the contracts. Converting the Westlands contract would, therefore, establish a precedent for future actions with significant effects.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

⁶ Relying on a newspaper article for factual information is a product of Reclamation not providing any factual information whatsoever in its complete ignoring of NEPA.

The Westlands contract conversion is related to other contract conversions in the pipeline that would have cumulatively significant impacts.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat

Endangered winter-run Chinook salmon, threatened spring-run Chinook salmon, Central Valley steelhead, Green Sturgeon, and Delta smelt continue to decline because of the reductions in water quality and flows resulting in rising temperatures, increased salinity, and sedimentation. CVP water deliveries harm the fish by reducing water flows and worsen the contamination of San Joaquin Valley surface waters, groundwater, and soils with pollutants including selenium.

(10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment

It appears that the contract would violate reclamation law by enlarging the service area and water quantities beyond the limits authorized by Congress. Reclamation's refusal to prepare an EIS appears designed to facilitate the violation of reclamation law by not providing any information whatsoever by which the public can evaluate how much land will remain in production for how long and how much land will be retired from agricultural production and when.

Reclamation must prepare an EIS before entering into the contract with Westlands.

Reclamation must Comply with the Endangered Species Act Before entering into the Contract with Westlands

Savings language in the WINN Act (section 4012(a)(3) requires,

This subtitle shall not be interpreted or implemented in a manner that—

[omitted]

(3) overrides, modifies, or amends the applicability of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) or the application of the smelt and salmonid biological opinions to the operation of the Central Valley Project or the State Water Project;

[omitted]

Endangered Species Act (ESA) section 7, 16 U.S. §1536(a)(2) requires consultation to ensure that an agency action is not likely to jeopardize the continued existence of any endangered species or result in destruction or adverse modification of its critical habitat. After initiation of the required consultation the agency shall not make any irreversible or irretrievable commitment of resources with respect to the action which has

the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures. (16 U.S.C. § 1536 (d.))

Reclamation must enter into the required ESA consultation and not enter into the Westlands contract until ESA compliance has been completed.

Conclusion

Reclamation must comply with NEPA and the ESA before entering into the contract with Westlands. That means Reclamation must prepare an EIS and enter into ESA consultation before entering into the contract with Westlands.

Contacts for this comment letter are Conner Everts, Facilitator, Environmental Water Caucus (310) 804-6615 or connere@gmail.com , or Robert Wright, Counsel, Sierra Club California (916) 557-1104 or bwrightatty@gmail.com . We would do our best to answer any questions you may have.

Sincerely,



E. Robert Wright, Counsel
Sierra Club California



Kathryn Phillips, Director
Sierra Club California



Barbara Barrigan-Parrilla, Executive
Director, Restore the Delta



Conner Everts, Facilitator
Environmental Water Caucus



Jeff Miller, Senior Conservation Advocate
Center for Biological Diversity



Carolee Krieger, Executive Director
California Water Impact Network



Barbara Vlamis, Executive Director
AquAlliance



Bill Jennings, Executive Director
California Sportfishing Protection
Alliance



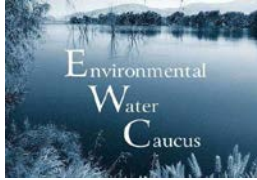
Ron Stork
Senior Policy Staff
Friends of the River



Jonas Minton, Senior Water Policy
Advisor
Planning and Conservation League

Attachment:

Bureau of Reclamation December 20, 2019 web site Notice



CA Save Our Streams Council



January 6, 2020

Brenda Burman
Commissioner
U.S. Bureau of Reclamation
1849 C Street NW
Washington DC 20240-0001

Ernest Conant,
Regional Director
California-Great Basin Reg.Fed Bldg.
2800 Cottage Way
Sacramento CA 95825-1898

Erma Leal
Repayment Specialist - SCCAO-445
Dept. of Interior | Bureau of Reclamation
Interior Region 10 - California - Great Basin
South-Central California Area Office

Via Email and Regular Mail

Re: Comments Westlands WD Conversion Contract for 1.15 MAF & Exhibits under the WIIN Act § 4011.

Dear Commissioner Burman, Mr. Conant and Ms Leal;

The largest federal irrigation district in the nation, Westlands Water District (Westlands), is seeking a permanent water contract for double the amount of water used by all the people of Los Angeles during 2018. By this contract, Westlands would escape limits on ownership acreage, pricing restrictions, and be allowed to irrigate with subsidized water on lands outside of the

federally authorized service area boundaries. The contract would allow irrigation of lands known to generate toxic drainage and runoff pollution. There is no current arable irrigation map to guide the Secretary's decisions about eligible contract deliveries.

For much of the last decade the undersigned have commented on Westlands' two-year interim contracts, seeking disclosure of the environmental, endangered species and water pollution impacts, and yet none of the undersigned or their representatives received notice of the "public negotiations" for this permanent contract. And, despite filing a Freedom of Information request, which Reclamation required for even the most rudimentary elements of the proposed draft contract and exhibits, public comment has been further thwarted by the absence of a complete draft contract and the essential exhibits necessary for public review by the January 8, 2020 deadline for public comment.

We urge you to deny the Westlands' contract conversion and that the process be restarted with proper public transparency and following established legal requirements. We request public contract negotiations be held with adequate notice provided, especially in the counties and areas from which the proposed irrigation water is taken. Furthermore, these negotiations should not be held until a full environmental impact statement is completed, endangered species consultation is provided, and an accurate irrigable land map is provided along with a complete draft of the proposed contract.

Our detailed comments follow, focusing on five main areas:

- I. Reclamation broke its own rules.**
- II. Full EIS analysis under NEPA is required.**
- III. NEPA and the ESA apply to Reclamation's decision to enter into and negotiate the terms of permanent contracts.**
- IV. The WIIN Act does not abrogate the requirements of other federal laws including NEPA, the ESA, and the CVPIA.**
- V. Conclusions**

I. Reclamation Broke its Own Rules

A. Public Participation was thwarted.¹

Reclamation law and policy seeks broad public participation in water contract negotiations.² Notice for the Westlands' public contract conversion negotiation sessions were printed in the

¹ <https://www.usbr.gov/mp/wiin-act/docs/wiin-act-negotiations-timeline-2019-06.pdf> See also https://s3.amazonaws.com/archives.federalregister.gov/issue_slice/1982/2/22/7761-7765.pdf#page=3

² See § 9(f) of the Reclamation Project Act of 1939, and the rules and regulations published in 52 FR 11954, April 13, 1987 (43 CFR 426.22) & "Final Revised Public Participation Procedures" for water resource-related contract negotiations, published in 47 FR 7763, February 22, 1982

county to which the water is exported in a three day legal notice that did not mention the Westlands' proposed permanent contract by name. The notice was issued on a Monday before the Labor Day holiday and "public negotiations" were held on that Thursday. In response to public protest, another public session was held after only a 32-hour workday notice during the Thanksgiving holiday, when many of the major highway arteries were closed by weather. Once again Westlands' contract conversion was not disclosed by name in the public notice. Water contractors were afforded a call-in number, but the general public was not. The rationale given for the rush to complete the contract was to preclude judicial review of Westlands' current water service contract. Evading judicial review is not a stated contracting purpose in Reclamation manuals. A key contractor essential to the negotiation needed to be reached by phone and another was simply contracted out without being present.³

B. A Complete Draft of the Contract has not been provided, thus public comment is precluded.

As required by Reclamation staff, representatives for the undersigned filed a Freedom of Information Request on October 2, 2019 for a copy of the draft water contract conversion and exhibits. These have yet to be provided. Subsequent draft exhibits provided online are incomplete and fully informed public comment has thus, been precluded. Problems with the exhibits⁴ include:

1. **Exhibit A – Map of Contractor’s Service Area**—This is not consistent with Congressional authorization and the map contained in the San Luis Unit Feasibility Study.⁵ The required updated irrigation suitability land classification maps and the systematic evaluation of lands with respect to suitability for agricultural production under irrigation are not provided.
2. **Exhibit B – Rates and Charges** [*-- This Exhibit template is unchanged from current Contract and is updated annually. Rate Schedules may be found at:* <https://www.usbr.gov/mp/cvpwatterates/ratebooks/index.html>] Two DOI Inspector General Reports have indicated the amounts being charged are insufficient to repay the

³ For a video of the November 2019 contract negotiation session see <https://www.dropbox.com/home?preview=Bureau+of+Reclamation+Negotiations%2C+Fresno%2C+Nov.+19%2C+2019.mp4--CLIPS+15%2C+16.mp4>

⁴ See <https://www.usbr.gov/mp/wiin-act/docs/usbr-westlands-draft-wiin-act-contract-exhibits.pdf> Posted 11-10-19.

⁵ In 1956, the Bureau of Reclamation delivered to the United States Congress, “A Report on Feasibility of Water Supply Development” for the San Luis Unit (the 1956 Feasibility Report), which recommended constructing a group of water management facilities, called the San Luis Unit, as an addition to the Central Valley Project, in order to bring irrigation waters to an area of approximately 496,000 acres in the San Joaquin Valley. In 1960, Congress passed the San Luis Act, Pub. L. No. 86-488, 74 Stat. 156 (1960) authorizing water deliveries to 500,000 acres for the entire unit consistent with the Feasibility Report, see § 1(a). Also see LAND Exhibit 299 https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/land.htm

capital costs.⁶ Reclamation law and policy require a contract to ensure that sufficient rates are charged to repay federal taxpayers. The undersigned have provided comment on how the proposed cost allocation will impact environmental protections and take additional money from the federal treasury without adequate repayment, as required.⁷ We adopt those comments by reference.

3. **Exhibit C – Central Valley Project Water Needs Assessments Purpose and Methodology** This is a methodology not a water needs assessment. The draft permanent contracts only include the methodology, not the actual water needs assessments.⁸
4. **Exhibit D – Repayment Obligation**—This is just a placeholder. The June 2018 term sheet letter to WWD (not provided to the public by Reclamation) indicated \$350 million was owed the US taxpayers. Now, this **template repayment obligation**, suggests the amount has dropped from ~\$350M to \$1.8M...” Moreover, this is apparently going to change further: *"This Exhibit template was developed during the WIIN Act Negotiations. Relevant data will be incorporated upon contract execution."* The public was effectively excluded from the negotiations so there is no ability to comment on this changing aspect of the contract. Further ratepayers and taxpayers are left in the dark regarding final payment obligations or the ability to pay off Westlands' debts.

C. The Secretary is allowed to contract for the delivery of project irrigation water only to lands with characteristics that allow delivery--this contract would violate that mandate.

As stated above water is being provided outside of the Congressionally designated service area and no updated irrigable lands map has been provided. Public Law 99–546, 100 Stat. 3050. (Coordinated Operations Act) Sec. 305. § 4(c) of the Act requires, among other things, that the Secretary must show that lands receiving project water are capable of *"successful irrigability of those lands and their susceptibility to sustained production of agricultural crops by means of irrigation has been demonstrated in practice. Such proposal shall also include an investigation of soil characteristics which might result in toxic or hazardous irrigation return flows."* No such documentation and evidence has been provided in support of the proposed permanent water contract to irrigate these lands referenced in Exhibit A of the proposed contract. In fact, government documents show that roughly 300,000 acres of the lands proposed for irrigation under this contract will generate "toxic or hazardous irrigation return flows" to ground or surface waters. Indeed, current practice results in some of these toxic flows being discharged to the

⁶ https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/california_waterfix/exhibits/land.html & 2004 DOIG *Central Valley Contract Renewal Process August 2004* [OIG Report No W-IN-BOR-0016-2004

⁷ <http://calsport.org/news/wp-content/uploads/Conservation-Fishing-and-Tribe-Cmts-RE-CVP-Cost-Allocation-Study-Burman-1-2-2020-.pdf>

⁸ See https://www.usbr.gov/mp/cvpia/3404c/process_info/cont_policies/3_cvp_policies/01_02-22-99.pdf and <https://pcffa.org/wp-content/uploads/2016/07/102-7-25-16-Amended-Memorandum.pdf> pg 7

California Aqueduct without proper Clean Water Act permits or consideration of hazardous conditions for fish and wildlife.⁹

D. Delivery of project water to toxic soils obligates the Secretary to provide drainage, but such drainage is not provided by the proposed contract.

Judge Hewitt ruled that under Westlands' current two year interim contracts the government was not obligated to provide drainage service, “*Because (Westlands) failed to show that drainage service was a bargained-for benefit of any of these contracts, (Westlands) has not shown that drainage service is a ‘fruit’ of any of the contracts.*”¹⁰ And yet, the proposed permanent contract proposal is to deliver water to these lands that are unsuitable for irrigation and to other lands that would receive project water that are, however, outside of Congressional authorization¹¹, but could obligate the federal government to furnish something that has been unattainable for decades—drainage.

The drainage obligation does not exist, however, if water service to these lands is cut off because of the impracticability of irrigation. This alternative—cessation of irrigation water from unsuitable lands—is mandated by law and regulation.¹² The toxic drainage, groundwater pollution, and surface water pollution is created in large part by the Bureau’s [of Reclamation] deliveries of CVP water to these non-irrigable lands. Reducing water service instead of expanding it is the obvious solution. Controlling or eliminating the supply of drainage water by eliminating deliveries to these identified toxic soils will control the demand for drainage and the

⁹ <http://calsport.org/news/wp-content/uploads/PCL-et.-al.-Cmts-Re-WWD-Interim-Contract-12-14-19.pdf>

<http://calsport.org/news/wp-content/uploads/Conant-Burman-Ltr-Re-Extension-of-Cmt-Re-SLD-Discharges-Use-Agreement-12-10-19.pdf>

<http://calsport.org/news/wp-content/uploads/CBD-PCL-et.-al-Cmt-Ltr-Cross-Valley-Interim-Contract-12-12-2019.pdf>

http://calsport.org/news/wp-content/uploads/PCL-et-al_Comments-on-DEA-for-GBP-Stormwater-Plan_12-23_-2019-.pdf

¹⁰ Westlands Water District v. United States, 12-12C (Fed. Cl. 2013) United States Court of Federal Claims Filed: January 15th, 2013 Docket Number: 12-12C

¹¹ See San Luis Act of 1960 Section 1(a) *for the principal purpose of furnishing water for the irrigation of approximately five hundred thousand acres of land in Merced, Fresno, and Kings Counties, California, hereinafter referred to as the Federal San Luis unit service area.* <https://www.govinfo.gov/content/pkg/STATUTE-74/pdf/STATUTE-74-Pg156.pdf>

¹² Continuing to provide project water to these toxic soils would require approval from Congress to increase the authorized appropriation cap under the San Luis Act. Also see Reclamation Directives and Standards PEC P12 for required continuing investigations into land classification and suitability for irrigation for the delivery of project water.

enormous costs estimated at \$2.6 billion. Westlands' land uses have changed significantly¹³ within the proposed contract acreage. These land use changes together with cessation of delivery to these lands impracticable of irrigation without generating pollution must be considered. The unauthorized financial obligation inferred by issuing the proposed permanent water contract must be addressed.¹⁴

II. A Full EIS analysis under NEPA is Required.

The CVPIA PEIS and Biological Opinion provided a framework whereby future CVP-related actions, including interim and long-term CVP water contract renewals, could be reviewed for site-specific impacts under NEPA and ESA. The environmental review completed for Westlands interim contracts is inadequate, as our organizations have documented in our December 14, 2019 comments on the Draft Environmental Assessment.¹⁵ We incorporate those comments by reference. These sequential two-year contracts have failed to address reduction in exports, irrigability of these lands, drainage impacts, and conversion to municipal and industrial uses as contemplated under the conversion of this 9(e) contract to a 9(d) repayment contract issued in perpetuity. These impacts would be exacerbated and magnified under the proposed permanent contract. Given the numerous potential environmental effects associated with Westlands' water deliveries, a full EIS and ESA analysis must be completed prior to converting the existing short-term contracts to permanent contracts.

Federal law requires a full EIS for Westlands' contract conversion. An EIS must comprehensively assess the far-ranging and complex direct and secondary effects of irrigation and illuminate the total environmental impact of contract renewal and conversion to a permanent contract. Responsible decision making requires guidance from this EIS and adherence to established legal requirements.

In 1989, Reclamation attempted to complete contract renewals for the Friant Division contracts without doing any environmental review, arguing that since the contract terms are essentially

¹³ Industrial uses including massive utility land conversion in thousands of acres has replaced irrigated agricultural uses and yet the contract is silent regarding the rates and interest owed on these land use changes along with water use changes. See the maps referenced in previous comments: <http://calsport.org/news/wp-content/uploads/PCL-et.-al.-Cmts-Re-WWD-Interim-Contract-12-14-19.pdf>

¹⁴ The 2008 Feasibility Report sent to Congress explained that “Federal interest is established either by legislation or through an evaluation of a proposed action relative to the agency's mission” and that, to be federally implementable, an action “must be feasible as defined by the Economic and Environmental Principles and Guidelines (Principles and Guidelines). The Principles and Guidelines require Federal actions contribute to the national economic development (NED).” The 2008 Feasibility Report continued: The San Luis Act of 1960 as amended establishes the Reclamation's Federal interest in the proposed action. However, the requirement for a net positive contribution to the Nation's economy cannot be met by either of the two action alternatives. The 2008 Feasibility Report concluded the action alternative selected by the Bureau was not appropriate for implementation according to the government's own accepted standards.

¹⁵ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41303

unchanged from those of four decades ago, there is no legal basis for triggering the National Environmental Policy Act (NEPA) requirements. The USEPA believed NEPA review was required and that an EIS was the appropriate level of review. In 1989, EPA made a rare formal referral of these contracts to the Council on Environmental Quality when the Department of the Interior proposed signing long term renewals without any environmental review.¹⁶ In support of EPA's recommendation, the CEQ concluded that an EIS should be prepared for Friant contract renewals.¹⁷

In comments submitted in 1999 by the USEPA to the Bureau of Reclamation on Long Term Contract Renewals for the CVP, EPA recommended that an EIS should be the level of review for contract renewals: "*an EIS should be assumed the appropriate level of analysis for contract renewals, especially considering the many regional and localized concerns which were not covered in the CVPIA PEIS; e.g. water quantity, water quality, or specific terms and conditions for contract renewals.*"¹⁸ Further, in comments on CVP Long Term Contracts in 2000 the USEPA argued that, "*long term water service contracts are not and should not be permanent entitlements, but rather that they should be subject to review at the end of each contract period to reevaluate water supply and environmental conditions in a rapidly changing state.*"¹⁹ Locking in these paper water supplies in perpetuity artificially inflates Westlands' allocation during times of shortage and results in shortfalls to other contractors and the environment.

The following impacts from Westlands contract conversion are significant and should be addressed in a full EIS:

A. Effects to the San Francisco Bay-Sacramento and San Joaquin River Delta Estuary.

There have been repeated violations of the Clean Water Act standards²⁰ and Endangered Species Act requirements under the Reasonable and Prudent Alternatives. CVP operations and the exports of water pursuant to this interim contract have consistently violated the Coordinated Operation Act of 1986, which requires adherence to Delta Water Quality Standards contained in D-1485 and subsequent water quality standards.

¹⁶ <https://www.latimes.com/archives/la-xpm-1989-04-12-me-1552-story.html>

¹⁷ <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=50626>

¹⁸ <https://archive.epa.gov/region9/nepa/web/pdf/cvprenew.pdf>

¹⁹ <https://archive.epa.gov/region9/nepa/web/pdf/cvpkrenewals.pdf>

²⁰ Of particular note, the SWRCB, referencing WR Order 90-05, stated in WR 92-02 at page 9: *The State Water Board also has advised the USBR that decisions on water deliveries are subject to the availability of water, and that water should not be considered available for delivery if it is needed as carryover to maintain an adequate cold water pool for the fishery.* SWRCB warned against USBR decisions to maximize water deliveries in the initial years of a drought and failing to maintain sufficient carryover storage to protect fisheries and public trust resources.

The operations of the Federal Central Valley Project and State Water Project (Water Projects) have caused devastating environmental impacts and have contributed to severe declines in California's native fish species, several of which are now listed as endangered or threatened species under the Endangered Species Act. Specifically, Water Projects operations have been major factors in the decline of the endangered Sacramento River winter-run Chinook salmon ("winter-run Chinook salmon"), threatened Central Valley spring-run Chinook salmon ("spring-run Chinook salmon"), threatened Central Valley steelhead, threatened Green Sturgeon and threatened Delta Smelt, and in the listing of these and other species under the Endangered Species Act. Further, species not currently listed, such as longfin smelt and Sacramento splittail, are also being adversely affected by Water Project operations.

B. Effects to Indian Trust Assets in the Trinity River must be assessed and disclosed.

The Yurok and Hoopa Tribe's fishing and associated water rights in the Trinity River are Indian Trust Assets. Protection of the Indian Trust Assets for the Hoopa, Yurok and Winnemem Wintu people require sufficient water to remain within the Tribe's watershed so that their fishery resources will thrive, not merely survive.²¹ As the Hoopa Tribe commented as far back as 2010, the CVP water diversions to Westlands and other west side San Luis Unit contractors, significantly impact their Indian Trust Assets:

*"...It is irrelevant to the environmental review that the Tribe's reservation is not in the vicinity of the Proposed Action Area. The water to which the Tribe has a right and whose use is essential to its fishery resources is being delivered and will continue to be delivered pursuant to the proposed federal action from the vicinity of the reservation to the contractors' area by CVP facilities that divert water from the Tribe's watershed."*²²

C. The required Endangered Species Consultation has not been provided for public review.

For any federal action that may affect a threatened or endangered species or its habitat, the agency contemplating the action, otherwise known as "the action agency" (here, the Bureau of Reclamation), must consult with the appropriate "consulting agency" (here, the FWS and NMFS), for the purpose of ensuring that the federal action is not likely to: (1) jeopardize "the continued existence of" an endangered or threatened species; and (2) that the federal action will not result in the "destruction or adverse modification" of the designated critical habitat of the listed species. 16 U.S.C. § 1536(a)(2).²³ For the Westlands' contract conversion, Reclamation is

²¹ *Federal court: Tribal water rights outrank farmers' rights* Associated Press 11/25/2019 See <https://www.cherokeephoenix.org/Article/Index/113786>

²² See January 29, 2010 Letter to Rain Healer, USBR from Joseph Membrino Re: Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts. pg 3.

²³ <https://www.fws.gov/endangered/laws-policies/section-7.html>

required to request both FWS and NMFS to complete a formal Section 7 consultation under the ESA.

Terrestrial federally-listed species that could be affected by Westlands water deliveries and contract conversion include:

Mammals: San Joaquin kit fox, Fresno kangaroo rat, Giant kangaroo rat, Tipton kangaroo rat,
Reptiles: Blunt-nosed leopard lizard;
Plants: San Joaquin woolly-threads, and California jewel flower.

Threats to these species include loss of habitat to cultivation, conversion of land to other uses, use of rodenticides, herbicides and pesticides, any of which could decimate small, isolated populations.

Supporting documentation for this USEPA Docket for Selenium in California includes 2 reports by USFWS: Species at Risk from Selenium Exposure in California Inland Surface Waters, Enclosed Bays and Estuaries (includes a list of species considered most at risk for selenium exposure in CA²⁴) and Species at Risk from Selenium Exposure in the San Francisco Estuary.²⁵ The species identified as most at risk from selenium exposure from agricultural drainage contamination in the San Joaquin Valley and San Francisco Estuary include:

Mammals: Buena Vista Lake Ornate Shrew;
Birds: Bald Eagle, California Black Rail, California Clapper Rail, California Least Tern, Greater Scaup, Lesser Scaup, White-winged Scoter, Surf Scoter, Black Scoter;
Reptiles: Giant Garter Snake;
Fish: Chinook Salmon, Steelhead, Green Sturgeon, White Sturgeon, Delta Smelt, and Sacramento Splittail.

D. Effects of Drainage from Westlands Caused by Imported Irrigation Water from the CVP are Significant and Complex and Must be Addressed in a Comprehensive EIS.

Federal and State law prohibit degradation of the waters of the State and Nation. The proposed contract conversions would allow the continued delivery of CVP water to lands known to create pollution when applied to irrigate these soils without data or substantive environmental analysis of the effects of drainage contamination from Westlands or Reclamation. This drainage pollution can deform fish and wildlife, impair reproduction, and reduce survival. These adverse impacts affect trust resources including migratory birds, anadromous fish, and federally and state listed species. Continued delivery of water to these soils, as contemplated by this contract renewal, will degrade the waters of the State and Nation. The USEPA, in their comments on San Luis Unit Long Term Contract Renewals (@ pg 4 of Attachment A), concluded that, “*the Drainage solutions and features relied upon to implement these solutions should not be separated from the*

²⁴ <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0144&contentType=pdf>

²⁵ <https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OW-2018-0056-0265&contentType=pdf>

implementation of long-term water contracts.”²⁶ Yet that is exactly what Reclamation has done in with this contract conversion for Westlands.²⁷

A comprehensive assessment of drainage problems in Westlands has not been conducted since 1980’s. A major planning effort to devise a drainage plan for the San Luis Unit was completed in 2006, with the San Luis Drainage Feature Re-evaluation (SLDFR) Final EIS. Yet the much of the data in the SLDFR FEIS for Westlands, which was used to define the drainage problem and help with modeling analyses, was derived from 1980’s data of groundwater conditions in Westlands (CH2MHill 1985).²⁸

Previous narrative description of groundwater movement in Westlands is based on modeling done by Williamson et al 1989 describing a groundwater flow system that has a much larger vertical gradient than horizontal gradient. However, lateral and vertical movement of subsurface drainage are not the only effects of subsurface agricultural drainage from Westlands to downslope lands. Steve Deverel, a groundwater hydrologist with Hydrofocus Inc., provided written testimony to the State Water Resource Control Board for the 1998 Bay-Delta Water Rights Hearing describing the effect of the hydraulic pressure of shallow drainage problem upslope of the Firebaugh Canal WD and Central California Irrigation District (primarily in Westlands), causing increases in pressure down gradient and contributing to drainage flows within those districts (Deverel 1998). Relevant excerpts are provided below:

“I have also been asked if I could quantify the load of salinity and selenium that enters along this boundary by downslope migration compared to the drainage load leaving Firebaugh Canal Water District as an example. Downslope migration does not explain all of the load but a part of it is from this shallow downslope flow, in the range of 20 to 40%...”

“...Elevations of groundwater in saturated areas in upslope areas are higher than elevation [sic] in lower areas. Although a particular particle of Water will take many years to migrate, in saturated soils pressure is very quickly transmitted to areas of lesser pressure. That is what is happening here. Pressure transmitted from high areas to low areas as an example will cause poor quality Water to show up in surface drain and be counted as load. A particle of poor quality Water may have originated from farming the downslope areas or migrated in the shallow geological features from farming the

²⁶ Ibid.

²⁷ <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68443> USBR October 25, 2019 Reclamation releases draft repayment contract for Central Valley Project contractor. And Reclamation extends the public comment period for the released draft repayment contract for Central Valley Project contractors <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68567>

²⁸ Westlands North, South and Central drainwater quality was estimated in the SLDFR FEIS by geostatistical analysis using TDS concentrations and 1980’s groundwater data (SLDFR FEIS Appendix C, page C-39) https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

downslope areas or migrated in the shallow geological features from upslope, but the pressure causes it to rise into the tile drainage and surface drain and flow out.”

“Pumping decreased substantially during the 1950’s and 1960’s as surface water was delivered and groundwater water levels rose. This rise in the groundwater levels continues to occur and has caused increases in pressures in downslope areas which have contributed to drainage flows.”

Numerous Reclamation documents have noted downgradient groundwater flows that could impact areas downslope of Westlands. For example, the SLDFR FEIS developed (by Hydrofocus Inc.) a regional groundwater flow model for the SLDFR project area (which included agricultural lands in the San Luis Unit, Delta Mendota Canal Unit, and San Joaquin Exchange Contractors service areas). The SLDFR FEIS noted on page 6-26 that, *“Using the groundwater-flow model results, horizontal groundwater velocities were estimated at about 500 feet/year in the upper 50 feet of the saturated zone for the 1foot/year seepage rate. Therefore, in 44 years groundwater with high salinity and constituent concentrations could travel about 20,000 feet downgradient from the evaporation basins. Results suggested significant water level increases could affect crop root zone salinity within 3,500 feet of the evaporation basins...”*²⁹

The San Luis Unit Long Term Contract Draft Supplemental EIS dated 2006 (Appendix B, @ pg 11) found that, *“The Westlands Subarea has no drainage discharge to the receiving waters of the State, therefore it is not directly affected by the current salinity and boron TMDL which limits discharge into the San Joaquin River. However, these actions have an indirect impact on the hydrology of the Basin owing to regional groundwater flow from Westlands into the Grasslands subarea...”*³⁰

Further, the Draft EA for a CVP Water Assignment from Broadview Water District (USBR 2004) noted on page 4-2 that, *“...the Proposed Action would reduce the quantity of drainage water currently being discharged from the BWD [Broadview WD] to the San Joaquin River by approximately 2,600 acre-feet or 70 percent of water per year (Summers Engineering, 2003). More specifically, by following the BWD lands and not applying CVP water for irrigation, the estimated reduction in drain water discharge from existing conditions (approximately 3,700 acre feet per year [afy]), will be reduced by approximately 1,100 afy. Most of these resulting flows are likely attributable to sub-surface flows originating from up-gradient locations to the south and west...”* and on page 4-12 that, *“Although irrigated agriculture would be discontinued within the BWD, under-land flow of groundwater from up-gradient locations would still contribute to drain water within BWD drainage canals.”* In other words, the Broadview DEA estimated that about a third of the subsurface drainage below Broadview WD originated outside and upslope of district boundaries via lateral flow from agricultural lands to the south and west (i.e., Westlands).

²⁹ Available at this link https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

³⁰ Available at this link: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2143

The SWRCB in their revised Water Rights Decision 1641, dated March 15, 2000 (@ pg 83) identified lands within the San Luis Unit that contribute to drainage-water contamination to the San Joaquin River, “...the SWRCB finds that the actions of the CVP are the principal cause of the salinity concentrations exceeding the objectives at Vernalis. The salinity problem at Vernalis is the result of saline discharges to the river, principally from irrigated agriculture, combined with low flows in the river due to upstream development. The source of much of the saline discharge to the San Joaquin River is from lands on the west side of the San Joaquin Valley which are irrigated with water provided from the Delta by the CVP, primarily through the Delta-Mendota Canal and the San Luis Unit.”³¹

Oppenheimer and Grober (2004), in a draft staff report for the Amendments to the Water Quality Control Plan for the Sacramento River and San Joaquin River Basins for the Control of Salt and Boron Discharges into the Lower San Joaquin River, noted the following with respect to Westlands’ effects on San Joaquin River water quality: “*The Grassland Subarea contains some of most [sic] salt-affected lands in the LSJR watershed. This subarea is also the largest contributor of salt to the LSJR (approximately 37% of the LSJR 's mean annual salt load). Previous studies indicate that shallow groundwater in the LSJR watershed is of the poorest quality (highest salinity) in the Grassland Subarea (SJVDP, 1990). The Grassland Subarea drains approximately 1,370 square miles on the west side of the LSJR in portions of Merced, Stanislaus, and Fresno Counties. This subarea includes the Mud Slough, Salt Slough, and Los Banos Creek watersheds. The eastern boundary of this subarea is generally formed by the LSJR between the Merced River confluence and the Mendota Dam. The Grassland Subarea extends across the LSJR, into the east side of the San Joaquin Valley, to include the lands within the Columbia Canal Company [and including the Northern Portion of Westlands Water District].*”

The USEPA in their comment letter on the Draft EIS and Supplemental Information for Renewal of Long Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006, @ pg 5 and 6 of Attachment A) found that, “*Subsurface drainage flow comes in part from the Westlands Water District and other water districts upgradient of the northerly [San Luis Unit] districts with high selenium/Total Dissolved Solids (TDS) concentrations ([USBR SLDFR] Plan Formulation Report Addendum, July 2004).*” EPA recommended that the FEIS for San Luis Unit Long Term Contracts should include information on the relationships between irrigation in the San Luis Unit (including Westlands) and groundwater movement downslope, in terms of flow and water quality. EPA further noted that Reclamation should provide information on the San Luis Unit’s role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as “*changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*”³²

³¹ Available at this link:

https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf

³² <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

E. Environmental Impacts from Groundwater pump-ins in the California Aqueduct need to be disclosed and mitigated.

Polluted groundwater from Westlands is being pumped into the California Aqueduct as part of a Warren Act Contract approved by USBR in 2015 despite records showing elevated levels of selenium, arsenic, and boron in this groundwater.³³ The California Department of Water Resources conducts monthly monitoring of the California Aqueduct and has documented occurrences of elevated levels of concern for selenium at Check 21 near Kettleman City (station number KA017226), especially during times when surface water flows have been restricted in the Aqueduct and groundwater from Westlands is being pumped into the Aqueduct. Some of these monthly water quality samples have exceeded the US EPA's November 2018 proposed selenium objectives for protection of aquatic fish and wildlife. These proposed objectives include a lentic water quality objective of 1.5 µg/L (lentic meaning of, relating to, or living in still waters, such as lakes, ponds, or swamps), which would be the applicable selenium objective for Kern National Wildlife Refuge and other wetlands that are fed by water from the Aqueduct.³⁴ The 50 µg /L drinking water selenium objective that is currently applicable to water in the California Aqueduct is not protective of fish and wildlife resources that use water from the Aqueduct. Kern National Wildlife Refuge receives their refuge water supplies from the California Aqueduct. Endangered species, such as the federally listed as endangered Buena Vista Lake Shrew, are likely to be impacted from cumulative levels of selenium in this source water contaminated by Westlands' groundwater discharges. The once-a-month water quality sampling is insufficient to capture selenium spikes that accumulate downstream, or to assess the bioaccumulation in the food chain.³⁵

F. Drainage Contamination in Grasslands Wetland Channels must be disclosed.

The Grasslands Wetland Channels are listed as impaired for selenium on the State's 303(d) list³⁶ and elevated selenium in those channels could be harming aquatic-dependent fish and wildlife resources including federally listed species such as the threatened giant garter snake. Although the Draft EA for Westlands' interim contracts concluded that extensive land retirement along the northern boundary and drainage management under the Grassland Bypass Project (GBP) have "*prevented contamination of Grasslands wetlands water supply*

³³ https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=21021

³⁴ Federal Selenium Criteria for Aquatic Life and Aquatic Dependent Wildlife Applicable to California Docket RIN, 2040-AF79 EPA-HQ-OW-2018-0056 FRL-9989-46-OW. These selenium criteria established lentic and lotic water values, and bird egg and fish tissue values. See: <https://www.regulations.gov/document?D=EPA-HQ-OW-20180056-0001>.

³⁵ Selenium & Arsenic concentrations in the California Aqueduct, downstream of where groundwater has been pumped into the canal, have increased markedly in 2015 and in the case of Arsenic are approaching the Maximum Contaminant Level for drinking water of 0.010 mg/L. See http://www.water.ca.gov/waterdatalibrary/waterquality/station_group/index.cfm

³⁶ https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/01657.shtml#34338

channels,” aside from the narrative in the Draft EA, there are no maps documenting retired lands in Westlands, no data confirming that contaminated groundwater is not migrating downslope and out of Westlands, and no data on flow or water quality in the Grassland wetland channels.

The undersigned organizations have long-standing interests in the GBP because contaminants in agricultural drainage discharges have profound effects to the environment, including effects to downstream waterways, aquatic life, and migratory birds. Further, Westlands' Broadview District lands and upgradient irrigated lands contribute to this drainage discharge. We hereby include our previous comments on the GBP EIR/EIS and Basin Plan Amendment by reference.^{37,38} We also include our comments submitted to Reclamation December 23, 2019 on the Draft Environmental Assessment on a 10-Year Use Agreement for the San Luis & Delta-Mendota Water Authority Long-term Storm Water Management Plan for the Grasslands Drainage Area (Draft EA-19- 029³⁹) by reference.

G. The San Francisco Bay/Delta continues to be impacted by selenium from agricultural drainage.

The San Francisco Bay and Delta ecosystem is at risk due to environmental degradation, including impacts from elevated levels of selenium. Waterways in the North Bay and Delta, including Carquinez Straits, Suisun Marsh, and Sacramento San Joaquin Delta, are listed as impaired for selenium on the 303(d) list (being addressed by a USEPA approved TMDL).⁴⁰ Sources of selenium contamination include agricultural drainage from the Central Valley and effluent discharges from oil refineries (Linares et al 2015; Presser and Luoma 2010). At risk species include federally listed as threatened or endangered, green sturgeon, Chinook salmon, steelhead trout, delta smelt, Sacramento splittail and the California Ridgway's rail, as well as many migratory bird species that use the estuary as a wintering ground, including greater and lesser scaup, and white-winged, surf, and black scoters.

³⁷ These comments are as follows: Coalition comments of environmental, fishing, and environmental justice organizations opposed U.S. EPA's proposed federal water quality criteria for selenium applicable to California. March 28, 2019. Available at <http://calsport.org/news/wp-content/uploads/PCL-et.-al-Cmt-Letter-EPA-CaSeleniumCriteria-Doc-No.-EPA-HQOW-2018-00....pdf>; Comments of the Pacific Coast Federation of Fishermen's Associations Requesting Denial of Proposed Waste Discharge Requirements for Surface Water Discharges from the Grassland Bypass Project, Stephan C. Volker. June 22, 2015. Available at https://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/wdrs_development_archive/2015_may/

³⁸ [_05_gbp_com_pcffa.pdf](#); Re: Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements, Coalition Letter to CVRWQCB Follow-up on Grasslands WDR. September 8, 2014. Available at <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-toLongley-re-gbp-landretirement.pdf>; Coalition Comments Re Draft Waste Discharge Requirements for the Grassland Bypass Project. June 30, 2014. Available at <http://calsport.org/news/wp-content/uploads/Finalcoalition-comments-on-Draft-GBP-WDR6.30.14.pdf>.

³⁹ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41546

⁴⁰ https://www.waterboards.ca.gov/water_issues/programs/tmdl/2014_16state_ir_reports/category4a_report.shtml

The USEPA noted on page 46036 of the Federal Register Notice 81(136) that, “[t]he analyses to develop the fish tissue and the avian egg tissue benchmarks used in the modeling, and the modeling results used to derive the proposed water column criteria, indicate the health of these species would be negatively impacted from exposure to selenium water column concentrations above 0.2 µg /L, which would be allowed to occur under the existing NTR selenium criterion of 5.0 µg /L. Accordingly, EPA finds that it is necessary to propose revised and more protective criteria for selenium in order to help ensure the continued protection of these vulnerable species and associated designated uses.”

Our organizations submitted comments to USEPA on the proposed selenium water quality and tissue criteria for the Bay Delta supporting more protective water quality criteria and hereby incorporate those comments by reference.⁴¹ The selenium discharges being considered by the Regional Board from the GBP for the next 25 years will affect the Bay-Delta ecosystem and could affect compliance with EPA’s proposed water quality criteria for San Francisco Bay and Delta. The 5.0 µg /L Basin Plan selenium objective for Mud Slough and the San Joaquin River is not protective of downstream beneficial uses, will result in non-compliance with proposed water quality criteria and will cause deleterious effects to fish and wildlife in the Bay-Delta. Westlands' Broadview District and upgradient irrigated lands contribute to this discharge and therefore must be analyzed in a full EIS for the contract conversion.

Table 2. Proposed Selenium Water Quality Criteria for the San Francisco Bay and Delta

Media Type	Tissue		Water Column ¹		
			Dissolved		Particulate
Criteria	Fish Whole Body or Muscle	Clam	Chronic	Intermittent Exposure ²	Chronic
Magnitude	8.5 µg/g dw whole body or 11.3 µg/g dw muscle	15 µg/g dw	0.2 µg/L	$WQC_{int} = \frac{0.2 \mu\text{g/L} - C_{bkgrnd}(1 - f_{int})}{f_{int}}$	1 µg/g dw
Duration	Instantaneous measurement	Instantaneous measurement	30 days	Number of days/month with an elevated concentration	30 days
Frequency	Not to be exceeded	Not to be exceeded	Not more than once in three years	Not more than once in three years	Not more than once in three years

¹ Dissolved and particulate water column values are based on total selenium (includes all oxidation states, i.e., selenite, selenate, organic selenium and any other forms) in water.

² Where C_{bkgrnd} is the average background selenium concentration in µg/L, and f_{int} is the fraction of any 30-day period during which elevated selenium concentrations occur, with f_{int} assigned a value ≥ 0.033 (corresponding to one day).

⁴¹ Coalition comments of environmental, fishing and environmental justice organizations on EPA’s Water Quality Standards for the Establishment of Revised Numeric Criteria for Selenium for the San Francisco Bay and Delta. October 28, 2016. Available at <https://www.regulations.gov/document?D=EPA-HQ-OW-20150392-0246>

H. Drainage Treatment is not cost effective and has not been proven to be reliable and meet operational criteria.

The 2006 EIS for SLDFR and the 2009 EIR/EIS for the GBP included treatment as a significant component of the plan to manage drainage and reduce brine volumes to be discharged or disposed of. Reclamation has promoted and funded drainage treatment solutions for decades with repeated operational failures and unreliable results.⁴² Both the SLDFR EIS and the GBP EIS/R included a biotreatment plant to reduce the selenium load being discharged, and to ultimately achieve zero discharge of agricultural drainage to the San Luis Drain and San Joaquin River.⁴³

In 2012, construction began of the SLDFR Demonstration Treatment Plant (Demo-Plant) in Panoche Drainage District. The purpose of the Demo-Plant was to demonstrate and operate water treatment processes to collect cost and performance data for the design of a full-scale water treatment facility to be constructed in Westlands. The Demo-Plant was completed in 2014 but did not operate consistently due to operational failures and faulty design. The treatment plant has yet to become operational.⁴⁴

The Department of Interior's Inspector General issued a report in November 2019 that finalized their investigation on the Demo-Plant.⁴⁵ The Inspector General found that the Demo-Plant did not provide the agricultural drainage service that is required by statute and it did not consistently meet operational performance criteria. In addition, the USBR was found to not have provided effective oversight of the cooperative agreement for operation and maintenance of the Demo-Plant. As a result, USBR spent a reported \$67.8 million for a project that does not meet its legal obligation and that had not consistently met operation performance goals. Warned of fraud, the Inspector General found that "work at the "pilot" Demo-Plant included: "invalid single audits, conflicts of interest with key personnel, a general absence of project oversight, and questionable use of a cooperative agreement as the legal instrument." The Inspector General also raised federal fraudulent funding issues, stating: "*We also question how and why the project grew from a pilot-scale \$15 million demonstration and research and development plant to a full-size \$37 million plant. Further,*

⁴² See USBR SLDFR Feasibility Report 2008, Appendices D and E. See: http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppE-Se-Biotreatment-Performance_2008.pdf
http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppD-RO-Treatment-Performance_2008.pdf

⁴³ See SLDFR FEIS Appendix B page 18:
https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2234

⁴⁴ Federal Status Report of October 1, 2019 Case 1:88-cv-00634-LJO-SKO Document 1037 Filed 10/01/19.

⁴⁵ See <https://www.doioig.gov/reports/bureau-reclamation-did-not-effectively-manage-san-luis-demonstration-treatment-plant>

we have been told that the costs to operate and maintain the plant could outweigh the benefits of the treated water produced.”⁴⁶

All action alternatives in the SLDFR FEIS included bio-treatment and reverse osmosis treatment as a large part of the schematic to manage drainage for the San Luis Unit, primarily from Westlands. Since the Demo-Plant has yet to work reliably, the viability and costs of the drainage plan put forth in the SLDFR ROD is questionable, particularly at full-scale. Without treatment, how will drainage volumes and selenium loads be managed? These issues related to the contract conversion must be addressed and analyzed in a full EIS.

I. Long Term Viability of Drainage Management Actions.

The SLDFR FEIS included a suite of management actions, including drainage reuse (to reduce the volume of drainage that would need to be treated), treatment, and disposal. Pilot studies conducted for SLDFR failed to meet specified objectives, putting doubt into effective implementation of any of these approaches at full-scale.

Reuse of polluted drainage in reuse areas does not eliminate the loading of wastes. It simply stockpiles contaminants on land. The continued recycling of agricultural drainage will ultimately turn vast areas of the Central Valley into saline and toxic wastelands. The practice of drainage reuse is not sustainable and will inevitably lead to permanent fallowing of more and more land.

J. Cessation of deliveries to these toxic soils is the most cost effective and proven strategy to manage drainage.

Our organizations have previously submitted comments to the Regional Water Board about the success of land retirement in relation to the GBP's drainage volume load reductions.⁴⁷ The USBR's 2004 Broadview Water Contract Assignment Draft Environmental Assessment cites Summer's Engineering as predicting a load reduction of 17,000 tons of salt, 1,500 pounds of selenium, and 52,000 pounds of boron to the San Joaquin River each year from the cessation of irrigation on 9,200 acres of agricultural land in Broadview Water District as per Table 4-1 below (USBR 2004). This amounts to a per acre reduction of 0.28 AF of drainage, 1.85 tons of salt, 0.16 pounds of selenium and 5.65 pounds of boron.

⁴⁶ See https://www.doioig.gov/sites/doioig.gov/files/ManagementAdvisory_ProposedModification_112717.pdf

⁴⁷ See Coalition letter to CVRWQCB on Selenium Basin Plan Amendment, April 26, 2010, p 15-16; http://www.waterboards.ca.gov/centralvalley/water_issues/grassland_bypass/grasslands_bpa_coalition_ltr and Coalition letter to Karl Longley on Land Retirement Benefits to Grasslands Bypass Project and Draft Waste Discharge Requirements: <http://calsport.org/news/wp-content/uploads/Coalition-response-letter-to-Longley-re-gbpland-retirement.pdf>

**TABLE 4-1
DRAINAGE AND WATER QUALITY EFFECTS OF PROPOSED ACTION ON THE
SAN JOAQUIN RIVER**

	Existing Conditions	Under Proposed Action Conditions	Estimated Reduction Attributable to Proposed Action
BWD Drainage to San Joaquin River (afy)	3,700	1,100	2,600
BWD Estimated Salt Production (tons/yr)	24,300	7,300	17,000
BWD Estimated Selenium Production (lbs/yr)	2,140	640	1,500
BWD Estimated Boron Production (lbs/yr)	74,000	22,000	52,000

Source: Summers Engineering, 2003

Land retirement likely accounted for most of the reductions in selenium, and the majority of reductions in drainage volume, boron, and salt claimed by the Grasslands Bypass Project in the 2009 EIR/EIS.

The USEPA, in a letter regarding the Bay Delta Conservation Plan,⁴⁸ strongly recommended the USBR's Land Retirement Program be revived to save water and prevent further selenium contamination and impacts to endangered species (page 13):

***Recommendations:** To mitigate for the project's impacts to selenium levels in the estuary as a result of the BDCP operations, consider reviving and funding the Bureau of Reclamation's Land Retirement Program¹⁷ to remove from cultivation and irrigation large areas of selenium laden lands on the West side of the San Joaquin Valley. This would save irrigation water, reduce discharges of selenium into the San Joaquin River basin, and advance attainment of selenium reduction targets¹⁸ set by EPA and the Central Valley Regional Water Quality Control Board. Evaluate the extent to which restoration of these "retired" lands to the native plant community could also contribute to the recovery of threatened and endangered plants and animals listed by FWS. Consider analyzing the cost/benefit of implementing treatment technologies vs. land retirement. Although cost/benefit analyses are not required under NEPA, such an analysis may be useful to decision makers and the public in this case."*

Further, the USBR's San Luis Drainage Feature Re-Evaluation (SLDFRE) Final EIS in 2006 found that land retirement was the most cost-effective solution to managing drainage in the San Luis Unit. Three land alternatives were evaluated in the SLDFRE EIS, 306,000 acres, 194,000 acres and 100,000 acres respectively. The Final EIS found that the only environmentally and economically preferred alternative was to retire 306,000 acres (In-Valley/Drainage Impaired Area Land Retirement).⁴⁹ It's clear from the NED findings in Table N-10 below that additional land retirement would provide increased net economic benefits.

⁴⁸ <http://calsport.org/news/wp-content/uploads/bay-delta-conservation-plan-deis.pdf>

⁴⁹ SLDFRE Final EIS, Appendix N, Table N-10, page N-17, accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2240

Table N-10
Benefit/Cost Summary
Changes Relative to the No Action Alternative (\$/year in 2050)

Subarea	In-Valley Disposal	Out-of-Valley Disposal	In-Valley/ Groundwater Quality Land Retirement	In-Valley/ Water Needs Land Retirement	In-Valley/ Drainage-Impaired Area Land Retirement
Total NED Benefit	\$37,962,000	\$38,430,000	\$31,164,000	\$20,629,000	\$9,931,000
Total NED Cost	51,225,000	51,370,000	46,767,000	30,778,000	6,288,000
Net NED Benefit	-\$13,263,000	-\$12,940,000	-\$15,603,000	-\$10,149,000	\$3,643,000

Notes:

Values represent net NED benefits relative to No Action.

Values rounded to nearest \$1,000. Totals may not add due to rounding.

Moreover, the US Fish and Wildlife Service, in their Fish and Wildlife Coordination Act Report (FWCAR) for SLDFRE, recommended that all of the northerly area within the San Luis Unit (GBP Drainage Area) be retired as well,⁵⁰ but USBR did not consider that alternative. The Service concluded on page 67 of the FWCAR, *“To avoid and minimize risks and effects to fish and wildlife resources in the San Joaquin Valley and Pacific Flyway, the Service recommends land retirement on all drainage impaired lands in the SLU. This approach would maximize the elimination of drainage at its source, and therefore avoidance of adverse fish and wildlife effects.”*

The 2019 Draft EA for Westlands interim contracts arbitrarily reduced the acreage of permanent land retirement from what was recommended in the Final EIS for SLDFR. This ‘head in the sand’ approach continues the delivery of CVP water to drainage-impaired lands in Westlands and creates an ongoing risk of toxic selenium discharges to wetland water supply channels, Mud Slough, the San Joaquin River and the Bay-Delta estuary, especially in wetter years.

K. A Drainage Plan is required by law.

Federal courts and reclamation law require a drainage plan. There is no plan. There is an unauthorized settlement agreement, as mentioned in the Draft EA, whereby Reclamation suggests implementation would occur in 2051. Westlands would be required to contain all drainage within their district. As pointed out, this promise is one of a long line of promises broken by Westlands, designed to get a contract for water without an effective drainage plan.⁵¹

The drainage management laid out in the schematics of the preferred alternatives in the SLDFR FEIS and ROD have failed during pilot studies, and treatment has not proven viable

⁵⁰ SLDFRE Final EIS, Appendix M, USFWS FWCAR accessed at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236

⁵¹ Taxpayers in 2002, paid roughly \$140 million dollars in a previous settlements to “solve” the drainage problem where four families reportedly reaped most of the financial gains and Westlands got the land and the water. Also see http://www.lloydgcarter.com/content/120329554_how-westlands-was-won-a-two-part-series-part-one

or cost effective.⁵² Moving forward with contract conversions that authorize full contract quantities in perpetuity without acknowledging drainage problems and technological and economic limitations is negligent and in violation of the law.

L. Endangered Species Consultations completed on Westlands Interim Contracts and San Luis Drainage are outdated or contain invalid assumptions.

1. Consultations on Drainage

Consultations by the USFWS on San Luis Drainage (SLDFR) and Grasslands Bypass Project (GBP) included as part of the project a cessation of discharge to the San Joaquin River by 2010 in SLDFR⁵³ and 2019 in GBP⁵⁴. In December 2019 Reclamation proposed to extend the Use Agreement for the San Luis Drain (allowing GBP discharges to the San Joaquin River) for an additional 10 years.⁵⁵

The SLDFR 2006 biological opinion (BO) and Fish and Wildlife Coordination Act Report were predicated on a drainage treatment performance objective of <10 µg/L selenium in treatment effluents, primarily as selenate. SLDFR FEIS studies of the proposed drainage management scheme reported that treatment (RO and selenium biotreatment) had not been performing to performance objectives that the Service used for the basis of the FWCA Report and biological opinion. The SLDFR pilot evaporation pond data in the SLDFR FEIS demonstrated double the bioconcentration that was predicted by the bioconcentration model (see page 18, Appendix B). The highest reported invertebrate selenium concentration from the SLDFR pilot evaporation ponds was 225.7 µg/L dry weight from a sample of aquatic nektonic invertebrates (primarily water boatmen) collected from pond 1 (see Appendix B, Attachment B-2, Table 10, SLDFR FEIS). By comparison, concentrations of selenium in water boatman collected from Kesterson Reservoir in the mid-1980's were in the range of 5.9-130 µg/L (see Moore et al., 1990 page 4-43). Most selenium concentrations for invertebrates from the SLDFR pilot evaporation ponds were well above concentrations associated with adverse biological effects to wildlife (i.e., >7 µg/L dry weight in invertebrates based on dietary effects on reproduction in chickens, quail and ducks, see Table

⁵² These important scientific reports were removed from USBR's website but can be found here: http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppE-Se-Biotreatment-Performance_2008.pdf Also see http://calsport.org/news/wp-content/uploads/USBR_SLDFR-Feasibility-Rpt_AppD-RO-Treatmt-Performance_2008.pdf

⁵³ See appendix M of SLDFR FEIS for Biological Opinion and Fish and Wildlife Coordination Act Report available at: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2236, https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2237, https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2238, https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=2239

⁵⁴ GBP BO available at https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4826

⁵⁵ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41546

6-4, Recommended Ecological Risk Guidelines Based Upon Selenium Concentrations, on page 6-27 of the FEIS/R Grassland Bypass Project, 2010–2019.⁵⁶

The critical issue with respect to environmental risk is associated with bioaccumulation potential of waterborne selenium through the food-web and into higher trophic level consumers. A two-fold increase in bioconcentration factors may have a pronounced impact on realized risks to wildlife populations because toxicity is not a linear phenomenon (i.e., the dose-response curve is sigmoidal). In the case of selenium, a trace element with a very narrow safety margin (the range between nutritionally beneficial and toxic concentrations), the dose-response curve is quite steep (see, for example, SLDFR FEIS Appendix M, USFWS Adult Avian Mortality Protocol).⁵⁷ Therefore, the ESA consultation and Coordination Act Report were based on invalid performance objectives and are invalid. Even Interior in their latest status report on the drainage litigation (@ pg 4) admits a need to re-scope [SLDFR] project needs: “*Reclamation, in collaboration with Westlands, San Luis WD, Panoche Water District, and Pacheco Water District, is collecting and analyzing data to verify that the original assumptions and conceptual plans presented in the 2008 Feasibility Study are still accurate.*”⁵⁸

2. ESA Consultations on Westlands Interim Contracts are Insufficient & Outdated.

a. Environmental Protection Measure is unverified.

The USFWS completed a Programmatic biological opinion on the Central Valley Project Improvement Act in 2000 (CVPIA BO). The CVPIA BO reviewed and provided ESA coverage for the CVPIA Programmatic EIS (PEIS). The purposes of the CVPIA include:

- Protection, restoration and enhancement of fish, wildlife, and associated habitats in the Central Valley and Trinity River basins of California;
- Addressing impacts of the CVP on fish, wildlife and associated habitat;
- Improving operational flexibility of the CVP;
- Increasing water-related benefits through expanded use of voluntary water transfers and water conservation;
- Contributing to efforts to protect the San Francisco Bay/Delta Estuary;
- To achieve a reasonable balance among competing demands for use of CVP water, including requirements of fish and wildlife, agricultural, municipal and industrial and power contractors.

The CVPIA PEIS and BO provided a framework whereby future CVP-related actions, including interim and long-term CVP water contract renewals, could be reviewed for site-specific impacts under NEPA and ESA. Included in the BO was a commitment to develop and implement a Comprehensive Mapping Program (aka CVPHMP) (as described on pages 2-62 and 2-63 of the Final CVPIA BO): “*Reclamation and the*

⁵⁶See https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=4412

⁵⁷ *Ibid.*

⁵⁸ Oct 1, 2019 Fed Defendants Status Report, Case 1:88-cv-00634-LJO-SKO

Service will use the best scientific and commercial information available, in conjunction with data from aerial photograph analysis to monitor trends in the environmental baseline for listed species. It is the ultimate goal of Interior to assure that listed species are being recovered. For any species affected by the CVP that are continuing to decline, the Service and Reclamation will immediately assess critical needs for the species and determine whether it is appropriate to expand the Conservation Program or implement other conservation measures. Any native habitat converted to agricultural or municipal/industrial use within the water service area without prior biological surveys, as required by Reclamation prior to the delivery of Reclamation water, will be evaluated to determine what mitigation measures will be required.” The purpose of the CVPHMP was to identify remaining natural habitats and cropping patterns within the State-permitted CVP Place of Use (POU) and identify any changes within those habitats that have occurred from 1993 to 1999, and then every 5 years thereafter. Identification of natural habitats remaining in CVP contract service areas and monitoring of those habitats every 5 years is essential to confirming that listed species baselines are stable.

As part of the ESA consultation on the 2014 CVP Interim Contract Renewals for Westlands, the USFWS requested confirmation that districts that receive this CVP water will not use the water to convert native lands to other uses. This information was identified as necessary for validating Reclamation’s conclusion that CVP interim contract deliveries do not result in land use changes that would adversely affect Federally-listed species or critical habitat.⁵⁹ Yet, the current Draft EA for Westlands interim contract renewals includes no mention of the CVPHMP commitments, or any data from it. Without actual data to verify the environmental commitment @ pg 11, “No CVP water would be applied to native lands or land untilled for three consecutive years or more” is of little value. Further, there is no mechanism identified in the Draft EA to address land conversions that may have occurred without additional “environmental analysis and approval.” The consequences of non-compliance need to be defined and implementable.

b. Status of Consolidated Place of Use Mitigation should be disclosed.

In November 1999, the SWRCB issued a final EIR that updated Reclamation’s 16 CVP water rights permits. Included in this EIR were changes to the state authorized place of use for these permits (CPOU). The EIR authorized the addition of “encroachment lands” to the CPOU (defined as lands within the boundaries of CVP water contractor service areas outside of the POU that received CVP water historically). The EIR did not authorize the addition of “expansion lands” to the CPOU (defined as lands within the boundaries of CVP water contractor service areas but outside of the POU that have never received CVP water) until adequate site-specific environmental documentation is completed (CPOU EIR @ pg ES-2).⁶⁰

⁵⁹ Available at this link: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=15981

⁶⁰ Available at this link: https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/eirs/eir1999_ccpou/docs/ccpoufeir.pdf

Westlands was identified in the EIR to have 30,718 acres of encroachment lands and 9,664 acres of expansion lands.

The CPOU EIR concluded that historic delivery of CVP water to encroachment lands has resulted in significant adverse effects to vegetation and wildlife. The EIR and D-1641 identified that of the 85,620 acres of encroachment lands that currently receive CVP water, the development and land use conversion of 45,390 acres was facilitated by delivery of CVP water supplies for agricultural purposes. As part of the SWRCB Decision 1641 Reclamation was required to provide compensation for lost habitat due to encroachment. Specifically, Reclamation was required to delineate existing habitats of the affected special status species and in consultation with DFG and USFWS to develop a mitigation plan satisfactory to the SWRCB. This decision requires that the mitigation plan be developed and completed within ten years of the date of D-1641 (D-1641 was signed in March 2000, @ pg 165). This decision also requires a mitigation monitoring and reporting program to ensure continued protection and enhancement of special status species.”⁶¹ The SWRCB identified the following habitat types that would need to be mitigated for from Westlands encroachment: 22,343 acres of alkali scrub/ 1,611 acres of Valley-foothill riparian/fresh emergent wetland, and 6,653 acres of annual grassland (CPOU EIR @ pg 2-70, Table 2-32). No information was provided in the Draft EA on the status of mitigation for CPOU.

M. An Alternative including Secretarial cessation of water deliveries to Westlands' must be considered in a full EIS.

There is nothing presented in the record that precludes the Secretary of Interior from considering an alternative that decommissions this specific contract. There is no legal obligation to operate a project once it was built if experience reveals to the Secretary that the project is not “practicable” under reclamation law without drainage (which of course both Reclamation and Congress knew to be the case beforehand) and is harmful to public and environmental health. At the time the San Luis Unit was authorized in 1960, vast portions of the unit were understood by Congress, the Bureau of Reclamation and the State of California not to be “practicable” for irrigation without drainage. See Reclamation Act of 1902 § 4 (43 USC 419) “*Upon the determination by the Secretary of the Interior that any irrigation project is practicable, he may cause to be let contracts for the construction of the same...*” The statutory premise and requirement of practicable irrigability remains under Reclamation law.

Drainage was known to be an issue and it was required to be provided under the San Luis Act of 1960 (PL 86-488). The project proceeded without it. So the catastrophe of Westlands' irrigation causing pollution and degradation of water supplies was both predictable and predicted. The contract conversion does not require Reclamation to merely roll over the existing interim contract without considering the irrigability requirements under Reclamation law and by definition the cessation of exported water to these non-irrigable lands.

⁶¹ D-1641 @ pg 140, available at this link:

https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf

Further, any consideration of a "no-action" alternative should not set up the false choice of drainage vs. no drainage. This is a false choice. The alternative which needs to be considered is the cessation of water exports under the contract to these lands that are causing the pollution. Such a false choice--drainage vs. no drainage-- is a deliberate obfuscation by the Secretary to avoid considering the alternative of discontinuing water deliveries to these unsuitable lands. The "No-Action" in the SLFRE alternative created by Reclamation set up a false choice between no drainage and drainage. The no action alternative is feasible and legal under the 9th Circuit court decision if the Secretary changed operations and discontinued deliveries to drainage impaired lands.

Finally, under Reclamation law, feasibility is required of project operations. Typically, project feasibility is determined by an economic analysis, the goal of which is a 1:1 benefit-cost ratio. If one includes the obligation for drainage management, for which no solution except land retirement has been effective, it seems that irrigation of Westlands is not *economically* feasible from a national perspective, even if it is *financially* beneficial to Westlands' irrigators. The ongoing environmental damage caused by its operation is a cost that needs to be fully integrated into any justification for continued deliveries.

There is a need for a full and fair review in the NEPA analysis that would determine what lands within Westlands' service area are not practicably irrigable and then that portion of the project should be *decommissioned*. Review should be made of the authority of the Secretary to make the non-practicability determination and thus, stop water deliveries. How can there be an obligation to provide—and liability for not providing—drainage when the government has decided, using another cornerstone of reclamation law, that irrigation of Westlands is not a “beneficial” use of water. *See* section 8 of the 1902 Act “beneficial use shall be the basis, measure, and limit of the right.”

Under the current San Luis Unit situation, solving the vexing drainage pollution problem turns on whether the CVP is delivering water to Westlands. If yes, then drainage is required of the Reclamation to be repaid by the contractors. If not, that is, if the Secretary declares it is not beneficial or practicable to apply water to San Luis Unit lands, then the drainage obligation as a federal responsibility disappears. This environmental pollution and the potential costs for clean up and treatment must be weighed against the alternative of not delivering the water for irrigation.

In addition, the cumulative impacts of other water export projects, such as a tunnel project providing even greater exports, needs to be evaluated against (1) the full cost, including drainage and environmental remediation costs of irrigating the San Luis Unit; and (2) who is responsible for those costs.

The benefit/cost ratio of the SLU is no longer favorable, if ever it could have been. The SLU irrigation development has fundamental flaws in its soils contaminants, and drainage that are not economical to remediate. The SLU is not feasible. The SLU is not a practicable irrigation project.

Section 4 of the 1902 act states: “Upon the determination by the Secretary of the Interior that any irrigation project is *practicable*, he may cause to be let contracts for the construction of the same . . .” (emphasis added). We know that subsequent to 1902, by the time of the SLU authorization in 1960, reclamation law had changed to require congressional authorization of projects. But the basic criterion of practicability remained intact.

When one looks PL 86-488, one can see how problematic the project development was, with drainage being the biggest problem. Tapping distant water supplies (e.g. Trinity River) along with expensive pumping plants and the Delta-Mendota Canal/California Aqueduct Intertie added to the problem. Too many subsidies are needed to address problems that it turns out cannot be solved. Moreover, there has been an enormous environmental price to pay because the SLU has not worked and was not feasible in the first instance to construct. Thus, one is drawn to the unavoidable conclusion that using CVP water on these SLU lands under these conditions is not practicable under federal law or “beneficial” under state law.

Finally, any conversion from the existing 9(e) contract to a 9(d) contract must include a contract to resolve the vexing contamination problem caused by excessive water exports from the Delta. Clearly, because such conversion contracts are proposed, these new contracts must document the practicability of the irrigation of Westlands' lands. We conclude, based on Reclamation's studies: (1) Over 200,000 acres under the proposed Westlands contract is no longer practicable of irrigation due to drainage problems; and (2) it is not a beneficial use to apply water to these lands that are not practicable of irrigation.

We conclude that the State Water Board must re-open the water right and Reclamation must cease deliveries of water to these toxic lands. It remains unclear whether the State Board has conformed its *place of use* designation for CVP water exports to facts on the ground. A contract requirement should include: (1) A prohibition of any water deliveries to drainage impaired lands, (2) the restoration fund payment obligation must remain intact, and (3) any proprietary interest in the water as a result of a change in the contract whereby Westlands can use or sell the water as the market warrants, must be subject to CVPIA limitations for other project purposes such as fishery restoration, preservation and propagation. Similarly fish and wildlife refuge needs also must be considered prior to such change in use or sale.

N. NEPA Analysis of Westlands' contract conversion should include alternatives that reduce contract quantities.

The Westlands contract conversion would renew full contract quantities in perpetuity. These contract quantities are justified by outdated, inaccurate data, and bias that renders the Water Needs Assessment (WNA) insufficient in addressing shortcomings identified by the 9th Circuit Court⁶². Further, the 9th Circuit Court ruled in their July 25, 2016 Amended Memorandum that “*Reclamation’s decision not to give full and meaningful consideration to the alternative of a reduction in maximum interim contract water quantities was an abuse of*

⁶² See Appendix B and C of the Draft EA, Central Valley Project (CVP) Water Needs Assessments (WNA) Purpose and Methodology, and Westlands WD WNA.

discretion, and the agency did not adequately explain why it eliminated this alternative from detailed study... On remand, the district court shall direct Reclamation consider such an alternative in any future EA for an interim contract renewal.”⁶³

The USEPA in their comments on the Draft EIS and Supplemental Information for Renewal of Long Term Contracts for San Luis Unit (SLU) Contractors (CEQ# 050411 and 060056, dated April 17, 2006, @ pg 2 of Attachment A) recommended that the SLU FEIS should consider mitigation measures, such as “...*contract provisions, or changes in amounts and location of water applied, which will reduce drainage production and selenium mobilization.*” EPA further cited 40 CFR 1502.14 (b) and CEQ’s NEPA 40 Most Asked Questions, which emphasize the need to evaluate all reasonable alternatives, even if they conflict with local or federal law (2b).⁶⁴

Curtailing deliveries of CVP water to drainage impaired lands could have significant benefits to the environment, including: reducing diversions from the Trinity River and pumping in the Delta, reduction of drainage production and selenium contamination of the environment, freeing up water to meet CVPIA fish and wildlife obligations including water for fisheries restoration and improvement as established in CVPIA Sections 3406 b(2) and b(3) and for refuge water management needs as established in 3406(d).⁶⁵

O. Cumulative Effects Analysis is Required in an EIS

The Westlands contract conversion should include the effects of other past, present, and reasonably foreseeable future actions that could result in cumulative impacts on the biological resources of the study area. Reclamation concluded, for Westlands’ interim contract renewals that there would only be minimal cumulative impacts to biological resources over a 2-year period. However, these conclusions of finding minimal cumulative impacts to biological resources are dependent on the timely implementation of future agricultural drainage service, habitat restoration, land acquisition and retirement, water conservation, and CVPIA programs including implementation of Fish and Wildlife Habitat Restoration Programs under Sections 3406 b(2), b(3) and 3406 d(1) and d(2).

The Draft EA for Westlands interim contracts references the Programmatic EIS for CVPIA which identified these restoration programs necessary to remediate adverse impacts of these contract renewals⁶⁶. Yet, some important ecosystem restoration provisions of CVPIA, such as acquisition of full Level 4 refuge water supplies, have lacked funding for adequate implementation. Purchase of environmental water under the CVPIA b(3) program has also fallen substantially short of targeted needs due to inadequate funding mechanisms. This unmet need

⁶³ See: <https://cdn.ca9.uscourts.gov/datastore/memoranda/2016/07/25/14-15514.pdf>

⁶⁴ <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁶⁵ <https://www.usbr.gov/mp/cvpia/docs/public-law-102-575.pdf>

⁶⁶ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41303

may increase in the future as market prices for water continue to rise with demand. Further, past and present efforts to meet water quality standards in the San Joaquin Basin have been significantly hampered by the lack of adequate fresh water supplies. The USEPA recommended, in their comments on the DEIS and Supplemental Information for San Luis Unit Long Term Contracts (@ pg 6 of Attachment A) that, “The cumulative impacts analysis in the FEIS should be based on the past and present trends of supplies available for redirection to meet restoration and refuge needs in the area, including Trinity Restoration needs. Where information is available, the analysis should reflect the actual implementation status of CVPIA restoration actions.”⁶⁷

In October 2019, Reclamation released a draft EA on new water assignments from Mercy Springs and Fresno Slough WDs (both Delta-Mendota Unit CVP contractors) to Angiola Water District.⁶⁸ Angiola WD is a non-CVP contractor in the Tulare Basin that is outside of the CVP Place of Use as established by the SWRCB⁶⁹. Allocating federal water outside of the State permitted Place of Use, and without consideration of CVPIA fish and wildlife restoration programs is a violation of the law.

III. NEPA and the ESA apply to Reclamation’s decision to enter into and negotiate the terms of permanent contracts.

Reclamation contended in a status report filed in district court in a case challenging some of Westlands interim contracts that NEPA does not apply to Westlands’ contracts that are converted from existing water service contracts to repayment contracts pursuant to section 4011 of the Water Infrastructure Improvements for the Nation Act (“WIIN Act”) because the conversion is a non-discretionary act. *See* 1:16-cv-00307-LJO-SKO (E.D. Cal), ECF No. 100.⁷⁰ However, pursuant to NEPA, ESA, and Reclamation laws there is no basis for that conclusion.

Reclamation’s decision to enter into the permanent contracts is not merely ministerial in nature and thus the non-discretionary exceptions to NEPA and the ESA do not apply. Therefore, Reclamation is required to complete an EIS and engage in Section 7 consultation prior to converting the water service contracts to repayment contracts. Under the plain language of the WIIN Act, the Secretary of the Interior has discretion over the terms of any permanent contract. Section 4011(a)(1) of the WIIN Act states:

⁶⁷ <https://archive.epa.gov/region9/nepa/web/pdf/san-luis-deis-supplemental.pdf>

⁶⁸ See: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=33881

⁶⁹ https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/eirs/eir1999_ccpou/docs/ccpoufeir.pdf

⁷⁰ “Section 4011 of the WIIN Act directs the Secretary of the Interior, upon the request of a contractor with a long-term water service contract, to convert that contract to a repayment contract under specified terms. Westlands Water District has requested conversion of the water-service contracts corresponding to the Interim Contracts to repayment contracts under the WIIN Act. Reclamation thus construes the conversion of the contracts under the direction of the WIIN Act as a non-discretionary action that is not subject to the requirements of NEPA.” United States Status Report, Mar. 12, 2019, ECF No. 100, at ¶4.

Upon request of the contractor, the Secretary of the Interior *shall* convert any water service contract in effect on the date of enactment of this subtitle and between the United States and a water users' association to allow for prepayment of the repayment contract pursuant to paragraph (2) *under mutually agreeable terms and conditions.*

WIIN Act (Pub. L. 114-322, 130 Stat. 1628), Section 4011(a)(1)(emphasis added).

Subsection 2 requiring “mutually agreeable terms and conditions” makes clear that the terms and conditions of the contract are not pre-determined and must instead be agreed to by the Secretary of Interior (Secretary) and a water users' association or contractor. The Secretary's discretion in negotiating such “mutually agreeable terms” means that the Secretary's actions in converting the contracts are not merely ministerial and that environmental considerations could alter the terms and conditions to which the Secretary is willing to agree. Accordingly, NEPA applies, and Reclamation must analyze the potential environmental impacts of the repayment contract before the Secretary can legally enter into these contracts. Further, Reclamation has discretion to negotiate the terms of the contracts, and it could do so for the benefit of a protected species. Thus, Section 7 of the ESA applies to Reclamation's decision on the permanent contracts, and it therefore must consult on effects of its action on listed species.

IV. The WIIN Act does not abrogate the requirements of other federal laws including NEPA, the ESA, and the CVPIA.

The WIIN Act did not repeal any parts of NEPA, the ESA, the CVPIA, or any other federal law and thus, Reclamation must still follow its obligations pursuant to these laws in its actions taken under the authority of the WIIN Act. There is nothing in the WIIN Act that creates “a clear and unavoidable conflict” and thus, NEPA, the ESA, and the CVPIA apply to Reclamation's decision. The fact that the WIIN Act says that the Secretary “shall” convert water service contracts to repayment contracts does not create a conflict with completing an EIS or ESA section 7 consultation first.

Furthermore, the WIIN act *expressly states* that the other requirements of federal reclamation law apply. Section 4011(d) of the WIIN Act provides that, “Implementation of the provisions of this subtitle shall not alter ... except as expressly provided in this section, any obligations under the reclamation law.” As acknowledged at the start of the draft contract, the CVPIA is part of “reclamation law,” and thus, according to the express language of the WIIN Act, the requirements of the CVPIA apply to the conversion of contracts under Section 4011 of the WIIN Act.

The CVPIA makes clear that Reclamation must comply with the ESA and suggests that Reclamation must complete an EIS. Regarding the ESA, Section 3406(b) of the CVPIA provides: “The Secretary, immediately upon the enactment of this title, shall operate the Central Valley Project to meet all obligations under State and Federal law, including but not limited to the Federal Endangered Species Act, 16 U.S.C. 1531, et seq....” 106 Stat. at 4714. Thus, compliance with the ESA is an express requirement of the CVPIA.

Section 3404(c) of the CVPIA requires that an EIS be completed before Reclamation can renew any long-term repayment or water service contract for a period of 25 years.⁷¹ Reclamation defines "long term contract" as a "*contract with a term of more than 10 years.*"⁷² By these definitions anything contract term longer than 10 years is by Reclamation's own definition 'a long-term contract.' A conversion to a permanent contract fits the definition of a long-term contract. Thus, Reclamation must prepare an EIS before entering into permanent repayment contracts, which will last even longer than either 25-year renewal contracts or the long-term contracts defined by Reclamation. Congress determined that long-term contracts would have a significant effect on the environment such that an EIS is required. Permanent contracts will have even a more significant effect on the environment and thus an EIS clearly is required for permanent contracts. We could also argue that it would frustrate the intent of Congress if Reclamation could get around the requirement of an EIS in CVPIA section 3404(c) by simply converting contracts under the WIIN Act rather than renewing contracts under the CVPIA. Congress did not expressly repeal these provisions of law that govern CVP water supply contracts.

V. Conclusions

Reclamation has engaged in a process to convert Westlands' two-year interim water service contract that functionally ignores much of Reclamation contract law and violates NEPA, ESA, the Administrative Procedures Act, Central Valley Project Improvement Act, the Reclamation Reform Act, and other federal statutes. The ultimate effects of the process Reclamation is following are:

- A raid on the US Treasury and taxpayers because of permanently eliminating beneficiary payment obligations;
- A clever water grab whereby contract conversion impacts are segmented by USBR, in collusion with Westlands, and have effectively excluded or contracted out impacts to areas of origin and communities who depend on these water resources for their livelihood and economic well-being;
- A process that effectively repeals, without Congressional authorization, the fundamental policy goals of providing these subsidized water benefits to the greatest number of people for the greatest good, while ensuring the environment is protected and the treasury is repaid at least the costs of construction and mitigation.⁷³

Under this contract conversion process the public has been given a puzzle of dizzying complexity without the puzzle picture. Relying on language adopted without hearings or testimony, USBR and Westlands, based on mutual agreement, claim that Congress intended the

⁷¹ Reclamation has not completed this analysis which is why it has been entering into interim contracts with water users, including Westlands.

⁷² <https://www.usbr.gov/recman/pec/pec-p05.pdf>

⁷³ See *Ivanhoe Irrig. Dist. v. McCracken*, 357 U.S. 275 (1958).

WIIN Act as the functional repeal of these federal laws. There is simply no justification for this contention and no authority for Reclamation to issue the proposed permanent water contract under the present process. Westlands' proposed draft contract conversion must be withdrawn and restarted.

The water contract conversion process must start with outreach to the more than 17-20 parties of interest that have thus far been excluded or contracted out under the proposal. Further, all of this now invisible draft contract must be publicly disclosed and the critical exhibits must be provided to the public and those areas of origin that are most impacted by the water that is being taken and exported to Westlands. The impacts of privatizing this amount of subsidized water for a few corporate irrigators must be analyzed and the impacts on other users disclosed, including for example impacts to Los Angeles ratepayers. Such ratepayers will ultimately pay to meet mutual state and federal project environmental protections and will undoubtedly be charged a markup of millions of dollars during times of shortage to obtain some of these federally subsidized supplies that will be dedicated to Westlands under such a permanent contract.

Additionally, any NEPA process that considers allocating excessive contract water amounts to Westlands in perpetuity must also include the management of toxic drainage from irrigating these soils within Westlands. Only after proper NEPA and ESA analyses are completed, should Reclamation issue a revised converted contract that modifies the terms to comply with the requirements of federal and state law. Using a 'stale water needs assessment', failing to conduct the required irrigability and arable land investigations, while delivering water outside of the Congressionally authorized area under the San Luis Act of 1960, inflates Westlands' water allocation. The proposed Westlands conversion contract permanently inflates their water allocation, and thus the export of water from the Delta and its tributary rivers. These excessive exports have significant impacts upon the environment and communities from where this water originates. We recommend strategic land retirement and cessation of water deliveries to the 300,000 acres identified by federal scientists. Water deliveries to irrigate these lands causes drainage problems and mobilizes water contaminants on the west side of the southern San Joaquin Valley. Only a full EIS that comprehensively assesses the far-ranging and complex direct and secondary effects of irrigating these toxic soils can illuminate the total environmental impact of the proposed permanent water allocation to this geographic area. Without a comprehensive, EIS Reclamation decision makers and the public are flying blind. Reclamation law does not require delivery of water claimed nor the operation of the CVP to deliver water to lands that are not practicably irrigated and where such federal action causes pollution. Alternatives that exclude water deliveries to these soils and incorporate contract provisions that require adherence to CVPIA mitigation measures are needed and required.

Thank you for considering our comments. Please make sure the undersigned are included in any future Reclamation actions with regard to CVP water exports from the San Francisco Bay-Delta Estuary and/or the CVP San Luis Unit contractors and/or conversion of CVP contracts pursuant to Section 4011 of the WIIN Act. Despite repeated comments the undersigned did not receive notice of the proposed permanent Westlands' conversion contract public negotiations.

Thank you for the opportunity to comment.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://PlanningandConservationLeague.org)
jminton@pcl.org



Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://PacificCoastFederationofFishermen'sAsso.org)
noah@ifrfish.org



John McManus
President
Golden State Salmon Association
john@goldengatesalmon.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



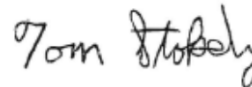
Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)
connere@gmail.com



Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com




Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Stephen Green
President
Save the American River Association



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council

gsg444@sbcglobal.net

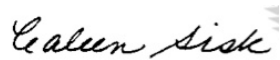


Lowell Ashbaugh
Conservation Chair
The Fly Fishers of Davis
ashbaugh.lowell@gmail.com

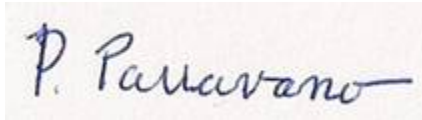
lcarter0i@comcast.net



Larry Collins
Senior Advocate
Crab Boat Owners Association
papaduck8@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers International
mrockwell1945@gmail.com



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org

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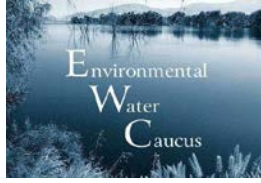
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CA Save Our Streams Council



December 20, 2019

Brenda Burman
Commissioner
U.S. Bureau of Reclamation
1849 C Street NW
Washington DC 20240-0001

Ernest Conant,
Regional Director
California-Great Basin Reg. Fed Bldg.
2800 Cottage Way
Sacramento CA 95825-1898

Ryan Everest,
U.S. Bureau of Reclamation,
2800 Cottage Way, MP-440,
Sacramento, CA 95825-1898

via email: Email ECONANT@usbr.gov Email bburman@usbr.gov & reverest@usbr.gov

Re: Comments on draft Agreement between US Bureau of Reclamation and San Luis & Delta Mendota Water Authority Operations and Maintenance Activities

The undersigned organizations submit the following comments on the draft Agreement between the US Bureau of Reclamation (Reclamation) and the San Luis & Delta Mendota Water Authority (WA) to Transfer the Operation, Maintenance and Replacement and Certain Financial

and Administrative Activities Related to the San Luis and Delta-Mendota Canals, C.W. Bill Jones Pumping Plant, Delta-Mendota Canal/California Aqueduct Intertie Pumping Plant, O’Neill Pumping/Generating Plant, San Luis Drain and Associated Works (Agreement). The Agreement was made available for 15-day public comment on December 5, 2019. No NEPA was provided at this link, just the draft contract dated Dec 4, 2019.¹

No notice of Categorical Exclusion was provided on the implementation of the Agreement. The 2019 Categorical Exclusion Checklists (CECs) for the South-Central California Area Office (SCCAO) was posted on November 27, 2019.² Included in this listing of CECs completed by the SCCAO in 2019 was a CEC for the implementation of the Agreement.³ As denoted in the summary of the SCCAO’s 2019 CECs, “A CEC excludes certain categories of Federal actions from further NEPA documentation because these categories of actions have been determined in a public process to have no significant affect on the environment nor do they involve unresolved conflicts concerning alternative uses of available resources.” Reclamation has failed to provide the CEC for this Agreement for public review or comment, and we contend there was no “public process” on the CEC for the Agreement. The undersigned have participated in contract renewals and operations of the CVP for over a decade and arbitrarily notice of such a public process was not provided.

The Agreement is presumably a renewal of the existing O&M Agreement between Reclamation and the WA. The Agreement references Cooperative Agreement No. 3-FC-20-10820 (Coop Agreement) dated September 30, 1992, and as modified on October 7, 1993 (see Agreement Recital d @ pdf pg 5). Further the Agreement references Contract No. 8-07-20-X0354 (Transfer Agreement) between the Parties for a term of twenty-five (25) years, effective March 1, 1998, as amended 37 February 18, 2003 and ending in 2023 (see Agreement Recital e @ pdf pg 5). No reasoning is provided to justify early renewal of the proposed Agreement or the truncated 15-day public comment period with no notification of National Environmental Policy Act (NEPA) for implementation of this action. Further, neither the Coop Agreement nor the Transfer Agreement are provided with the review of the proposed Agreement, making it impossible to compare the terms of the existing Agreements with the proposed Agreement or assess the impacts of any changes in the proposed Agreement. The proposed Agreement includes the San Luis Drain and Kesterson Reservoir (see Agreement @ pdf pg 41-42). It is unclear if the current version of the Agreement included those Reclamation-owned facilities. The indemnification articles, Section 7(c) and portions of Section 8 all were in flux at the last noticed public negotiation session. The final version of the proposed contract has not been made available in time to meet this truncated public review comment period. Once again, this makes a mockery of required public participation, notification and review. Not making the final documents available, effectively thwarts public review and comment and violates federal regulation and law.

¹ <https://www.usbr.gov/newsroom/newsrelease/detail.cfm?RecordID=68783>

² https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=36741

³ https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=41362

The Agreement references 7 exhibits (A-G, Agreement @ pdf pg 2), yet none of these exhibits are included with the Agreement for public review. Further, the Agreement references a Use Agreement for the San Luis Drain (Terms of Agreement 28 (b) @ pdf pg 41), but no Use Agreement for the San Luis Drain is included with the Agreement. Failure to provide these essential documents for such a truncated public review period prevents the public the opportunity to comment and does not comply with the disclosure and transparency required under NEPA. It is impossible to fully assess the impacts of the implementation of this Agreement without the disclosure of these Exhibits:

Exhibit A: List of Project Works

Exhibit B: Settlement Contractors

Exhibit C: List of Obligations to Convey and Distribute Water In and From the Project Works

Exhibit D: Baseline OM&R Activities for the San Luis Drain

Exhibit E: Performance Work Statement – Kesterson Reservoir

Exhibit F: Sustainable Operation and Maintenance

Exhibit G: Inspection Reports

The CEC for the Agreement references several biological opinions pertinent to the Agreement (CEC @ pg 1): the U.S. Fish and Wildlife Service’s 2005 Biological Opinion (2005 O&M BiOp) for Reclamation’s SCCAO’s Operations and Maintenance Program, and three Biological Opinions which cover the construction (U.S. Fish and Wildlife Service) and operation (U.S. Fish and Wildlife Service and National Marine Fisheries Service) of the Delta-Mendota Canal /California Aqueduct Intertie of which a Record of Decision was signed by Reclamation on December 28, 2009. None of these biological opinions are included with the draft Agreement for public review making it impossible to fully assess the impacts of the implementation of this Agreement. Further, the Agreement references integrated pest management (IPM) (Terms of Agreement 32 (d) @ pdf pg 43) and references a Department of Interior Manual, Part 517 Integrated Pest Management Policy and Part 609 Weed Control Program, the Plant Protection Act of June 20, 2000 (Pub. L. 106-224), and Executive Order 13112 of February 3, 1999. No reference to an updated IPM plan considering effects to federally listed species requirements from the 2005 O&M BiOp is given in the Agreement. The Agreement should be updated to reflect non-discretionary requirements of relevant biological opinions and those opinions should be added as Exhibits to the Agreement.

Finally, the Agreement includes an automatic renewal of the Agreement for successive periods not to exceed 35 years (Term of Agreement 2 (a) @ pdf pg 10). Subject to modification acceptable to the Contracting Officer of Reclamation and the WA, *“the Authority shall have the option to renew this Agreement for successive periods not to exceed thirty-five (35) years each by providing written notice of such to the Contracting Officer not more than one (1) year, but not less than six (6) months, prior to the end of the then-current term, unless by mutual agreement to renew sooner.”* We see no justification for this automatic right of renewal without sufficient public and environmental review.

We conclude that the proposed Agreement should not be finalized until an additional comment period is provided of at least 60 days (consistent with review periods allotted for Reclamation contract renewals specified here: https://www.usbr.gov/mp/cvpia/3404c/lt_contracts/index.html). Further the current Cooperative Agreement and Transfer Agreement, and the supporting Exhibits and biological opinions should be included with the Agreement for public review. Given that the existing Agreements do not expire until 2023, there should be ample time to allow for such a public disclosure and review.

Thank you for considering our comments. Please make sure the undersigned are notified of any future actions related to this Agreement.



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](#)
jminton@pcl.org




Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](#)
noah@ifrfish.org



John McManus
President
Golden State Salmon Association
john@goldengatesalmon.org



Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



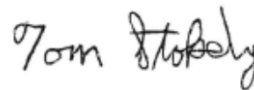
Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger7@gmail.com



Lowell Ashbaugh
Conservation Chair
The Fly Fishers of Davis
ashbaugh.lowell@gmail.com



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](#)
connere@gmail.com



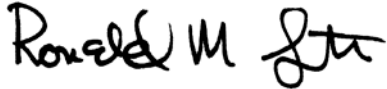
Tom Stokely
Director
Save California Salmon
tgstoked@gmail.com



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net



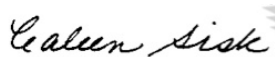
Ron Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org




Dr. C. Mark Rockwell, D.C.
President & Conservation VP,
Northern California Council, Fly Fishers International
mrockwell1945@gmail.com



Caleen Sisk
Chief and Spiritual Leader of the
[Winnemem Wintu Tribe](http://WinnememWintuTribe.com)
caleenwintu@gmail.com



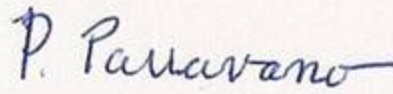
Barbara Vlamis,
Executive Director
AquAlliance
barbarav@aqualliance.net



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



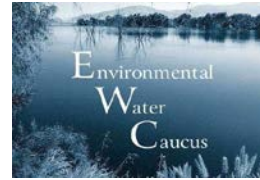
Larry Collins
Senior Policy Advisor
Crab Boat Owners Association
papaduck8@gmail.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net



October 29, 2019

Ernest A. Conant
Mid-Pacific Regional Director
2800 Cottage Way
Sacramento, CA 95825

Via Email and Regular Mail

Re: Westlands WD Conversion Contract for 1.15 MAF Exhibits under the WIIN Act § 4011.

Dear Mr. Conant,

On October 24, 2019, the Bureau of Reclamation (BuRec) publicly noticed a permanent contract between BuRec, and the Westlands Water District (Westlands).

A 60 day public comment period was initiated and days are presently counting down.

There is are two significant problems.

First, according to published BuRec rules, water contracts are required to be negotiated pursuant to an open, public process in accordance with Reclamation law and regulation. The pending water contract between BuRec and Westlands was required to be negotiated pursuant to such a process. Westlands could not provide any documentation of public notice for the negotiations. Please provide all documents related to the public negotiation process, including, but not limited to:

- 1) Copies of the Federal Register notice(s) for each meeting.
- 2) Copies of all press announcement(s) for each meeting.
- 3) Copies of all draft contracts and complete set of documents related thereto.
- 4) Copies of all correspondence (regardless of the method – letter, email, report, facebook, instant message, etc.) between WWD and the US Department of the Interior, including but not limited to (a) the Office of the Secretary and Deputy Secretary; (b) the office of the Solicitor; and/or (c) the

Bureau of Reclamation in Fresno, Sacramento, Denver, Washington, DC and other offices as appropriate.

- 5) Copies of all legal, financial, hydrological and programmatic analyses provided by either party or commented upon by same.
- 6) A copy of the legal sufficiency determination – a legal statement by DOI/SOL/BuRec that the proposed contract is consistent with the San Luis Act of June, 1960.

Second, according to the BurRec notice, a comment period was initiated.

A complete set of contract documents, as approved and supporting materials are not available. We contacted Westlands to provide a complete set of contracting documents including the listed exhibits, A-D. According to Westlands, they assert that they do not have a complete set of contract documents. And specifically they do not have the referenced exhibits A-D. BuRec has not posted or otherwise made available the same documents. No water interest can prepare or submit meaningful comments without a full and complete set of documents.

In light of these circumstances, we request the following:

- (1) Public notice of the 60 day comment period be withdrawn.
- (2) The Comment period, initiated by the notice, be halted.
- (3) BuRec and WWD now release:
 - A. All supporting documents related to the water services contract
 - B. All justification documents, including legal analyses
 - C. All correspondence between WWD and/or their agents or representatives
- (4) We attempted to obtain these documents, but were referred to a lengthy Freedom of Information Process which would effectively preclude public comment and participation.
- (5) If Reclamation included any provisions in this proposed contract that are atypical, unusual or in conflict with established Reclamation policy, please identify such provisions and provide details explanations and all legal analyses.
- (6) If the public process for participation and observation of the contract negotiations was waived, please provide a justification for nullifying the public contract requirements.

We look forward to your prompt response. Under the current public clock comments are due December 24, 2019. These documents are essential to understanding how and if BuRec will enforce the Congressional directives to avoid land speculation and prevent water monopoly.

If you have any questions please contact either Kathryn Phillips Director of Sierra Club California at (916) 557-1100 or Jonas Minton at (916) 626-9148



Jonas Minton
Senior Water Policy Advisor
[Planning and Conservation League](http://www.planningandconservationleague.org)
jminton@pcl.org



Noah Oppenheim
Executive Director
[Pacific Coast Federation of Fishermen's Asso.](http://www.pacificcoastfishermen.org)
noah@ifrfish.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



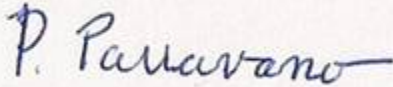
Barbara Barrigan-Parrilla
Director
Restore the Delta
Barbara@restorethedelta.org



Conner Everts
Executive Director
Environmental Water Caucus
Southern California Watershed Alliance
[Environmental Water Caucus](http://EnvironmentalWaterCaucus.org)



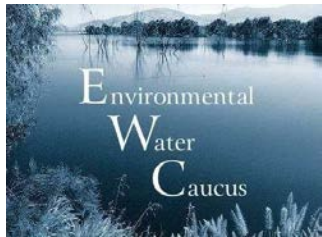
Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Pietro Parravano
President
Institute for Fisheries Resources
pietro15@comcast.net



NORTH
COAST
RIVERS
ALLIANCE



South Delta Water Agency

CA Save Our Streams Council



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180



June 4, 2014

Brooke Miller-Levy
Project Manager
Bureau of Reclamation
2800 Cottage Way, MP-730
Sacramento, CA 95825.

RE: Institute for Fisheries Resources (IFR COALITION) Comments on Proposed CVP Cost Allocation Methodology: A recipe for continuing deficits and failure to repay taxpayers.

Dear Ms. Miller-Levy:

We, the undersigned organizations, are pleased to present our comments on the U.S. Department of the Interior, Bureau of Reclamation's "Economics Guidebook: Chapter 3 "Cost Allocation Methodology" ("CAM") and the "draft Findings and Recommendations Table" ("Table") as prepared by the Institute for Fisheries Resources ("IFR COALITION") by Dr. Guy Phillips, PhD, Economics, dated and attached, May 28, 2014.

Dr. Phillips has more than 40 years experience as an economist with specialization in water resource economics in California and other states. He has held positions in academia (University of California and California State University) and policy positions in the California Resources Agency and the California State Legislature.

Following is a summary of our comments:

1. The CAM does not adhere to some of the most fundamental principles of economic analysis. If implemented as set out, the result would almost certainly result in taxpayers continuing to pay more than their fair share.
2. The CAM is more of a description of a possible methodology than a methodology. The text is vague. The definitions are incomplete; there are analytic assumptions that are presented as if they are fact; and the "exceptions" offered are not only ambiguous but incomplete and appear to be biased against the taxpayer. The result is essentially an invisible analytic approach that is, or at least can be, left to the subjective interpretation and decisions internal to the CAM process. We believe that this lack of transparency is not Congress' intent.
3. These cost allocation methodological questions and their results perpetuate decades of flawed techniques and results that have resulted in billions of dollars in direct and indirect subsidies to a relatively few project beneficiaries. In spite of decades of criticism from the public and from its sister agencies, the BOR has clung to its historical approach as if, by repetition, an invalid system can be made valid. We believe this is directly contrary to Congressional intent.
4. There is no budget constraint, time limitation, or other resource constraint that justifies the BOR approach. As has been repeatedly illustrated elsewhere by reputable agencies such as the Government Accounting Office, there are analytic methods that would actually require less time, less complex effort, fewer agency resources, and would result in better results than those proposed in the CAM. If nothing else, the CAM should present each of these alternatives and explain explicitly why they have been rejected.

5. Furthermore, continued dependence on an historic, flawed, methodology and its results ignores the advances in the field that have occurred over the decades. Today there are better methods, analytic tools, data, and presentation techniques that would enable the public, the taxpayer, and Congress to understand what the BOR has done. Again, if nothing else, the BOR should provide a detailed explanation for why it has rejected the use of contemporary analytic methods and tools.
6. While the CAM is ambiguous (or even consciously masked), it appears to present the view that capital and operating costs incurred to compensate, mitigate, or otherwise seek to remedy the damages caused by the BOR facilities should be paid by the taxpayer merely because there is a perception that there is a public “benefit”. Hundreds of millions of dollars lent by the taxpayer to the direct project beneficiaries are at stake. For example, the notion that fish, wildlife, and water quality costs incurred by virtue of building and operating BOR’s facilities—costs that would not have occurred without the facilities—violates basic tenets of sound economic analysis. The only justifiable costs that the taxpayer should pay would only be those costs that are demonstrated to have resulted in a net increase or enhancement above and beyond what would have happened had the facilities not been built in the first place. The CAM should explicitly address these basic principles and provide an economically sound basis for continuing to adhere to some other idea.
7. We are not able to identify in the CAM a methodology that (a) that the historic under-collections will in fact be collected going forward on an economically sound basis, and (b) that the mechanism for paying the historic under-collections will be based on sound economic analysis and will be practical—e.g., that the reimbursement mechanism will not simply result in more hardship excuses to avoid reimbursement.
8. The Table suffers from similar weaknesses that it is vague and proposes to utilize techniques that have been criticized for decades. Further the Table itself is internally inconsistent. Statements in some parts of the Table are not matched by statements in other parts of the Table.
9. The Table is also inconsistent with the CAM. Statements in the Table directly conflict with statements in the CAM. Obviously, these inconsistencies need to be reconciled. Vagueness will only perpetuate the public/taxpayer impression that arbitrary decisions made in the past will be made again in this Cost Allocation. Furthermore, either the Table or the CAM, or both, should be explicit in justifying the approach (es) proposed. Billions of taxpayers’ dollars for past and future facilities are at stake. The taxpayer deserves a full and explicit analysis of all

alternatives and a justification for the methods, analyses, and data proposed for application in this Cost Allocation.

10. The CAM/Table is very vague relating to future facilities and how the principles will be applied to ensure proper allocation and collection of the reimbursable costs. Past practice suggests that even a proper cost allocation will still result in under collections and subsidies and the burden will fall on the taxpayers.

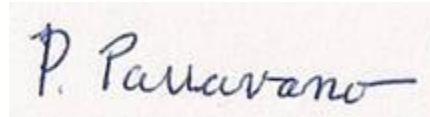
We are very concerned that, as it stands, the CAM/Table leave either the analyst or some other party in the process to make judgments or decisions that may or may not be consistent with sound economic analysis—and may result in nearly invisible vulnerabilities in the entire cost allocation effort.

Since the CAM is actually only a description of a possible cost allocation methodology—based on a seriously flawed historical approach--and not a thorough review and analysis of BOR's proposed methodology, we cannot tell what the final methodology will be.

Therefore, we reserve our right to further comment on the CAM once the details have been more completely developed. We recommend that BOR offer the public in general another opportunity to comment on the CAM once the concerns have been addressed.

Thank you for the opportunity to comment. Please add our emails to your future notifications regarding the CVP cost methodology.

Sincerely,



Pietro Parravano
President
Institute for Fisheries Resources
parravano@ifrfish.org



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso
zgrader@ifrfish.org



Rebecca Crebbin-Coates
Water Campaign Manager
Planning and Conservation League
rebecca@pcl.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@gmail.com



Renee C. Sharp
Director of Research
Environmental Working Group
renee@ewg.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Barbara Vlamis
Executive Director
AquAlliance
barbarav@aqualliance.net



Lowell Ashbaugh
Conservation VP, NCCFFF
Northern CA Council of Fed. of Fly Fishers
ashbaugh.lowell@gmail.com



Barbara Barrigan-Parrilla
Campaign Director
Restore the Delta
Barbara@restorethedelta.org



Dr. Mark Rockwell
California State Representative
Endangered Species Coalition
mrockwell@endangered.org

John McManus
Executive Director
Golden Gate Salmon Asso.
john@goldengatesalmon.org

Stephen Green
President
Save the American River Association
gsg444@sbcglobal.net

S. Dean Ruiz, Esq.
Harris, Perisho & Ruiz
Attorneys at Law
South Delta Water Agency
dean@hprlaw.net

Frank Egger
President
North Coast Rivers Alliance
fegger@pacbell.net

Attachment: **IFR Coalition Specific Comments: U.S. Department of the Interior Bureau of Reclamation “Economics Guidebook: Chapter 3 “Cost Allocation Methodology” (“CAM”) Guy Phillips, PhD, Economics June 4, 2014**

cc: Interested Parties

**IFR Coalition Specific Comments: U.S. Department of the Interior Bureau of Reclamation
“Economics Guidebook: Chapter 3 “Cost Allocation Methodology” (“CAM”)**

Guy Phillips, PhD, Economics

June 4, 2014

INTRODUCTION

The IFR COALITION appreciates the opportunity to provide comments on the CAM. The IFR COALITION understands the importance of properly allocating the capital and operating costs of BOR facilities between taxpayers, where there are costs that benefit the public at large, and those parties that are specific beneficiaries of the facilities such as water supply, power, water quality, and recreation. Stated differently, IFR COALITION applauds any effort that threads the needle of properly allocating the complex array of present and future costs between those costs that would have been incurred without the facilities as compared to those costs with the facilities.

Unfortunately, IFR COALITION finds that the CAM not only does not thread the needle: the CAM could perpetuate decades of flawed analyses that have resulted in billions of dollars of taxpayer subsidies for a relatively small number of direct project beneficiaries.

The CAM is the foundation of the entire Cost Allocation being prepared by the BOR. The Cost Allocation itself will affect the taxpayers’ and users’ costs for decades to come. Analogous to the foundation of a house, the CAM embodies the method, specifications, and assumptions for all that follows. If the methodology is ambiguous, flawed, or incomplete, the resulting structure will be weak and vulnerable and potentially unable to stand. Such vulnerabilities may be obvious or all but invisible. Thus the IFR COALITION takes this responsibility as seriously as we believe that Congress intended.

The historical context: BOR’s decades-old flawed approach to cost allocation and cost reimbursement methods have inappropriately shifted billions of dollars from direct project beneficiaries to taxpayers.

BOR’s history has added to the taxpayer burden from its facilities in two principle ways: (1) In the first case, by allocating too much of the capital and operating costs of its facilities to the taxpayer rather than the direct project beneficiary, and (2) secondly, through BOR’s methods to collect reimbursable costs that provide (a) arbitrary “ability to pay” calculations that result in even more subsidies and (b) even then do not collect what is due from project beneficiaries which results in serious undercollections of funds due the taxpayer.

BOR’s biased cost allocations inappropriately charge too much to the taxpayer and too little for the direct project beneficiaries, resulting in large subsidies.

BOR’s various efforts to comply with Congressional mandates regarding cost allocation and cost reimbursement have been controversial for decades. The conflicts have arisen mainly because reviewers have demonstrated repeatedly that the methods, analyses, data, and assumptions have driven the BOR’s work toward a bias that would have the taxpayers paying more than is warranted by an economically sound analysis. The BOR work has been too ambiguous and has left too much

opportunity for subjective decisions and interpretations to enter the analysis at points in the analysis that would be all-but invisible to the public and the taxpayer.

Finally, the bias against the taxpayer has been repeated in each of BOR's cost analyses over decades. Repetition does not ennoble faulty methods. As such, the BOR has not only resisted comments from sister federal agencies on measures that would remove the bias but the BOR has also rejected the opportunity to use modern analytic tools, methods, and data that have been developed in the decades since BOR's cost allocation efforts began. As it relates to the "fish and wildlife" and "water quality" aspects of BOR facilities, several sister federal agencies and the general public have pointed out that the taxpayers should not be required to pay the costs of such facilities or operations. Curiously, BOR's rejections may have continued and have even exacerbated BOR's bias against the taxpayer (the inconsistency between the CAM and the "draft Findings and Recommendations Table" makes it uncertain which way BOR is going to go).

While the CAM is silent on this point, the "draft Findings and Recommendations Table" ("Table") seems to suggest that no fish and wildlife and water quality costs will be charged to the taxpayer unless it can be clearly demonstrated that such costs are associated with an enhancement of conditions above that which would have occurred without the project. That would be an appropriate direction to take but since it is not explicit in the CAM and the relationship between the CAM and the Table is not clear, we urge BOR to address this explicitly in the CAM. Therefore for purposes of these comments, we will treat the CAM as if the CAM has not addressed this matter.

To cite a few historical examples:

- The Department of the Interior's Office of the Inspector General analysis in 2004 presented the case that the under-collection was at that time about \$1.5 billion and rising quickly. Water irrigators' annual subsidy was estimated at \$250 million/year for only 50 of the water customers and was also rising quickly.
- The Government Accountability Office ("GAO") in 2007 reported to Congress on some of the various ways that the CVP facilities had to be re-tooled or operated differently in order to address emerging issues directly associated with the construction and operation of the CVP. The revised cost allocations buried the associated reimbursements to taxpayers in ways that were not supportable by sound economic analysis. The result is that not only is the former CAM flawed and inappropriate, using its next generation in the same clothing will merely perpetuate the problem.
- GAO's 1992 Critique of the USBR Cost Allocation failure. Most of the critique is still valid today. GAO found that: (1) the Bureau gave limited attention to the congressional mandate to implement an updated cost allocation study by January 1988, mainly because of funding and staffing constraints; (2) the Bureau included inappropriate costs and made questionable estimates of project benefits and alternative costs in its 1988 draft study, and public comments on the study cited similar concerns; (3) the Bureau charges rates to its CVP water users that are based on the cost allocation percentages it developed in 1970 and updated in 1975; (4) delays in properly allocating CVP costs could result in the government recouping less of its capital investment, because the value of the dollar received years later will be less than if those dollars were timely received; and (5) although the Bureau has agreed to explore alternate allocation approaches it continues to rely on its methodologies, which could cause additional delay in developing an acceptable cost allocation.

With billions of taxpayer dollars at stake, there is no analytic, methodological, budgetary, or time-constrained reason for BOR's perpetuating its flawed cost analysis methodology or results.

The following excerpts from the GAO (pages 9-11) illustrate not only the flawed approach being followed by the BOR but also demonstrate that there are better analytic approaches that are simpler, would take less time to implement, would cost less to follow, and would yield better results:

(a) "We discussed with the Bureau two alternative approaches to its cost allocation method. One approach allocates joint costs in direct proportion to the specific costs assigned to each purpose. For example, if specific costs associated with irrigation are 80 percent of all specific project costs, then irrigation would receive 80 percent of the remaining joint costs to be allocated among all project purposes."

(b) "The other approach allocates joint costs among purposes on the basis of use. For example, if 20 percent of the water in a reservoir is used for M&I purposes, while 80 percent is used for irrigation, then 20 percent of the costs of the dam and reservoir would be allocated to M&I purposes and 80 percent to irrigation. In many cases, dams and reservoirs are also used for flood control and hydroelectric power generation. In these cases, the percent of space in the reservoir dedicated to controlling floods would represent the share of joint costs dedicated to flood control. Often, almost all water released to water users generates power. Therefore, the remaining joint costs of the dam and reservoir could be divided equally between water and power users. The costs allocated to water users could then be suballocated on the basis of use."

(c) "These two approaches have the advantages of (1) eliminating the need to gather data and estimate benefits and alternative costs to allocate joint costs among project purposes, (2) applying a cost allocation formula across all purposes, thus reducing subjective assumptions, and (3) generating a cost allocation more quickly with existing data."

(d) "We discussed the appropriateness of these approaches with the Mid-Pacific Region's senior economist responsible for cost allocation. He agreed that our approaches were far less complicated and time-consuming than the method the Bureau had been pursuing and that they would address problems raised in public comments. In December 1991, he informed us that Bureau headquarters advised him to use the AJE method to revise the cost allocation study but also to explore the use of both of our suggested approaches."

(e) "The Bureau did not complete its updated cost allocation by the a congressionally mandated deadline. In addition, the Bureau's method has two fundamental problems: (1) it relies on assumptions and subjective judgments about costs and benefits relating to each project purpose that are open to question and (2) it requires data that are not always available

or that are time-consuming to generate. If the Bureau relies on this method to revise its 1988 draft study, problems identified with the draft are likely to remain, causing additional delay. Because of the potential adverse cost implications for the federal government that are associated with delays in completing the update, we believe the Bureau should adopt a cost allocation methodology that is less complicated and more timely, and relies on existing data.”

(f) “To complete the CVP cost allocation expeditiously, we recommend that the Secretary of the Interior direct the Commissioner of the Bureau of Reclamation to use less costly and more timely methodologies to update the CVP cost allocation study. We have suggested two approaches: (1) allocating joint costs in direct proportion to specific costs or (2) allocating joint costs on the basis of use.”

(g) “Bureau officials also stated that their guidelines do not include consideration of one of the approaches we suggest—the allocation of joint costs in direct proportion to specific costs. However, they believed that they could obtain approval for the use of this approach for the CVP.”

(h) Page 18, from the GAO report: **Delays in Allocating Costs Can Affect Revenues**

(i) “To develop joint cost distribution percentages for the draft 1998 study, the Bureau first allocated among project purposes costs incurred from facilities in service plus \$3 billion in authorized costs that have not yet been spent. These authorized costs include costs for project facilities that, as of 1986, had not yet been, and may never be, constructed. Distribution percentages calculated from these values were then used to allocate only the costs incurred from completed and in-service facilities among project purposes.”

(ii) “We do not believe that the costs of authorized but not completed project facilities should have been included in the distribution calculations. The benefits and alternative costs of future project features are at best difficult to estimate. Furthermore, basing allocation percentages on one set of benefits and alternative costs (those associated with all authorized features), and then allocating a subset of the benefits and costs (those associated with facilities that are complete and in service), potentially distorts the allocation of incurred costs. Actual experience with project facilities may differ significantly from potential future experiences.”

At pages 18-19, the GAO continues: Inappropriate Costs Were Included

“In addition, the Bureau included in its allocation certain costs that are specific to only one or a few water districts that have sole responsibility for repaying such costs directly. Unlike most other water supply costs, these costs are not repaid through general water rates that are based on cost allocation; they are repaid by the responsible water districts directly through individual repayment contracts. By assigning these costs to the general water supply purpose, the Bureau reduced the allocation of joint costs to water supply, thereby increasing the allocation of joint costs to other project purposes.”

BOR's approach to collect the already-understated reimbursable costs from direct project beneficiaries further subsidizes the beneficiaries resulting in major shortfalls in reimbursements on an ongoing basis, also at taxpayer expense.

The history of cost recovery to repay the taxpayers for their huge loans primarily for water supply for the financial benefit of the customers demonstrates that the taxpayers have been put into a position never intended by the original “deal” with the water customers. Not only have the (taxpayer subsidized interest-free) loans from the taxpayers not been repaid, but the CAM as set forward today suggests that the problem will not be corrected.

In simple terms, the original and, theoretically, the present “deal” between the taxpayers and (primarily) the water users was that the taxpayers would lend billions of dollars to build facilities that the water users themselves could not raise the capital to build. Then, the capital and operating costs were to be reimbursed by the project beneficiaries through a mechanism that had substantial subsidies built into the “loan agreement” itself. Now, decades later, history has shown a large number of unintended consequences; to mention but a few:

- The reimbursement mechanism itself has failed to collect what was due the taxpayers by more than \$1.5 billion.
- The impacts of building and operating the projects proved to be much different than expected, particularly with respect to remedying the water quality and salinity impacts.
- The public's priorities changed, particularly as it relates to the value of the environmental, water quality, and fish and wildlife impacts that were attendant the construction and operation of the facilities.
- The projects undertaken not only skyrocketed in cost but had to mitigate, compensate, or otherwise repair damages that would not have incurred had the projects not been undertaken.
- The project costs ended up exceeding the project's benefits, directly contradicting the Congressional mandate that authorized the deal in the first place and stirring the controversy that has existed since.
- The increasing subsidies to a relatively small number of agricultural enterprises—who do not have to pay the prevailing market price for water—are drawing much more public and Congressional attention and corresponding insistence that the problems be remedied.

These are classic examples of the scale and type of economic activity that happens when a resource is undervalued (water) and the taxpayer is asked to step in. The unintended consequences, however, mean that the taxpayers are using their scarce dollars to give those agricultural enterprises receiving the subsidized water a significant competitive advantage over those farmers who do not receive the subsidized water—whether they are next door in California or in other parts of the U.S. While this is not the core of the CAM's challenge, it is central to what the economic analyst must keep in mind when analyzing the costs and benefits of what the taxpayer has financed. What would have happened if no project were undertaken and therefore who should pay for the project that was undertaken?

In response to changing conditions over the years, BOR has made numerous changes to the facilities, priorities, and their operations. Further, so many changes have been made to the purpose(s) and operations of the facilities, that it is a very difficult challenge—the challenge faced by the CAM—to reconstruct the reimbursement obligations.

Even if the reimbursement obligations are calculated using reasonably sound economic analytic methods and solid data, the CAM offers no evidence that the historic and contemporary undercollection problem will be resolved going forward. Instead, the CAM not only perpetuates the undercollections, but uses analytic techniques that would hide from the taxpayer and the general public the true size and distribution of the undercollections.

In conclusion, unfortunately, the IFR COALITION finds that the CAM is ambiguous, flawed, and incomplete. Its flaws are rooted in, but not limited to, BOR's previous methods and practices to estimate costs and cost allocations. The CAM announces that the method to calculate and allocate costs will be the “Separable Costs Remaining Benefits (SCRB)” method. Over the years, the SCRB has been repeatedly and deeply criticized both as a method and for the application of the method. Yet, the CAM argues that the SCRB method should be continued. The only justification offered is that the SCRB has been used for a long time. That is not satisfactory. BOR should utilize contemporary economic methods, tools, practices, and data to achieve Congress' mandate. Only by using a better method can the taxpayers, the stakeholders, and the general public have confidence that the appropriate tools have been used to reimburse the billions of dollars that have been lent to a relatively small number of beneficiaries.

If the SCRB method is to be utilized, the CAM should set out explicitly how the method will be followed in order to improve upon or avoid the flaws of the past. Similarly, if the SCRB method is to be followed, the CAM or BOR should provide an explicit discussion of why it is to be preferred over other alternatives. For example, experts have ranked the “Costs follow the water” and “Capacity rights” approaches as superior to the SCRB method. With billions of taxpayer dollars at stake, the IFR COALITION questions why the SCRB would still be preferred by the BOR.

The balance of our comments are organized in three sections: (1) General Overview, (2) Detailed Comments, and (3) Comments on the “draft Findings and Recommendations Table. Unfortunately, the comments are fairly repetitive. This is due to the fact that the ambiguities or analytic errors are pervasive, important, and very interrelated to the CAM work yet to be completed.

I. General Overview: the IFR COALITION is concerned that the CAM approach repeats past mistakes, incorporates a flawed methodology (as if repeating the method will make it the correct method), will not result in proper reimbursement of the taxpayer's “loan” to build the facilities, and will continue or even increase the subsidies to the relatively small number of project beneficiaries.

In summary, IFR COALITION finds that the draft CAM so far is more of the description of a possible approach to cost allocation than a methodology. Indeed, sections of the CAM are so vague that they cannot even be described as a description of a methodology. Rather, those sections describe things that BOR might do. While the CAM describes a reasonable framework for how the allocation of the capital and operating costs of the Central Valley Project and related facilities might be presented, as a methodology we find it to be too conceptual and lacking in the specificity required to gauge whether the resulting methods, assumptions, and data would yield an analysis that would meet the tests of either sound economic analysis or the standards of Congress.

Further, while the CAM seeks to define its terms for the methodology and analysis, IFR COALITION finds that the definitions are too ambiguous and not well enough specified to provide the public much opportunity to comment. Further, the general approach appears to be a good way to start but again is too general to provide guidance for either a sound analytic framework or selection of the data appropriate to the analysis. IFR COALITION cautions against repeating the mistakes of the past.

Therefore, IFR COALITION is concerned that BOR will rely on the CAM as presented to go forward with an analysis using the “tools” in the CAM when those tools are not sufficiently set out, are not themselves analyzed (e.g., strengths, weaknesses, and empirical differences between them), a selection is not made, and a justification is not provided –nor, is there even a description of how the selection will be made.

There are three basic tasks that need to be completed. Their importance cannot be overstated. Billions of taxpayer dollars are at stake:

- (1) How much of the capital and operating cost of BOR facilities is reimbursable to the taxpayer from the project’s users (or as we use it here, the direct beneficiaries)?
- (2) How should those reimbursable costs be allocated to the respective project users? And
- (3) How can the BOR provide enough assurance to both the taxpayers and the project’s users that the undercollections problem will be solved? The CAM is simply too vague throughout to provide much assurance to the taxpayer (a) that the correct allocation of the costs to the taxpayer will result, (b) that costs will be equitably distributed among project users, and (c) that the resulting reimbursement obligations will actually be achieved.

IFR COALITION is not able to identify in the CAM a methodology that (a) that the historic under-collections will in fact be collected going forward (since they are indeed project costs), and (b) that the mechanism for paying the historic under-collections will be based on sound economic analysis and will be practical—e.g., that the reimbursement mechanism will not simply result in more hardship excuses to avoid reimbursement.

IFR COALITION is very concerned that, as it stands, the CAM leaves either the analyst or some other party in the process to make judgments or decisions that may or may not be consistent with sound economic analysis—and may result in nearly invisible vulnerabilities in the entire cost allocation effort.

The result, as is described in the Detailed Comments section below, is that it is possible that historic weaknesses in preceding studies/analyses could be perpetuated in this effort. For example, the flawed historic allocations of costs to the taxpayer should not be perpetuated again through such components as fish and wildlife or water quality that should actually be allocated to those project uses and users that actually benefit from the project and its associated capital and operating costs.

The CAM is not simply an accounting exercise to allocate present and future costs among present and future project-related actions. It is fundamentally an economic analysis challenge. The “accounting” component should follow and be based on the economic principles and analysis. A basic principle of sound economic analysis requires that the costs be viewed “with” and “without”

the facilities rather than “before” and “after” the facilities are built as seems to be suggested in the CAM. It is not clearly stated in the CAM that this principle is central to proper allocation of costs. In fact, it is not even addressed. Stated simply: if the costs incurred would not have been incurred “without the project”, the costs are “with the project” costs and should be allocated to the project beneficiaries, not the taxpayer.

To illustrate: if fish and wildlife or water quality (or wildlife refuges) would not have required public expenditures “without” the facilities, then fish and wildlife and water quality expenditures as a result of the facilities should be allocated to those beneficiaries directly benefiting from the water supply, power, and recreation, not to the taxpayer. Stated differently, if the fish and wildlife or water quality expenditures are actually intended to compensate, mitigate, or repair for the damages or reductions in fish and wildlife or water quality resulting “with” the facilities, then taxpayers should not be expected to pay for them.

Similarly, the re-stated purpose of some of the BOR facilities (such as the “redefinition” of the purpose of New Melones for water quality or the changes to the San Luis facilities) should not be confused with a public benefit to be paid by the taxpayers. Since the water quality expenditures (capital and operating) are only required “with” the facilities and for the purpose of benefitting the water supply functions for the direct benefit of the water supply customers (even if the water quality improvements also benefit fish and wildlife that would not have needed the improvements “without” the facilities), the taxpayers should not pay; the project beneficiaries should pay.

Therefore, the IFR COALITION reserves its right to further comment on the CAM once the details have been more completely developed. IFR COALITION recommends that BOR offer the public another opportunity to comment on the CAM once the concerns have been addressed.

II. Detailed Comments: As ambiguous as it is, the CAM’s description of a possible cost allocation methodology is biased against taxpayer recovery of reimbursable costs and biased against undertaking measures to compensate, mitigate, or otherwise pay for the damages caused by BOR facilities.

1. Do not perpetuate previous methodological or analytic weaknesses: The history is well documented that BOR’s cost allocation(s) have been biased against the taxpayer. Furthermore, it has also been documented that BOR’s previous cost allocation analyses, even as they were biased for the benefit of the direct beneficiaries of the project(s) still resulted in incomplete reimbursement. To the extent that this CAM is intended to represent improvements over preceding cost allocation methods and analyses (including, for example, the SCRB method previously utilized), the differences should be clearly noted and corrected in the CAM (which is presently completely silent on this matter). Further, as the previous cost allocation(s) were flawed, the results or conclusions should not be used as the starting point for this analysis. Rather, if the BOR intends to use any of the results of any previous cost analyses in this cost analysis, the BOR should first adjust any of those past results to reflect today’s improvements.

For example, on page 9 of the CAM, last paragraph, the following language “The basic guideline to follow in updating cost allocations is to use the same method of allocation as was used in the project authorization report” suggests that analytic methods and data sources used decades ago are the best available today and tomorrow (since the CAM will establish the method for future facilities as well). Of course, methods and data sources have improved and will likely continue

to improve. Further, the types of questions that were being analyzed decades ago have changed both in substance and in importance. IFR COALITION suggests that the CAM should seek to reflect the state of the art rather than further endorse methods and results that have proven to be inadequate.

To illustrate, the CAM itself on page 11 acknowledges: “A problem that has often occurred in final allocations and reallocations is the condition wherein project costs to be allocated exceed total benefits...” When such a condition has occurred and when reimbursements are billions of dollars short of their obligation under historically biased cost allocation and reimbursement methods, IFR COALITION is astonished that the BOR has not simply started over again with a fresh look at everything they do.

2. The relationship between the CAM and the draft Findings and Recommendations Table (“Table”) is not clear. The Table sets out descriptions and methods that are not mirrored in the CAM. In order to guide the analyst and the analytic process, the CAM should contain more detail than the Table. Yet, this is not the case. More importantly, it appears that the Table and the CAM are in direct conflict with each other over the treatment of the fish and wildlife and water quality aspects of the CVP.
3. The CAM’s reference points are not well defined. The starting (but not final) reference point should be the original Congressional authorization(s) or subsequent specific (and properly cited) amendments that are specifically related to cost allocation and reimbursement. A number of the BOR facilities are no longer used for the purposes for which they were originally authorized. For example, the New Melones and San Luis facilities were authorized for purposes different from the way that they are managed today. Of course, that changes the cost allocations. Unless Congress has specifically authorized not only the operational changes and the associated cost allocations but has directed that the taxpayer should pay for the changes, the cost allocations should continue to flow to the direct project beneficiaries, not the taxpayer. Further, even if Congress has specified the cost allocation, if subsequent analysis (using appropriate analytic techniques) suggests that the cost allocation specified by Congress is no longer appropriate, IFR COALITION suggests that BOR should seek authorization from Congress to get the cost allocations correct.
4. If Congress will be expected to accept the taxpayer reimbursement amount, its timing, and its implied taxpayer subsidies, then the amounts, distribution (beneficiaries), and timing of such subsidies should be presented. The CAM is biased in favor of the direct project beneficiaries in a host of ways. They are detailed in the following comments. Yet, at no point in the CAM is there acknowledgement of these subsidies and there is no discussion at all of the subsidies implied in the present reimbursement “system” (zero interest loan, reduction in rates for “hardship”, water prices based on historic costs rather than contemporary value, taxpayer reimbursement for the costs associated with project damages rather than by the water customer, and—even with all of those subsidies, a failure to be reimbursed for what is due). Instead, the CAM would entomb those subsidies and damages in a method that does not appear to meet basic economic principles of sound analysis.
5. Taxpayers should not pay for the capital or operating costs associated with the facilities where those costs are incurred as a consequence of, rather than the purpose of, the facilities themselves (see also Comment related to Page 1, “introduction”, below). While the Table partially addresses this concern, the CAM does not. The CAM should clearly delineate

capital and operating costs that are associated with the consequential, remedial, or compensating measures undertaken for the purpose of seeking to mitigate the impacts of or pay for the damage caused by the facilities as distinguished from the costs associated with benefits to specific project beneficiaries.

6. The CAM does not provide a proper delineation between what constitutes costs for “fish and wildlife” and “recreation”. See for example the following comment regarding “Page 4, Suballocation of Recreation and Fish and Wildlife Component”.
7. The CAM does not provide a functional definition for costs associated with compensating, mitigating, or otherwise repairing the damages caused by the project. Our comments herein have repeatedly argued for a clear treatment of mitigation and repair of damages caused by a project (i.e., costs that would not have been incurred in the absence of the project). But, the CAM does not define what is meant by these terms. We urge BOR to provide a clear and functional definition.
8. Page 1, general introduction: There are a number of principles that should guide the cost allocation process. Only some are discussed here. Others include (a) most important: utilizing “with” and “without” analysis, not “before” and “after”, (b) properly attributing benefits between taxpayers and benefits that flow directly to project users (water supply, power, recreation), and (c) allocating costs properly between taxpayers and project users especially where, based on “with” and “without” the facilities, certain costs may appear to benefit the public at large or taxpayers but actually only result because the facilities have caused a deterioration in the “without” facilities case.
9. Page 1, Terminology: While these terms on their face seem appropriate, in their actual application, IFR COALITION cautions that the BOR follow the economic principles previously described. For example, “Specific Costs” for fish passage could mistakenly be allocated to the taxpayer when in fact those costs should be allocated to the water supply or power functions.
10. Similarly, “Incremental Costs” could also erroneously treat such costs as fish passage or water quality costs associated with water supply that would not have been required had the facilities not been built in the first place (the “without” case).
11. Page 2, “Single Purpose Alternative Costs”: IFR COALITION cautions that, viewed as “with” and “without” cases, it is also possible that the Alternative would be “no project”. The specification of this term does not allow for this possibility and therefore could skew the analyst’s results.

Rather than repeat this concern for each of the cost classifications described, IFR COALITION notes that to various degrees the concerns apply for all of the cost terms. Unless these terms are further defined, the terms do not provide enough guidance to the public and the analyst to know how such costs should be allocated.

12. Page 2, the “NED Plan”: as described, this drives the analysis toward structural alternatives and away from the “no project” or “remove project” alternatives. Furthermore, the NED is not the appropriate place from which to assign costs unless there is a net benefit as compared to the “without project” case. And only when it can be demonstrated that there is a net benefit to

the taxpayer clearly and explicitly linked to the “with project” case separate from the direct benefits received by the project user(s).

13. Page 3, 3rd paragraph: as described in the General Comments section, since this Chapter is actually more of a description of a possible cost allocation methodology rather than actually setting forth the methodology, it is not possible to provide any substantive comments regarding the description and examples of the SCRIB method of allocating NED costs. IFR COALITION looks forward to its opportunity to review and comment on the actual CAM methodology. IFR COALITION cautions however, as it is well known that the previous applications of the SCRIB method have been weak and controversial, that BOR should carefully set out the new use of the SCRIB early in this process (so that BOR can avoid its previous history of getting too committed to a method only to find that it was weak) and, further, so that the definitions, assumptions, and data sources (particularly as they are influenced by the cost allocation process discussed above) can be clearly understood by the public. Since the NED and SPA elements of the CAM are not at all clearly defined in this Chapter, it is neither clear what the data, etc., will be used and how reviewing such uses by the public will be straightforward. See Figure 1 comments below.

14. Page 4, Figure 1: This is a reasonable format in which to present the results of the analysis. But, as it is only an example of results without the underlying analysis (presumably not yet performed), IFR COALITION can only comment on areas that will need further definition and justification.

- a. It is not clear from the example Figure 1 whether it is intended to represent all of the Project Purposes that will eventually be included in Figure 1. The ones that are presented are appropriate (although “Irrigation” may not be a complete characterization of the water supply purposes). If other purposes are to be included, they should be defined, analyzed, and justified. If not, then many of the comments in this commentary may not apply.
- b. 8% interest: is this meant to mean the rate of inflation on construction and operating costs? Please be sure to provide a clear definition and an analysis and justification for this assumption. “Interest rate”, “discount rate”, and “escalation rate” are not the same for all costs. While a single discount rate may be appropriate for certain types of costs, it is highly likely that the future capital and operating costs will not escalate at the same rates. Some costs, e.g. non-structural costs, may not escalate at all or very little, while capital project costs are likely to escalate at a faster rate than the discount rate.
- c. Further, if the term “interest” is meant to include some correlation to discount rates, the correlation should be defined, analyzed, and justified.
- d. The presentation of “Benefits” is vulnerable to the same concerns raised above. Just because there are “benefits” resulting from certain capital or operating costs, does not imply that those benefits should be paid by the cost category. As discussed above, if the costs of fish and wildlife and/or water quality are costs that would not have occurred “without” the facility, then the only justifiable description of those benefits is that the costs were incurred in order to mitigate, compensate, or otherwise remedy damages associated with the facility. Therefore, the public taxpayer should not be responsible for

such costs and, instead, the direct beneficiary (water supply, power, recreation) should be responsible for those costs.

- e. IFR COALITION cautions that the “Present worth” and “Annual value” components of Figure 1 are vulnerable to the weaknesses discussed throughout these comments on the CAM. If, for example, ultimately more project purposes are added to the Figure, then the Figure simply must distinguish between the costs that are justified for the taxpayer and those that are associated to the “with project” beneficiaries and treated accordingly.
 - f. As for the balance of Figure 1, present and previous concerns about the SCRB method of allocating NED costs remain and are discussed elsewhere in these comments.
15. Page 4, Suballocation of Recreation and Fish and Wildlife Component: Please provide further definition, analysis and justification for the following statement: “Recreation and fish and wildlife **may** [emphasis added] be considered to be a **single component** [emphasis added] especially for interrelated reservoir-type activities”. Without a better understanding of what BOR considers a single component or a “joint cost” as compared to a completely different category of cost, IFR COALITION is not able to provide further comment except as cautioned elsewhere in these comments.
 16. Page 5, first full paragraph: IFR COALITION does not understand what is meant by the following: “both reservoir and instream flow requirement segments of a component”. Clearly, if the fundamental principle of economic analysis is followed wherein costs (and benefits) should be considered “with” and “without” the project, how would the BOR and the CAM consider “instream flow requirements” as anything but a cost “with” the project? As such then, the capital and operating costs associated with instream flow requirements would only be attributable to the direct project beneficiaries: water supply, power, and reservoir recreation. There is, as far as we can tell, no overlap or “joint” costs to be allocated between reservoir recreation or other costs and those associated with instream flow requirements.
 17. Page 5, last paragraph: see comments below regarding the “alternative justifiable expenditure (AJE) method”. This technique has been criticized for years. Why repeat it now?
 18. Page 6, Figure 2: IFR COALITION sees no purpose to this figure as it suggests that there are in fact costs that should be ascribed to “fish and wildlife”. See previous comments regarding both the with/without principle and the compensating nature of the costs associated with fish and wildlife. IF there are any costs (or benefits) to be attributed to fish and wildlife, it would only be those associated with a net gain or net enhancement of the “with project” case above that which would have occurred under the “without project” case. As has been suggested repeatedly in previous comments regarding the fish and wildlife and water quality aspects of the CAM, there is much more definition, analysis, and justification to be done before the CAM can be described as a complete methodology.
 19. Page 6, Figure 2: See also the “analytic” comments regarding Figure 1 preceding.
 20. Page 6, “Exceptions” and “Overriding Legislation or Departmental Directives”: IFR COALITION suggests that the CAM has it all backwards in this section. This whole

discussion emphasizes the importance of IFR COALITION's prior comments. In any case, whatever "overriding legislation" or "directives" the CAM intends to rely upon should be specifically related to Congressional directive(s) to reallocate costs and then should be explicitly analyzed and justified.

- a. Once again, the appropriate principle of economic analysis to guide here is not what BOR has been ordered to do but a complete with/without analysis—not a "before" and "after" framework. Then, if costs are required to remedy or mitigate the consequences of the "with project" situation, whether BOR is ordered to do so or not, these costs are attributable to the direct project beneficiaries. To charge the taxpayer for "fish and wildlife" or "water quality" is inappropriate when those costs would not have been incurred in the "without project" case.
- b. Furthermore, what BOR has been ordered to do is a very incomplete basis to attempt to create an exception that, if used, would be biased against the taxpayer. The CAM's method would suggest that the only time the costs of such measures should be paid by the direct project beneficiaries (e.g., water supply, power, reservoir recreation) instead of the taxpayer, is when ordered to do so. This, of course, creates a substantial bias against any taxpayer or other party to work with the BOR in a less expensive process, such as simple dialogue or settlement agreements. Furthermore, this approach creates a bias for the direct project beneficiaries to resist mightily any notion of a modification or settlement agreement without expensive litigation or a taxpayer-financed expensive Congressional directive.

Finally, this approach will almost certainly allocate to the taxpayers a higher amount of the costs than appropriate or equitable. That, in turn, can be expected to cause even less support from the taxpayers for measures to reduce the damages (e.g., fish, wildlife, and water quality) caused by a project. Surely, this is not the basis for a sound and equitable cost allocation.

Historically, BOR has/may yet modify its operations (only sometimes pursuant to being ordered to do so) for many reasons, to cite but two:

- a. BOR determined that it was the right thing to do as part of its own adaptive management prerogatives;
- b. BOR agreed formally or informally to undertake such measures (sometimes in simply to avoid being ordered to do so) to compensate partially for the damages caused by the "with project" case.
- c. While there may be some basis upon which the remaining of the descriptions of the proposed "exceptions" on Page 7, they need to be much better defined, analyzed for their consistency with sound economic principles, and justified. IFR COALITION's major concern regarding this whole approach is the notion that taxpayer's should pay for the damages cost "with" a project. This is further complicated by the ambiguity of the terminology that, in IFR COALITION's view, does not enable the taxpayer to know what they are paying for and leaves discretion to the analyst to decide what the taxpayers will pay rather than the actual direct project beneficiaries. IFR COALITION does not believe that this is Congress' intent.

21. Page 8, Allocations Based on Other Measures: this whole section does not even describe a methodology. Rather it is a cursory review of possible approaches to disentangling costs. This section does not describe a methodology. "Other Measures" and "alternative

approaches” need to be carefully analyzed themselves for each one’s strengths and weaknesses according to sound economic principles, not simply because agency “policy” overrides economic analysis. Finally, when an approach is selected, it should be justified explicitly on the basis of sound economic analysis.

22. Page 8, “Allocations....”, second paragraph: See previous comments. IFR COALITION is very concerned that language like “salinity control purposes are currently evaluated on a cost effectiveness basis. This requires a slight modification of the SCRB procedure.”, and “water supply purposes are estimates of beneficiaries’ willingness to pay”, and “Instances might arise in which allocated costs to the other beneficiaries are greater than the repayment capability of those beneficiaries resulting in the need to reallocate costs”.
- a. Just because the taxpayers’ investments have been evaluated on a cost effectiveness basis does not imply in any way that the taxpayers should therefore pay any portion whatsoever of the resulting “benefits” if those so-called costs would not have been required “without project”.
 - b. “slight modification(s) of the (already heavily criticized) SCRB procedure without explaining what “slight modification” is (whether or not it is “slight” is in the eye of the beholder), without analyzing what the modification means, and without justifying the modification, does not create an economically sound cost allocation method.
 - c. “estimates of beneficiaries’ ability to pay” is utterly irrelevant to a proper and sound economic analysis of the costs of the facilities. Cost allocations should be performed independent of any user’s ability to pay (or desire to pay). Let the chips fall where they may. It is an entirely separate consideration, that itself must be supported by analysis, whether the taxpayers or power customers should pay—and how much to further subsidize anyone who cannot or desires not to pay.
23. Page 8, “Allocations....”, third paragraph: See previous comments. IFR COALITION would like to emphasize that this language is arbitrary and not consistent with sound economic analysis:
- a. “Costs may be allocated to purposes based on cost effectiveness using other measures of beneficial use” implies that every “benefit” is equal and should pay or that Congress has authorized a reallocation of costs. This notion completely misses the importance of “with/without project” analysis. Again, while “fish and wildlife” and “water quality” or salinity control may produce benefits, it does not follow that they should in any way be responsible for reimbursement of costs. They probably are not benefits as compared to the “without project” case (this point should also be analyzed according to sound economic principles and practices).
 - b. Just because “policy” or “legislation” “authorizes” an assumption that benefits are at least equal to costs or that “the assumption that the use of water for the purpose is at least equal to the value of the water in its next best alternative use; i.e., equal to the opportunity costs of the water” doesn’t mean that it is appropriate from an economic analysis point of view. Policymakers and legislators may have made such

assumptions to make decision making easier. It is unlikely (unless documented in the CAM) that policymakers or legislators made such decisions to instruct the CAM.

24. Page 8, "Allocations....", fourth paragraph: See previous comments. "Note that in the case of some threatened and endangered species, current methodologies do not lend themselves well to measurement of quantifiable benefits... In these instances, costs may be allocated based on other measures." There is no need to measure in either quantifiable or unquantifiable ways the "benefits" to threatened and endangered species unless preceded with a sound analysis that shows that those species achieved a net gain or enhancement over what the "without project" conditions would have been. And then, taxpayers should only pay for the net gain over the "without project" case. Instead, if the costs were incurred to compensate, mitigate, or otherwise repair the damages to those species in the "with project" case, those costs should appropriately be entirely allocated to the direct project beneficiaries.
25. Page 9, "O&M Costs": "The procedure of first choice for allocating Federal O&M costs should utilize the final project cost allocation." This is an assumption and it should be presented as such. Then the assumption itself should be analyzed and justified on the basis of sound economic analysis.
26. Page 9, "O&M Costs", first paragraph: This discussion is not based on economic analysis. Further, once again, IFR COALITION cautions that the use of the term "benefits" is too loose and can lead to serious analytic errors. Similarly, the language "farm enterprise budgets" raises the previously described concerns regarding "ability to pay" and "desire to pay" as false measures of benefits for purposes of cost allocation to reimburse the taxpayers for the loans made.
27. Page 9, "O&M Costs", first paragraph: Similarly, the language "unit-day values may be used to estimate recreation benefits" should not be used to imply that the cost reimbursement obligation of "recreation" should be limited to those day values, "ability to pay", or "desire to pay". If the taxpayer is to subsidize recreation uses of BOR facilities, that should be an explicit act by legislators, not buried in a cost allocation process.
28. Pages 9 and 10, "Other Allocation Problems": IFR COALITION readily recognizes the complex analytic problem of disentangling huge capital and operating costs incurred over decades, historically only partially reimbursed, and for which project purposes and public priorities have changed over time. IFR COALITION submits, however, that the analytic "problem" would be greatly simplified if the task were first organized according to sound economic principles and practices rather than immediately diving into what the CAM has done: frame the task as essentially only an accounting problem. So, rather than repeat many of the comments previously made on other sections of the CAM, IFR COALITION affirms those comments and encourages the BOR to back up and re-frame the analysis. IFR COALITION believes, that the complexity and controversy surrounding its previous methods would be clarified, justifiable, and would yield a result more aligned with the economic challenge of meeting Congress' original and present intent: reimburse the taxpayer for those costs not directly benefitting the taxpayer. Toward that end, IFR COALITION offers the following summary analytic considerations not presently evident in the CAM:
 - a. "Benefits" do not automatically imply a cost reimbursement obligation.

- b. The starting point for disentangling costs should be viewed in the context of a careful analysis of “with project” and “without project” conditions.
- c. “Ability to pay” or willingness to pay should not be gauges for determining an appropriate cost allocation to reimburse the taxpayers. If there is a desire to subsidize with taxpayer or power customer dollars any of the project users, that decision should be explicitly made by the Congress and the amount and timing of such subsidies should be available to the public and the Congress before such a decision is made.
- d. Costs incurred to mitigate, compensate, or otherwise remedy (partially or completely) the damages caused by a project are not appropriate for the taxpayers to pay. Rather, these damages would not have occurred but for the other benefits received by the direct project beneficiaries (e.g., water supply, power, recreation). And,
- e. The CAM should adopt an economic analysis approach that is based on contemporary methods, tools, and data, not merely perpetuate the subtle and not-so-subtle errors of the past. For example, see the preceding discussion in these comments at page 6 regarding the “Costs follow the water” and “Capacity rights” methods.

29. Page 11, “Results of Cost Allocations”: This section should explicitly add to the list of uses of the results: reports to Congress regarding: (a) the level of reimbursement collections received as compared to that expected, (b) the magnitude and timing of subsidies embodied in the cost allocations, and (c) the magnitude and timing of subsidies resulting from the actual reimbursements received.

30. Future capital and operating costs associated with new facilities or new mitigation costs: we are concerned that the CAM as set out is too ambiguous toward future capital projects and project mitigation/damage repair requirements. Whether or not the CAM appropriately addresses historic costs, we find the CAM to be simply too vague regarding future projects that are needed because of the problems caused by the BOR facilities themselves.

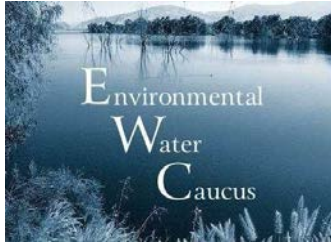
31. What is known today about the future of BOR CVP facilities suggests that major capital and operating costs will be incurred as a result of lawsuits, settlement agreements, or court orders. For example, drainage facilities may be required in order to meet regulatory/legal requirements. The CAM is silent on how these facilities will be treated for purposes of cost allocation and recovery. It is critically important that the associated future capital and operating costs be treated in the same manner as costs associated with mitigating or repairing damages caused by the project and should therefore be assigned to the project beneficiaries. Furthermore, in order to ensure that the costs are actually recovered from project beneficiaries, cost recovery should not be part of the present inadequate cost recovery system that provides little assurance that the taxpayers would not end up footing the bill anyway. That is, repayment should be direct, short term, and not subject to reduction or waiver on the basis of arbitrary “ability-to-pay” (or willingness to pay) decisions after the cost allocation has been made. Any other method will inappropriately allocate costs to the taxpayers. The CAM should explicitly set forth these principles and associated methodology.

32. Comments on the “draft Findings and Recommendations Table”: The Table is a big step in the right direction but is not mirrored in the CAM. In addition, the terminology is not well defined in either the Table or the CAM. Therefore, it is not possible to conclude that the improvements will follow through to the analysis.

- a. The relationship between the CAM and the Table is not clear. Is one intended to govern the other? Is one intended to be the summary of the other? The answers to these questions are not clear because neither is well defined but, more importantly, they are in conflict with each other. In addition, the Table is inconsistent between the discussion in the first one-half as compared to the second one-half.
- b. One way in which the Table and the CAM are in conflict with each other is with respect to the treatment of fish and wildlife, water quality, and all other matters related to compensating, mitigating, or otherwise addressing the damages and negative effects of the project.
- c. Cost Allocation vs. Cost Recovery: Please provide a description of the methodology by which historic under collections and ongoing subsidies (e.g., “ability-to-pay” or willingness to pay subsidies) will be corrected in this cost allocation. Please also set forth how the existing large under collection will be collected and will not directly or indirectly cause a reallocation of costs to taxpayers (e.g., by reallocating under collections into a category of taxpayer costs).
- d. Cost Allocation Method, “Separable Costs Remaining Benefits (SCRB)” method: please provide a table to illustrate how this application of the SCRB has improved over previous flawed SCRB applications.
- e. Capital Cost Evaluation: Methodology: please specify and remove the ambiguity in the phrase “can be used” and provide a justification for the method used. Then make the appropriate changes to the CAM.
- f. Capital Costs: Types of Costs: see comments on the CAM.
- g. Inclusion of New Melones Unit: see comments on the CAM.
- h. Trinity River – Assumptions: see comments on the CAM.
- i. Flood Control: Benefits-Methodology: see comments on the CAM.
- j. Flood Control: Benefits-Results: Do the benefits estimated by the USACE need to be revisited in order to be consistent with “with project” and “without project”?
- k. M&I Water Supply: Benefits-Methodology: If the results of the different models prove to have inconsistent results, how will those inconsistencies be reconciled? Please describe the justification for each model, its strengths, weaknesses, and how using different models is ultimately helpful.
- l. Refuge Water Supply: Benefits-Methodology: see comments on the CAM. The costs associated with the wildlife refuges are only applicable to the taxpayer to the extent that

a net enhancement of fish and wildlife populations can be demonstrated over the populations that would have occurred without the project. Otherwise, the costs are project costs attributable to the direct beneficiaries of the project.

- m. All of the discussion on fish and wildlife, water quality, recreation, and refuges: see comments on the CAM and reconcile the top half of the Table with the bottom half.



South Delta Water Agency

CA Save Our Streams Council



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180

November 1, 2013

Karen Hall
Bureau of Reclamation
2800 Cottage Way
Sacramento, CA 95825

Re: Central Valley Project Interim Contract Renewals:

Pajaro Valley Water Management Agency, Westlands Water District Distribution District No. 1, and Santa Clara Valley Water District	14-06-200-3365A-IR14-B
Tracy, City of (The West Side)	7-07-20-W0045-IR14-B
Tracy, City of (Banta-Carbona)	14-06-200-4305A-IR14-B
Westlands Water District Distribution District 1 (Widren)	14-06-200-8018-IR14-B
Westlands Water District Distribution District 1 (Centinella)	7-07-20-W0055-IR14-B

Westlands Water District Distribution District 1 (Broadview)	14-06-200-8092-IR14
Westlands Water District Distribution District 2 (Mercy Springs)	14-06-200-3365A-IR14-C
Westlands Water District	14-06-200-495A-IR4
Tracy, City of	14-06-200-7858A-IR1

Dear Ms Hall:

On behalf of the undersigned groups we respectfully request these comments be included in the record regarding the Bureau's interim contract renewals for delivery of water from the Central Valley Project referenced above.

As explained below and as reflected in the attached materials, the proposed interim renewal contracts are a threat to California's environment and constitute misguided federal policy. Furthermore, the contracts and their supporting environmental documents have numerous legal deficiencies. Specifically the proposed interim contracts and their supporting Environmental Assessments and other environmental documents violate the Administrative Procedure Act (APA), the Central Valley Project Improvement Act (CVPIA), the Reclamation Reform Act (RRA), the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), the California Environmental Quality Act (CEQA) and the California Endangered Species Act and salmon doubling requirements. Accordingly we urge the Bureau to withdraw all of the proposed renewal contracts and reinstate negotiations after adequate environmental review and consultation have been completed.

By way of example, each of the new "interim two year" contracts all contain the same language that basically perpetually renews the contracts: For Example CONTRACT NO. [14-06-200-3365A-IR14-C](#), provides in pertinent part:

1. Except as specifically modified by this Contract, all provisions of IR13-C are renewed with the same force and effect as if they were included in full text with the exception of Article 1 of IR13-C thereof, which is revised as follows:

(a) The first sentence in subdivision (a) of Article 1 of IIR13-C is replaced with the following language: "This Contract shall be effective from March 1, 2014, and shall remain in effect through February 28, 2014, **and thereafter will be renewed as described in Article 2 of IR8 if a long-term renewal contract has not been executed with an effective commencement date of March 1, 2016.**" [Emphasis added]

(b) Subdivision (b) of Article 1 of IR13-C is amended by deleting the date "February 29, 2014," and replacing same with the date "February 28, 2016."¹

¹ http://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2014_int_cts/index.html

The contract language “will renew” was not disclosed in the one EA/FONSI that analyzed three Delta Division and five San Luis Unit interim renewal contracts for: Pajaro Valley Water Management Agency, Santa Clara Valley Water District, City of Tracy (two contracts) and Westlands Water District (five contracts). Nor was it disclosed in the second EA/FONSI that analyzed eight Cross Valley interim renewal contracts and Article 5 exchanges for: County of Fresno, Hills Valley Irrigation District, Kern-Tulare Water District (two contracts), Lower Tule River Irrigation District, Pixley Irrigation District, Tri-Valley Water District and County of Tulare.

A contract that binds the United States to renewal of interim contracts is contrary to Section 3404 (c) of the CVPIA which reads in pertinent part as follows:

(c) Renewal of Existing Long-Term Contracts.—Notwithstanding the provisions of the Act of July 2, 1956 (70 Stat. 483), *the Secretary shall, upon request, renew any existing long term repayment or water service contract for the delivery of water from the Central Valley Project for a period of 25 years and may renew such contracts for successive periods of up to 25 years each.*

(1) No such renewal shall be authorized until appropriate environmental review, including the preparation of the environmental impact statement required in section 3409 of this title, has been completed. *Contracts which expire prior to the **completion of the environmental impact statement required by section 3409 may be renewed for an interim period not to exceed three years in length, and for successive interim periods of not more than two years in length, until the environmental impact statement required by section 3409 has been finally completed, at which time such interim renewal contracts shall be eligible for long-term renewal as provided above . . .*** [Emphasis added.]

The contract improperly asserts and assumes that Reclamation *will approve renewal of the interim contracts*. This is contrary to section 3404 (c) of the CVPIA which expressly authorizes Reclamation to decline to execute an interim contract. Thus the contract provision asserting Reclamation *will* renew is contrary to Congressional intent and the law’s plain language.

The contract also violates Reclamation’s duties to comply with NEPA.² Reclamation’s commitment to renew the contracts before environmental review takes place renders that review a meaningless charade. Pre-deciding an action precludes meaningful analysis and weighing of project alternatives. Moreover, compliance with other environmental laws such as the ESA, CESA, CEQA, MBTA and the Fish and Wildlife Coordination Act is likewise rendered meaningless because approval of the action is preordained. Some of the undersigned have already commented on the failure of the EA to

² When entering new, renewed, supplemented, or amended contracts, appropriate environmental compliance will be performed. See Reclamation Manual Policy ENV P03 (NEPA) and ENV P04 (ESA); Departmental Manual 516 DM 14; and see Pub. L. 91-190; 42 U.S.C. § 4321, et seq. (NEPA); Pub. L. 93-205; 16 U.S.C. § 1531, et seq. (ESA). See Reclamation Manual Directive and Standard WTR 02-01. Pgs 3-4

sufficiently analyze the full range of alternatives. We reiterate those comments, which are attached, and incorporate them by reference. There is also a failure to comply with the Endangered Species Act including the failure to enforce existing biological opinions and the failure to consult with United States Fish and Wildlife Service when interim contractors discharge into impaired waters especially where endangered species are present such as the San Joaquin River.

Just as Reclamation's environmental analysis failed to consider the impacts of the proposed action upon the water source, these interim contracts will perpetuate these impacts without sufficient analysis and mitigation of the impacts to the areas being dewatered—the American, Trinity, and Sacramento rivers, and the Delta. Limiting the study area and analysis to the lands receiving the water deliveries precludes meaningful analysis of the impacts to the watersheds where the water is being diverted and extracted. Reclamation's decision to enter into a contract to deliver water *by taking it from these watersheds and water sources* has significant impacts on fish and wildlife. These cumulative impacts will be compounded by this ever renewing "interim" contract for water diversion and delivery. Reclamation's deficient review and failure to disclose its "will renew" commitment to the public most impacted by the water diversions renders unlawful Reclamation's proposal to execute these flawed contracts.

Another fundamental flaw is Reclamation's reliance on the outdated and unrealistic quantity terms of the old 1940's and 1950's CVP contracts that exaggerate water supplies and fail to consider the environmental impacts of continuing to irrigate toxic soils that poison lands and waters downstream while deforming migratory birds and other wildlife. Reducing these inflated quantities to reflect these factors is also clearly required by the reasonable and beneficial use requirements of federal and state law. Therefore, Reclamation's decision to roll over all previous maximum water quantity terms, regardless of Reclamation's ability to provide such water quantities, and then by contract to obligate the federal government to such renewals, is a fundamental policy mistake and an illegal agency action.

The defects in the quantity terms are part of a larger problem in that the contracts fail to make adequate provision for environmental protection and mitigation required to restore fish and wildlife impacted by these water diversions and extractions that have left source areas with lethal temperatures, poor water quality, and insufficient water to serve area of origin and public trust needs. This defect is compounded by the adoption of contract language that states the federal government "will" renew the contracts for these exaggerated quantities of water that are not deliverable without devastating impacts. The interim contracts fail to ensure existing standards under the ESA, CVPIA, Clean Water Act, and state water law will be met and implemented as part of these new contract commitments. Specifically the export contracts have not considered the potential impacts to the Delta, the San Joaquin River, Sacramento River, American River and Trinity River. Reclamation's failure to provide for adequate environmental protection in the contracts or even to adequately consider and evaluate the environmental impacts of the proposed contracts, means that the Bureau cannot legally execute the proposed contracts.

A mechanical rollover of all pre-existing and in the case of Westlands Water District ever expanding amounts does not meet the state and federal requirements of reasonable and beneficial use. The cursory “water needs” just added to the final EA without public review, suggests that the analysis is little more than a rubber stamp on an arbitrary and capricious decision to commit the identical inflated quantity for virtually all these contracts indefinitely.

Similarly, Reclamation’s decision to set water prices at the lowest possible level and to perpetuate federal taxpayer subsidies for the maximum possible time flies in the face of federal reclamation law and applicable court decisions. Under Reclamation policy, repayment requirements must be met even in the face of inflated contract totals and drainage repayment contracts. By policy and law the Secretary must establish the rates to ensure prompt and adequate repayment, full cost recovery and encouragement of additional conservation. It is unclear why operation and maintenance fees are being credited back to Westlands under their federal Delta Habitat Conservation and Conveyance Program which seems to circumvent Congressional intent and Bureau policy.

Further, in its responses to comments and in the Final EA, the Bureau continues to ignore its duty to prepare an EIS for the present contract renewals. First, the Bureau attempts to argue that it has no discretion to modify or refuse entry into the interim contracts, citing the Reclamation Project Acts of 1956 and 1963. Nothing in these acts, however, addresses serial renewal of interim contracts or otherwise negates the CVPIA’s explicit grant of discretion to the Bureau to reduce the contract amounts or refuse to enter into the contracts altogether, as discussed above. Indeed the CVPIA, as the most recent and specific statutory directive, is given much more weight than the Reclamation Project Acts cited by the Bureau. *Simpson v. United States*, 435 U.S. 6, 15 (1978) (later statutes receive precedence over earlier statutes); *Busic v. United States*, 446 U.S. 398 (1980) (specific statutes receive precedence over general statutes); *Kidd v. United States Dept. of Interior*, 756 F.2d 1410 (9th Cir.1985) (same). The use of the term “may” in Section 3404(c) of the CVPIA demonstrates that Congress intended to make entry into interim contracts a completely discretionary action. The Bureau ignores this statutory language. Moreover, the Bureau’s preparation of the EA in the first place is an admission of its discretion to modify or refuse to enter into the contracts – as NEPA only applies to discretionary acts.

The Bureau also fails to address section 3404(c)(1) of the CVPIA, which provides that “interim renewal contracts *shall be modified to comply with existing law*, including provisions of this title.” *Id.*, emphasis added. This provision directs the Bureau to determine the environmental protection required by all the existing laws that apply to these contracts and their impacts, including, *inter alia*, ESA, NEPA, CWA, and MBTA, and then to *modify* the contracts – including the quantities of water delivered thereunder -- to bring them into compliance with those laws. Thus, section 3404(c)(1) not only invests the Bureau with the very the discretion it claims it lacks, but also *requires* the Bureau to *exercise* that discretion to bring the contracts into compliance with existing laws.

Second, the Bureau relies on the “short term nature” of these interim contracts. Final EA, App. D, p. 2. However, as discussed above, the auto-renewal clauses in the present contracts raise the specter of many *more* years of interim contract renewals with no further progress on completion of the Final EIS for the long-term, renewal contracts. The CVPIA did not contemplate 20-30 years of unstudied water diversions and use by the contractors, particularly in the context of the accelerating decline in the ecosystem health of the Bay-Delta and impending extinction of imperiled species including the Delta Smelt, Spring-run Chinook, and Winter-run Chinook. Thus, the Bureau cannot claim that the impacts of these contracts are *de minimis*, or otherwise inconsequential, because of the so-called short term nature of these contracts.

Third, the Bureau invokes the concept of tiering and attempts to rely on the CVPIA Programmatic Environmental Impact Statement (“PEIS”), prepared over 12 years ago. However, many important changes to the CVP, its operations, and the affected environment have occurred since the preparation of the CVPIA PEIS. Further, “tiering does not eliminate the EIS requirement when a proposed project significantly affects the environment.” *Western Watersheds Project v. Bureau of Land Management*, 774 F.Supp.2d 1089, 1095 (D.Nev. 2011), *citing* 40 C.F.R. §§ 1502.20, 1508.28. Here, as discussed in previous comments, the Bureau’s entry into the interim contracts causes direct harm to endangered fish species and degrades the water quality in many water bodies throughout much of the state. Thus, the Bureau’s attempt to rely on tiering to obsolete and superseded documents is unavailing.

The duty to study the effects of these interim contracts is critically important given the auto-renewal nature of the 2012-2014 interim contracts, which may tempt Bureau decision makers in the future to forego NEPA review altogether when faced with the next round of interim renewals. Indeed, it seems that the Bureau’s continuing efforts to evade its duties under the CVPIA to analyze the impacts of the contracts have produced 15 years of meaningless paperwork and no solutions to the ever-mounting environmental destruction directly attributable to the contracts.

For all of these reasons we urge Reclamation to require full compliance with the National Environmental Policy Act, Endangered Species Act and existing Biological Opinions, Clean Water Act and rescind these interim contracts and abide by federal and state law.

Thank you for your consideration



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com




Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@gmail.com



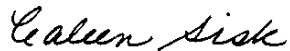
Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Caleen Sisk
Chief of the
Winnemem Wintu Tribe
caleenwintu@gmail.com



Barbara Vlamis
Executive Director
AquaAlliance
barbarav@aqualliance.net



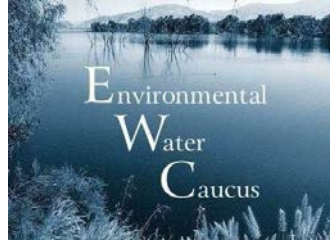
Larry Collins
President
Crab Boat Owners Asso.
lcollins@sfcraaboot.com



Barbara Barrigan-Parrilla
President
Restore the Delta
Barbara@restorethedelta.org

John Herrick, Esq.
South Delta Water Agency
4255 Pacific Avenue, Suite 2
Stockton, CA 95207
Jherrlaw@aol.com

Attachment: Cross Valley Comment Letter FONSI /DEIS



CA Save Our Streams Council



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180

September 26, 2013

Rain Healer
South Central California Area Office
U.S. Bureau of Reclamation
1243 N St
Fresno, CA 93721

RE: Comments on Draft Environmental Assessment Cross-Valley Contractors Interim Renewal Contracts EA-12-048 and Draft Finding of No Significant Impact Cross-Valley Contractors Interim Renewal Contracts FONSI-12-048

Dear Ms Healer,

The undersigned respectfully submit the following comments regarding the above referenced Draft Environmental Assessment and Draft Finding of No Significant Impact for the renewal of the Cross-Valley Contractors water service contract. We urge a full environmental impact analysis be conducted. We include by reference the documents previously submitted disclosing the environmental impacts associated with this type of serial “temporary” interim contract renewal included in Exhibit A and adopted here by reference.

Broad Impacts from both CVP and SWP Project Water Deliveries Renewed Under the Proposed Project Have Not Been Disclosed.

Over two decades of interim contract renewals, USBR has used consecutive cookie cutter Environmental Assessments to thwart the Congressional intent and letter of the law, which requires tiered pricing for this taxpayer subsidized water and disclosure in a clear, complete, and straightforward manner for decision makers and the public of the full environmental impacts of this federal water delivery under Central Valley Water Project Contracts.¹ Using two major federal and state water projects—both the State Water Project and Federal Central Valley Project—along with local water delivery projects and five counties—Fresno, Tulare, Kern, Kings, Benito—with source water impacts from Trinity, Sacramento, Placer, San Joaquin, Merced, and Stanislaus counties, just to name a few, this “new” FONSI and DEA proclaims that renewal of up to 128,300 acre feet of exports from the Delta will not have impacts to the environment.² Without analysis or data, the DEA proclaims that these eight interim renewal contracts and proposed Article 5 exchanges will not have an impact on endangered species. Thus, it is claimed, there is no need for consultation with either the United States Fish and Wildlife Service or the National Marine and Fishery Service. We understand, according the DEA, that “*Environmental documents for long-term contract renewal with the Cross Valley Contractors have not been completed, as ESA consultation for the CVP/SWP Coordinated Operations is ongoing.*” [DEA @pg 7], but this is simply not adequate. Further the proposed water deliveries and diversions will impact critical habitat. The proposed actions will cause direct adverse modification to critical habitat, which will be compounded by the interrelated export of substitute water from the Delta to the Exchange Contractors.³

Finally, the DEA brushes aside impacts to the areas from where the water is taken, where it is delivered, land fallowing, and contract assignments as not needing analysis to reach an informed decision regarding environmental impacts. [DEA @ pg 9] No analysis or data

¹ A contract that binds the United States to renewal of interim contracts is contrary to Section 3404 (c) of the CVPIA. See also previous NEPA documents that along with this document fail utterly to allow the reader to follow the water to the specific place of use and specific user and to understand specific impacts of the delivered water.

² “Up to 128,300 acre-feet (AF) per year (AF/y) of the CV contractors’ contractual CVP water supply from the Delta would be allowed to be exchanged for Friant Division CVP supplies and other sources (other sources of water include rivers, streams, creeks, groundwater, and SWP water). The CV contractors and potential exchange partners (other CVP contractors and non-CVP contractors) are all located within Fresno, Tulare, Kings, and Kern counties. This EA covers the broadest flexibility for Article 5 exchange arrangements known at this time.” [DEA @pdf pg12] The CV contractors are currently in their fourteenth IRC and the proposed renewal would be the fifteenth. [DEA @pdf 17] In addition, Reclamation proposes to approve the CV contractors’ exchange arrangements with individually proposed exchange partners for the 2014 and 2015 contract years (March 1, 2014 through February 29, 2016) for up to the full CV contractors’ CVP contract supply of 128,300 AF/y. The Proposed Action would also include the continued historical exchanges between the CV contractors and AEWS.

³ NRDC v. Rodgers, No. S-88-1658 LKK, Order at 19-20 (May 31, 1995).

regarding impacts to air quality, visual resources, recreation resources, and global climate change are provided, and all are deemed by fiat to not be significant or necessary to analyze.

Failure to Consider a Full Range of Alternatives

Failing to consider a full range of alternatives, the DEA compares the project to itself. The only alternative considered, the no action alternative, briefly discusses the existing 14 serial “interim” contract renewals spanning over a decade and with only one modification requiring tiered water pricing. [DEA @ pdf pg 16] The alternative is dismissed out of hand.⁴ The DEA incorrectly claims that the Bureau is bound by law to renew the contracts without adequate environmental impact analysis or considerations. [DEA pdf @ pg 16]. Reduction of contract water quantities due to delivery constraints on the CVP system was considered in certain cases, but eliminated from the analysis of the eight IRCs, basically claiming federal law requires contracts of the full amount of water even if delivery of that amount of water is not feasible or would harm the environment. [DEA pg 14] This interpretation of the law is incorrect. Section 3404 (c) of the CVPIA which reads in pertinent part as follows: (c) Renewal of Existing Long-Term Contracts.—Notwithstanding the provisions of the Act of July 2, 1956 (70 Stat. 483), *the Secretary shall, upon request, renew any existing long term repayment or water service contract for the delivery of water from the Central Valley Project for a period of 25 years and may renew such contracts for successive periods of up to 25 years each.*

*(1) No such renewal shall be authorized until appropriate environmental review, including the preparation of the environmental impact statement required in section 3409 of this title, has been completed. Contracts which expire prior to the **completion of the environmental impact statement required by section 3409** may be renewed for an **interim period not to exceed three years in length, and for successive interim periods of not more than two years in length**, until the environmental impact statement required by section 3409 has been finally completed, at which time such interim renewal contracts shall be eligible for long-term renewal as provided above [Emphasis added.]*

The contract improperly asserts and assumes that Reclamation *will approve renewal of the interim contracts*. This is contrary to section 3404 (c) of the CVPIA which expressly authorizes Reclamation to decline to execute an interim contract. Thus the contract provision asserting Reclamation *will* renew is contrary to Congressional intent and the law’s plain language.

Additionally, proposed contract renewals suggest that there are no environmental impacts from issuing water contracts that cannot be delivered or that there are no impacts from delivering these unsustainable supplies in wetter years. The DEA asserts:

⁴ *Many of the contractors’ service areas are planted in permanent crops, and in very dry years they have shown a willingness to pay rates above what would be expected in a tiered pricing structure, to preserve their crop planting investment. Therefore it is not expected that switching to a tiered pricing structure would prompt CV contractors to change water use patterns.* [DEA @ pdf @ pg 24]

“Further, CVP operations and contract implementation, including determination of water available for delivery, is subject to the requirements of BOs issued under the federal ESA for those purposes. If contractual shortages result because of such requirements, the Contracting Officer has imposed them without liability under the contracts. Fourth, retaining the full historic water quantities under contract provides the contractors with assurance the water will be made available in wetter years and is necessary to support investments for local storage, water conservation improvements and capital repairs. Therefore, an alternative reducing contract quantities would not be consistent with Reclamation law or the PEIS ROD, would be unnecessary to achieve the balancing requirements of CVPIA or to implement actions or measure that benefit fish and wildlife, and could impede efficient water use planning in those years when full contract quantities can be delivered.”[DEA @pg 14-15]

And yet recent data suggest otherwise. Water quality standards are not being met, temperatures are being exceeded, pulse flows are not being provided and species are in fact facing deteriorating habitat and extirpation. [See exhibit C] The DEA fails to recognize and consider that the CVC water from Friant can be conveyed down the San Joaquin River and recirculated to a Cross Valley contractor or an exchange via the Mendota Pool or the Delta, and analyze the potential environmental benefits of this alternative. Further Reclamation’s absurdly limited range of alternatives in the DEA are also defective because the approach to the “needs analysis” fails to adequately address alternative needs for the water including environmental needs such as restoration of the Delta and the San Joaquin River.

Failure to Comply with the Endangered Species Act (16 U.S.C. § 1531 et seq.)

Unfortunately, the existing Biological Opinions cited in the DEA have not been deemed adequate and species remain threatened with extirpation. The Bureau’s reliance on the USFWS opinion, in this circumstance, does not discharge its section 7(a)(2) procedural obligation to consult with the USFWS or its substantive obligation to ensure that its action would not jeopardize, or cause adverse modification to the critical habitat of, threatened or endangered species.

During the course of its consultation on CVP contract renewals, USFWS was required to “[e]valuate the effects of the [contract renewals] on the listed species.” 50 C.F.R. § 402.14(g)(3). The biological opinion that USFWS produced after consultation was similarly required to include “[t]he Service’s opinion on whether the action is likely to jeopardize the continued existence of a listed species.” Id. at § 402.14(h)(3). The DEA relies on the USFWS Friant Biological Opinion which did not do so.

The Opinion lists 42 species that were ostensibly considered, and then concludes that the long-term renewal of contracts is not likely to jeopardize 36 of these species. See USFWS Friant Biological Opinion at 1-5 to 1-7, 5-1. The biological opinion states no specific conclusion as to the effect of the contract renewals on the remaining six species, however. See id. These six other species include two, the Mountain Yellow-legged Frog and the Yosemite Toad, that were at that

time candidate species; subsequently, the Mountain Yellow-legged Frog was listed as endangered. 67 Fed. Reg. 44382 (July 2, 2002). The other four species as to which FWS reached no conclusion are: the riparian brush rabbit; the riparian woodrat, the Little Kern golden trout; and the longhorn fairy shrimp. USFWS Friant Biological Opinion at 1-6, 3-30 to 3-31, 3-57 The Biological Opinion includes discussion of possible negative effects on each of these species. Yet the Opinion simply omits these species from its list of species as to which the contract renewals purportedly pose no jeopardy. The Opinion also contains no analysis demonstrating that the contract renewals will not cause jeopardy to these species or result in adverse modification of their critical habitat. Reliance on this Biological Opinion to renew these proposed contracts does not meet the requirements of the law. The Bureau has failed to consult and conclude consultation with the USFWS on several listed species. In fact there is no evidence from the documents listed in the DEA that the Bureau has consulted on these operations and impacts from the contract renewals and exchanges.⁵

Typical operation and maintenance operations impacting endangered species are not mentioned or considered. Nor are these activities considered in the cited Biological Opinions. Among the maintenance activities not considered by the USFWS and NMFS in the Friant Biological Opinions are periodic applications of toxic aquatic pesticides to channels, gates, weirs, levees, and other water delivery facilities. See generally *Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526, 528-29 (9th Cir. 2001). These pollutants may, in some circumstances, reach stretches of the San Joaquin River and/or the San Francisco Bay-Delta that provide habitat for winter-run Chinook salmon, spring-run Chinook salmon, Central Valley steelhead, Delta smelt, and Sacramento splittail. See generally USFWS & NMFS Biological Opinion for the California Toxics Rule (March 24, 2000) (file no. 1-1-98-F-21). The referenced USFWS issued a BO (1-1-04-F-0368), dated February 17, 2005, for routine operations and maintenance (O&M) activities on SCCAO lands in San Joaquin, Stanislaus, Merced, Madera, Fresno, Santa Clara, San Benito and Contra Costa counties (USFWS, 2005) referenced DEA @ pg 36 is insufficient and much of the information and monitoring required by that Opinion has never been provided and certainly is not provided in this DEA.⁶ Specifically Reclamation is required to provide:

- An update of the SCCAO O&M Plan every two to five years. Additionally *“Reclamation and the Service will meet every five years to review the effectiveness of avoidance and minimization measures,and reinitiate consultation as appropriate on*

⁵ “However, transfers and/or exchanges involving Friant Division or CV contractors were not addressed by the LTCR Opinion. In addition, the LTCR Opinion did not address some of the species and critical habitats covered in this EA, because their listings/designations occurred after the BO was issued. These species and critical habitats are: the vernal pool fairy shrimp, the vernal pool tadpole shrimp, all critical habitats for vernal pool species, and critical habitat for the California tiger salamander.” See http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=8831

newly listed species and designated critical habitat.” [BO @ pg.7] No such plan is provided in the DEA nor has one been developed to the best of the signees knowledge.

- Within 2 years of the issuance of the BO, Reclamation “shall develop a final Integrated Pest Management Plan.” (BO @ pg 98) No such plan is provided in the DEA nor has one been developed to the best of the signees knowledge.
- Annually “*Reclamation must provide the Service with reports to describe the progress of implementation of all the commitments in the Conservation Measures and Terms and Conditions sections of this biological and conference opinion. The first report is due January 31, the first year after the issuance of this biological and conference opinion, and bi-annually thereafter.*” [BO @pg 99] No such report information is provided in the DEA nor has one been developed to the best of the signees knowledge.

Another set of routine maintenance operations not considered by the DEA or in previous USFWS’s biological opinions is the discharge of selenium-contaminated water from check drains and sumps along the Delta Mendota Canal (“DMC”). The check drains and sumps are necessitated by DMC operations which, in turn, result in large part from the Bureau’s decision to deliver water to the CV contractors from the Delta, so that the Bureau can continue to divert San Joaquin River water to the Friant and CV contractors. See generally NRDC v. Rodgers, No. S-88-1658 LKK, Order at 19-20 (May 31, 1995) (holding that the Friant Dam diversions affect the entire Bay-Delta system and have “required the export of Delta water through the Delta-Mendota Canal”).

Still another impact not addressed in the DEA and serial contract renewals are the cumulative impacts from Delta exports to the Westside of the San Joaquin Valley from the Delta Mendota Canal, San Luis Unit and Cross Valley Contractors. For example exchanges, transfers [water sales] and diversions impact DMC receiving waters, into which the check drains and sumps discharge, ultimately flow into habitat for a variety of listed species, including the Mendota Wildlife Area and, in some circumstances, through the Mendota Pool, down the San Joaquin River, and ultimately to the San Francisco Bay-Delta – each of which waterways is impaired by selenium. Monitoring data on these discharges indicates that the drains and sumps discharge mass loadings and concentrations of selenium that could reasonably be expected to contribute to the jeopardy of numerous listed species (including the giant garter snake, Sacramento winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, Delta smelt, and Sacramento splittail). These discharges also contaminate, and adversely modify, critical habitat for several of these species.⁷ The Bureau has not consulted on

⁷ Not considered in the DEA are impacts from CV renewal contracts to Critical Habitat designated since the Friant Biological Opinion and not considered in this DEA: Vernal Pools http://www.fws.gov/sacramento/es/critical-habitat/Vernal-Pool/es_critical-habitat-maps_vernal-pool.htm CA Tiger Salamander in 2005 <http://www.gpo.gov/fdsys/pkg/FR-2005-08-23/pdf/05-16234.pdf> http://www.fws.gov/sacramento/es/critical-habitat/CA-Tiger-Salamander/es_critical-habitat-maps_ca-tiger-salamander.htm Along with other critical habitat

these operations impacted by the proposed contracts, exchanges, exports and water deliveries. Further the Bureau unlawfully failed to complete consultations on these activities prior to executing the Friant contracts and issuing the Biological Opinion. See generally 50 C.F.R. §§ 402.02, 402.12(a), & 402.14(c)(4), (d) & (g)(4).

Excess water exports from the Delta have led to over 52 species being listed as threatened or endangered. The evidence before the Bureau and the Services demonstrates that these diversions from the Delta to the Cross Valley contractors may appreciably reduce the likelihood of survival and recovery of at least three listed species under NMFS jurisdiction (Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead) and at least two listed species of fish under USFWS jurisdiction (the Delta smelt and Sacramento splittail). The evidence also demonstrates that these Delta diversions do adversely modify the critical habitat for these species. The specific cumulative impacts of these serial contract renewals and the specific impacts from the proposed Cross Valley Contract renewals have not been analyzed, nor have the required monitoring data and mapping required under existing biological opinions. The Bureau has failed to consult or complete consultation on numerous actions specifically authorized by the contracts, renewals, exchanges and transfers [sales]. Further the Bureau has failed to complete consultation with the USFWS on the contract water quantities that the Bureau actually authorized in the serial contract renewals and in the proposed contract renewals.

USFWS Biological Opinion on US Bureau of Reclamation Long Term Contract renewal of Friant and Cross Valley Unit Contracts January 19, 2001 File Number 1-1-01-F-0027. See pages 2-31-32:

*“Monitoring will be used to assess the condition and impacts of Reclamation actions on listed species. Reclamation and the Service are actively developing a monitoring strategy based on the comprehensive mapping program. **The land cover database for year 2000, described in Phase III above, will be revisited every 5 years for monitoring purposes.**” ... “Additionally, Reclamation and the Service **commit to revisit and update the land cover database for year 2000 every 5 years for monitoring and trends analysis purposes.**” [emphasis added.]*

“The Land Use Monitoring and Reporting Program will be implemented immediately to test and track, for the purpose of validating over the life of the project, the assumptions made in this biological opinion that the baselines of the species on Table 1.1 are stable or increasing.

*Monitoring will be used to assess the condition and impacts of Reclamation actions on listed species. Reclamation and the Service are actively developing a monitoring strategy based on the comprehensive mapping program. **The land cover database for year 2000, described in Phase III above, will be revisited every 5 years for monitoring purposes.***”
[emphasis added]

The DEA fails except in a generalized listing to disclose the size and complexity of the proposed interim contracts and exchanges on vast tracks of lands and then brushes aside any analysis of endangered species: “*Due to the size of the Proposed Action’s Action Area, the list of endangered, threatened and sensitive species includes species that may occur within the Counties of Fresno, Kings, Tulare and Kern (San Joaquin Valley portion). The BOs described in Chapter 1.2 contain more detailed descriptions of biological resources in the contractors’ service areas and boundaries.* [DEA pdf @ pg 28] And yet as noted above, USBR and the contractors do not appear to be in compliance with the provision of these Biological Opinions.

None of the required monitoring or mapping is provided in this DEA. [See Exhibit B for Cross Valley acreage included in the BO] It is critically important to understand and evaluate the effectiveness and effects of the 20 years of water diversions that have occurred. In February 2013 USFWS determined in a consultation within a similar service area that the Bureau and interim contractors had failed to abide by monitoring and mapping required and concluded changes were necessary to the water contracts to test assumptions and impacts from previous diversions and deliveries.⁸:

“In the CVPIA Programmatic biological opinion, dated November 2000 (Service File No. 98-F-0124), Reclamation and the Service committed to develop a Comprehensive Mapping Program to identify remaining natural habitats and cropping patterns within CVP Service Areas, and identify any changes within those habitats that have occurred from 1993 to 1999, and then every 5 years thereafter (pages 2-62 and 2-63). Reclamation completed a mapping assessment of habitat changes from 1993 to 1999 and 2005. The Service is unaware of any recent habitat/crop mapping efforts for CVP Service Areas completed by Reclamation since 2005. The Service therefore requests that prior to the next IRC or Long Term Contract Renewal, this comprehensive mapping effort be updated with current imagery and compared with the previous mapping efforts to update the environmental baseline and to verify assumptions by Reclamation that the IRCs do not result in land use changes that would affect federally listed species. Water Supply Deliveries and Sources and Off-Site Conjunctive Use of CVP Water As part of the baseline information provided by Reclamation, the Service asks that Reclamation provide recent data on the following:

⁸ USFWS Correspondence FR: Thomas Leeman to USBR, David Hyatt Re: Consultation on the Interim Renewal of Water Service Contracts for the Cities of Avenal, Coalinga, Huron and California Department of Fish and Game 2013-2015. February 7, 2013.

- *Summary of recent water deliveries and sources under Reclamation’s purview (e.g., CVP, water transfers, exchanges, etc.) for the contractors under consideration.*
- *Summary of off-site conjunctive use projects used to store CVP water supply (e.g., the amount of water stored, location and information on where the water was stored, used etc.).”*

Reclamation goes on to determine in the DEA without analysis or information that the “Proposed Action would not affect any Federally listed or proposed species or any critical habitat beyond what has already been addressed in other consultations. For species under NMFS responsibility Reclamation discussed the Proposed Action and it was determined that federally listed salmonids would not require consultation/conferencing for this interim renewal. Therefore, further consultation under the Endangered Species Act is not required.” [DEA pdf @pg36]

Further claiming, “All of these species and habitats were addressed however by the BOs on coordinated long-term operations of the CVP and SWP and associated documents. Listed salmonids are not expected to return to the upper San Joaquin during this interim renewal period and so don’t require consultation/conferencing.” [DEA pdf @pg 29] This claim is not supported by fact. The Biological Opinions identified in the document have been deemed insufficient and further, the specific impacts of the tiered actions have not been disclosed or analyzed. Nor have the impacts from operational changes, “The exchanges when added to the Article 55 provision in the SWP contracts could result in more frequency of DWR pumping and conveying the 128,300 af/y of water.”⁹ This fails to consider recent violations of temperature, salinity and flow requirements of D-1641.¹⁰[Also see Exhibit C]

Cumulative Impacts Are Not Disclosed or Analyzed from Over a Decade of “Interim” Contract Renewals.

The list of EA’s from 1994 to 2012, which do not include adequate environmental or biological review, document how USBR has thwarted the law and Congressional intent to disclose the impacts from these discretionary water deliveries and diversions from the Delta, surrounding watersheds and site specific impacts. This failure to disclose environmental impacts has been further compounded by the litany of EA’s from 2005 to 2012 for exchanges and transfers [water sales] that are related, but have been put forward in a segmented, piece-meal fashion that precludes analysis of impacts of the project as a whole. For the first time in 2012,

⁹ http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=2575 February 2007 - Renewal of Interim Water Service Contracts

¹⁰ Sacramento River Chinook salmon spawning this year [2013] are threatened by the relaxation of water temperature standards on the upper Sacramento River combined with the violations of water quality standards in the Delta, the result of the over-allocation of scarce water supplies and diverting too much water in a dry year. http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/decision_1641/conserves/docs/05292013swrcb.pdf
http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/decision_1641/conserves/docs/05242013swrcb.pdf

Article 5 Exchanges were incorporated into the EA for the IRCs rather than as a separate EA. This change was made because the two elements are interrelated and it was determined that a combined EA presents a clearer explanation of the overall project. [DEA pdf @ pg 11] This change, while an improvement in disclosing the impacts, still is deficient and documents the piece-meal analysis that historically has occurred. As presented in the environmental assessment, the exchanges and transfers [water sales] and associated biological and environmental impacts provide insufficient data and information to support the conclusion that there are no impacts. Further the failure disclose in a straightforward manner specifically where the water has been used and how much was used and which of those transfers [sales of water] or exchanges will continue does not provide sufficient information on the necessary site-specific review that NEPA requires.¹¹

Thank you for the opportunity to comment.



Jonas Minton
Senior Policy Advisor
Planning and Conservation League
jminton@pcl.org



Kathryn Phillips
Director
Sierra Club California
kathryn.phillips@sierraclub.org



Nick Di Croce
Co-Facilitator
Environmental Water Caucus
troutnk@aol.com



Carolee Krieger
Executive Director
California Water Impact Network
caroleekrieger@cox.net

¹¹ In 2012 a federal budget rider relaxed water transfer [sales] rules allowing the sale of water outside of the CVP service area to areas for example such as Kern Water Bank and other non CVP contractors. See: The Consolidated Appropriations Act, 2012, Division B, Energy and Water Development Appropriations Act, Section 207(c) and deemed the water transfer [sale] also “ meet the conditions described in subparagraphs (a) and (i) of §3405(a)(1) of CVPIA.” The impacts of this expanded water use and delivery are not disclosed.

http://www.usbr.gov/mp/PA/water/docs/CVP_Water_Transfer_Program_Fact_Sheet.pdf

Further the impacts and ultimate use of the water is not disclosed. As noted in previous NEPA documents, “*The CVP water supplies for ARVIN-EDISON WATER STORAGE DISTRICT [AEWSD] are variable and regulates this water by use of the groundwater reservoir underlying AEWSD. In addition, AEWSD engages in Article 5 exchanges of CVP water with the CV Contractors. Up to 128,300 af/y of CV Contractor’s CVP water is delivered to AEWSD. This water is diverted from the Delta through the Aqueduct and to the CVC.In 1997, AEWSD entered into a 25-year agreement with the Metropolitan Water District of Southern California (MWD), in which AEWSD agreed to bank approximately 250,000 af/y of MWD State Water Project Supply for later extraction in drought years. AEWSD has completed construction of an Intertie pipeline connecting the terminus of its canal to the California Aqueduct to enhance the water banking and exchange program. The Intertie pipeline does not create new or additional contractual supplies.*” http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=6086



Conner Everts
Executive Director
Southern California Watershed Alliance
connere@gmail.com



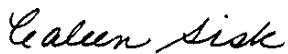
Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org



Lloyd G. Carter
President, Board of Directors
California Save Our Streams Council
lcarter0i@comcast.net



Bill Jennings
Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Caleen Sisk
Chief of the
Winnemem Wintu Tribe
caleenwintu@gmail.com



Barbara Vlamis
Executive Director
AquaAlliance
barbarav@aqualliance.net



Larry Collins
President
Crab Boat Owners Asso.
lcollins@sfcraabboat.com

John McManus
Executive Director
Golden Gate Salmon Asso.
john@goldengatesalmon.org

Exhibit A: Documented Public Interest & Comments Incorporated by Reference [All Documents can be found in the record of earlier contract renewals, earlier NEPA processes and in some cases on the BOR website.]

- 1. 1-29-10 “ Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts” To Rain Healer from Joseph Membrino for Hoopa Valley Tribe.**
- 2. 1-29-10 “Comments of The Bay Institute and NRDC on Draft Environmental Assessment (EA) and Draft Findings of No Significant Impact (FONSI) for the San Luis Unit interim renewal contracts (Central Valley Project, California)” To Rain Healer from Hamilton Candee**
- 3. 2-18-2010 “Comments Re Two Year Interim Renewal Central Valley Project Water Service Contracts: Westlands Water District [WWD] Contracts 14-06-200-8237A-IR13; 14-06-200-8238A-IR13; WWD DD1-Broadview 14-06-200-8092-IR12; WWD DD1 Centinella 7-07-20-W0055-IR12-B; WWD1 Widren 14-06-200-8018-IR12-B; WWD DD2 Mercy Springs 14-06-200-3365A-IR12-C. To Karen Hall, USBR, from 11 Conservation, Fishery and Community Organizations.**
- 4. 3-2-2010 “Final Scoping Comments for Westlands Water District [Westlands] Proposed “Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct”. The project proposes to discharge up to 100,000 acre feet of groundwater into the State Water Project California Aqueduct, a Drinking Water Supply for Approximately 20 Million People”. To Russ Freeman from 14 Conservation, Fishery and Community Organizations.**
- 5. 5-19-10 Letter to Donald Glaser, USBR From David Ortmann, Pacific Coast Management Council**
- 6. 7-30-2010 “San Joaquin River Central Valley Selenium Basin Plan Waiver, 303 (d) Delisting of San Joaquin River for Selenium and the California Toxics Rule” To Jared Blumenfeld, EPA from 16 Conservation, Fishery and Community Organizations.**
- 7. 9-22-2010 USFWS “Comment Letter – San Joaquin River Selenium Control Plan Basin Plan Amendment” To: Ms. Jeanine Townsend, Clerk to the Board from Susan K. Moore.**
- 8. 11-16-2010 “Letter to Senator Feinstein on Long Term Solution to Westlands Drainage Problem” To Commissioner Connor from Environmental Working Group.**
- 9. 12-13-2010 Comments on the Draft Finding of No Significant Impact [FONSI] San Luis Water District’s [SLD] and Panoche Water District’s [PWD] Water Service**

Interim Renewal Contracts 2011-2013 FONSI-10-070. To Rain Healer, USBR, From 8 Conservation, Fishery and Community Organizations.

- 10. 2-28-2011 “Scoping Comments Proposed Ten Year North to South Water Transfer of CVP and Non CVP Water Using State Water Project (SWP) and Central Valley Water Project (CVP) Facilities” To Brad Hubbard, USBR et. al from 10 Conservation, Fishery and Community Organizations.**
- 11. 5-5-11 “Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities” To Deputy Interior Secretary Hayes from 16 Conservation, Fishery and Community Organizations.**
- 12. 8-11-2011 “Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project.” To Michael C. S. Eacock (Chris), Donald R. Glaser, USBR and Ren Lohofener USFWS et. al from 7 Conservation, Fishery and Community Organizations.**
- 13. 10-17-2011 “Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District’s San Joaquin River Improvement Project (SJRIP) FONSI-10-030” To Rain Healer, USBR from 8 Conservation, Fishery and Community Organizations.**
- 14. 11-15-2011 “Full Environmental Impact Statement Needed for San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District [FONSI-10-030]” To Donald Glaser from 13 Conservation, Fishery and Community Organizations.**
- 15. 11-16-2011 Notice Inviting Public Comment on BDCP MOA to Hon. Kenneth Salazar, Secretary John Laird, Secretary from 190 Conservation, Fishery and Community Organizations.**
- 16. 1-5-2012 “Comments on Draft EA/FONSI for Three Delta Division and Five San Luis Unit Water Service interim Renewal Contracts 2012-2014” To Rain Healer from Stephen Volker on behalf of 4 Tribal, Conservation, Fishery and Community Groups.**
- 17. 1-18-2012 “Comments on Draft EA/FONSI for Oro Loma Water District Partial Assignment of Central Valley Project Water to Westlands Water District FONSI-11-092” To Rain Healer, USBR from 12 Conservation, Fishery and Community Organizations.**
- 18. 1-20-2012 “Delta Division, San Luis Unite and Cross Valley CVP Interim renewal contracts—Comments of the Hoopa Valley Tribe on draft EA-11-049 and EA-11-011 and FONSI 11-049 and FONSI 11-011” To Rain Healer, USBR from Leonard E. Masten Jr. Chariman.**

19. 3-26-2012 “Comments on CVP Interim Renewal Contracts for three Delta Division and five San Luis Unit interim water service renewal contracts for: Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District (five contracts) 2012 to 2014 and Environmental Documents.” To Hon. David J. Hayes, Donald R. Glaser, Michael L. Connor, Hilary Tompkins and Michael Jackson from PCFFA et. al [13 Conservation, Fishery and Community Organizations.]

Exhibit C:

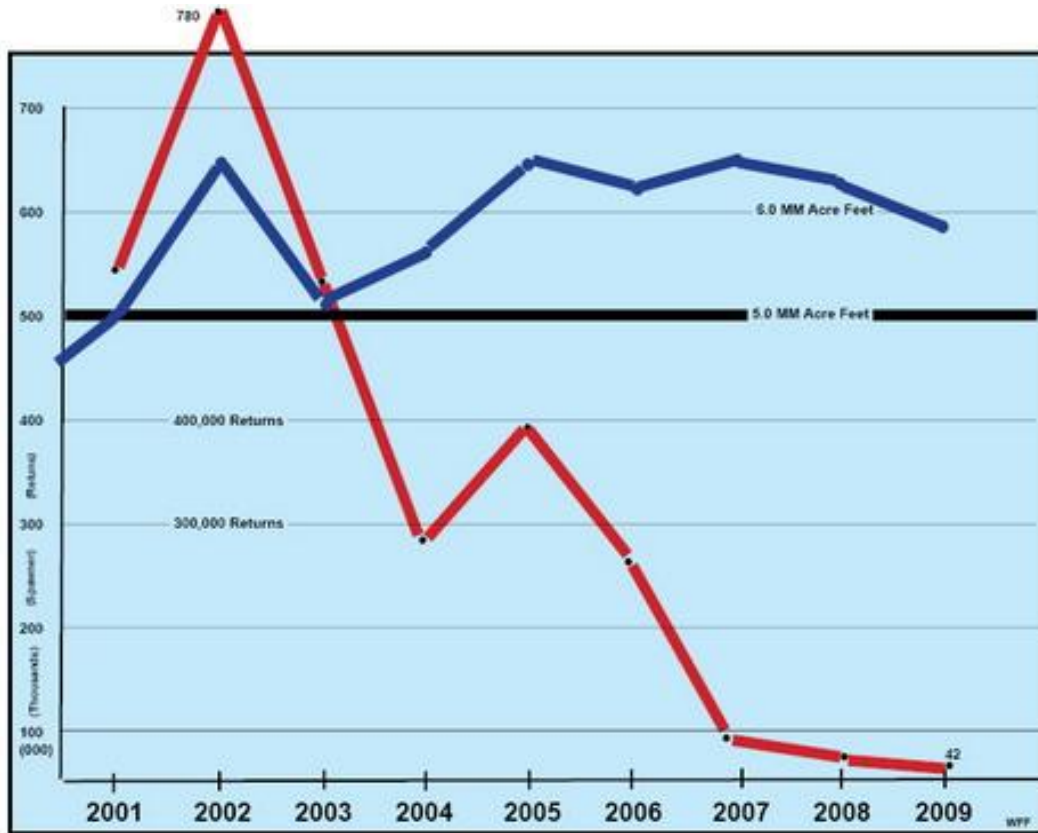


Figure 1. *Pumping increased and salmon crashed* <http://water4fish.org/>

<http://www.counterpunch.org/2012/05/07/carnage-in-the-pumps/>

Report Documents Record Delta Water Exports and Massive Fish Kills

Carnage in the Pumps

by DAN BACHER

A report written by Geir Aasen of the California Department of Fish and Game documents the massive numbers of fish salvaged at the federal Central Valley Project's Tracy Fish Collection Facility (TFCF) and the State Water Projects' Skinner Delta Fish Protective Facility (SDFPF) during the 2011 water year, as well as the record amounts of water exported to corporate agribusiness and southern California by the state and federal projects.

The report appeared in the [Interagency Ecological Program for the San Francisco Estuary Newsletter](#), Fall/Winter 2012 edition.

The State Water Project reported record high water exports, 4.90 billion cubic meters of water, the highest export rate recorded since 1981, the report stated. The federal Central Valley Project exported 3.13 billion cubic meters of water, an increase from exports in 2008-2011, but comparable to exports from 2002 to 2007.

Translated into acre feet, the annual export total via the state and federal Delta pumps was 6,520,000 acre-feet in 2011 – 217,000 acre-feet more than the previous record of 6,303,000 acre-feet set in 2005.

“Annual fish salvage (all species combined) at the TFCF (federal) was high (8,724,498), but well below the record high salvage of 37,659,835 in 2006,” according to the report. “Annual salvage at the SDFPF (state) was 3,0092,553, an increase from 2007 to 2010 which ranged from 646,290 to 2,484,282.”

When you combine the fish “salvaged” in the state and federal facilities, the total count is 11,817,051 fish of all species.

“Splittail were the most salvaged species at both facilities,” the report said. “Threadfin shad (591,111) and American shad (100,233) were the 2nd and 3rd most salvaged fish at TFCF. American shad (558,731) and striped bass (507,619) were the 2nd and 3rd most-salvaged fish at SDFPF. Relatively few Chinook salmon, steelhead, delta smelt and longfin smelt were salvaged at the SDFPF ($=0.7\%$ of total annual salvage combined) and the TFCF (<math><0.3\%</math> of total annual salvage.)”

The total splittail salvage was 7,660,024 in the federal facilities and 1,326,065 in the state facilities, a total of 8,986,089 fish, nearly 9 million splittail and a new salvage record for the species. The fish, formerly listed as “threatened” under the Endangered Species Act (ESA), is no longer listed.

Conservation organizations first petitioned for federal ESA protection for splittail in 1992 and the species was listed as threatened in 1999. After litigation by water agencies challenging the listing, the Bush administration improperly removed the splittail from the threatened list, despite strong consensus by agency scientists and fisheries experts that it should retain protected status.

The Center for Biological Diversity sued, and the Fish and Wildlife Service agreed to revisit the tainted Bush-era decision. The critically endangered splittail was again denied Endangered Species Protection by the Obama administration in October 2010, in spite of an analysis of splittail population trends by the Bay Institute showing that there

has been a significant decline in the abundance of splittail during the past several decades.

The total chinook salmon salvage in the state facilities was 18,830 and the federal facilities was 18,135, a total of 36,965 fish. While the report says that is “relatively few” salmon, fish advocates note that this is still a lot of wild spring run and fall run salmon.

The report says record low numbers of Delta smelt, 51, were salvaged at the federal facilities, while no Delta smelt were salvaged at the state facilities for the first time recorded for 1981 to 2011. Salvage was also low in 2010 (22).

The report breaks down the total amount of fish salvaged by species in a number of charts and graphs.

CWIN, Winnemem Wintu Tribe and GGSA respond to report

After reading the report, Carolee Krieger, president of the California Water Impact Network, commented, “It’s outrageous that the greed of a few growers, who are irrigating poisoned land south of the Delta on the west side of the San Joaquin Valley, is causing this unnecessary fish kill. At the same time, these growers have the most junior water rights in the state of California.”

Caleen Sisk, Chief and Spiritual Leader of the Winnemem Wintu Tribe, emphasized that the “salvaged” salmon mentioned in the report are only a fraction of the total number of salmon that die in the state and federal pumping facilities.

“It seems to me that when a DFG report claims that they only counted 36,965 salmon, which they claim represents ‘relatively few,’ there still remains the gross ‘uncounted and uncountable’ and ‘underestimated’ numbers of salmon that die in the pumps yearly that is not addressed,” Sisk said. “This should be a major concern in the report when the overall return of all wild salmon are on a steady, clear decline. Where is the report that evaluates the health of the estuary from these huge unnecessary fish kills?”

“There seems to be enough studies that verifies the Delta pumps are killing the fish by the millions and they are the reason our water to ocean system is dying,” she stated. “An estuary is like a beaver pond, it is a sacred pool that brings life! We call a beaver pond “k’Od Bisus” (giver of life). Man cannot make an “estuary,” – after such damage, all water systems will respond and change. This is a major concern of the Winnemem Wintu Tribe who sing and dance for the return of salmon to the McCloud River.”

“The salmon are the indicators of how healthy the water systems are from the high mountain waters to the oceans and back again. There should be better safeguard for

such an irreplaceable 'public trust' asset that provides water for all. This is not about 'money' or 'who gets the water' - it is about how an estuary and salmon surviving corporate greed," concluded Sisk.

"The pumps continue to kill our salmon at alarming rates," responded Victor Gonella, President of the Golden Gate Salmon Association (GGSA). "Thanks to the hard work of many, we do have the biological opinions in place to reduce pumping slightly in critical times of migration. We must all remain steadfast to insure the biops are adhered to and push for further pumping reductions in the future."

Bay Institute report documents carnage in the pumps

In March, the Bay Institute released a ground breaking report titled "Collateral Damage" revealing the enormous numbers of fish that are "salvaged" by the state and federal pumps on the South Delta every year.

The report revealed that the record number of any fish salvaged in one year, 13,541,203, was set by striped bass. The annual "salvage" numbers for striped bass from 1993 to 2011 averaged a horrendous 1,773,079 fish.

The report said the average salvage total for all species is 9,237,444 fish, including striped bass, splittail and threadfin shad, as well as ESA listed Sacramento River chinook salmon, Central Valley steelhead, Delta smelt, green sturgeon, and longfin smelt. Over 42 species have been recorded in the state and federal pumping facilities.

However, salvage numbers are only the "tip of the iceberg" of the total fish lost in the pumping facilities. "Salvage numbers drastically underestimate the actual impact," according to the Bay Institute. "Although the exact numbers are uncertain, it is clear that tens of millions of fish are killed each year, and only a small fraction of this is reflected in the salvage numbers that are reported."

A conservative estimate (Kimmerer, 2008) is that, for juvenile salmon that have been pulled towards the pumps, only 1 in 5 will survive long enough to be counted in salvage (the rest are lost to predators or other factors), resulting in an overall loss of up to 10% of the migrating fish (Castillo, 2010). Another study of "pre-screen loss" estimated that as many as 19 of every 20 fish perished before being counted (Castillo, 2010).

"The fact is, the salvage numbers look really bad but the real impact of export-related mortality is probably far worse," the report added.

You can download the Bay Institute's report, Collateral Damage, by going to: <http://bay.org/publications/collateral-damage>).

While this massive carnage takes place in the Delta pumps every year, the Brown administration is fast-tracking the construction of the peripheral canal or tunnel through the Bay Delta Conservation Plan (BDCP). The canal is likely to lead to the extinction of Central Valley steelhead, Sacramento River chinook salmon, Delta smelt, longfin smelt, green sturgeon, Sacramento splittail and other species.



CRAB BOAT OWNERS ASSOCIATION, Inc.
2907 Jones Street
San Francisco, California 94133-1115
415-885-1180

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March 29, 2012

Hon. David J. Hayes
Deputy Secretary
U.S. Department of Interior
1849 C Street N.W.
Washington D.C. 20240

Michael L. Connor
Commissioner
Bureau of Reclamation 91-00000
1849 C Street NW
Washington DC 20240-0001

Hilary Tompkins
Solicitor
U.S. Department of Interior
1849 C Street N.W.
Washington D.C. 20240

Donald R. Glaser
Mid-Pacific Regional Director
Federal Office Building MP-100
2800 Cottage Way
Sacramento CA 95825-1898

Michael Jackson,
Area Manager, SCC-100
South-Central California Area Office
1243 N. Street
Fresno CA 93727

RE: Comments on CVP Interim Renewal Contracts for three Delta Division and five San Luis Unit interim water service renewal contracts for: Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District (five contracts) 2012 to 2014 and Environmental Documents,

Gentlemen:

On behalf of the undersigned groups we respectfully request these comments be included in the record regarding the Bureau's interim contract renewals for delivery of water from the Central Valley Project referenced above.

Despite providing comments in past and attending public meetings regarding interim renewal contracts, none of the undersigned received a draft of the proposed contract language and thus, the ability to comment on the proposed interim contract language in a meaningful manner was precluded. This procedure is contrary to Bureau Policy Manual.¹ Further meetings and notifications of contract negotiations were held at contractor locations, and not where impacts occur from the water diversions, pumping and extraction. Despite previous comments on contracts and procedures this contracting language and notice of the ability to comment was not provided to all of the undersigned groups. Thus, we request these comments be accepted for the record. We adopt by reference previous comments submitted. [See Attachments]

As explained below and as reflected in the attached materials, the proposed interim renewal contracts are a threat to California's environment and constitute misguided federal policy. Furthermore, the contracts and their supporting environmental documents have numerous legal deficiencies. Specifically the proposed interim contracts and their supporting Environmental Assessments and other environmental documents violate the Administrative Procedure Act (APA), the Central Valley Project Improvement Act (CVPIA), the Reclamation Reform Act (RRA), the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), the California Environmental Quality Act (CEQA) and the California Endangered Species Act and salmon doubling requirements. Accordingly we urge the Bureau to

¹ Reclamation Manual Directives and Standards PEC 05-01 [M] Contract negotiations must be announced in advance, and an opportunity provided the public for review and comment of the draft contract. Associated public meetings are to be conducted in a manner that provides opportunities for the public to observe and provide meaningful input. See Reclamation Manual Policy and Directives and Standards CMP P03 and CMP 04-01; and see subsection 9(f) of the 1939 Act (Pub. L. 76-260, as amended by Pub. L. 97-293; 43 U.S.C. § 485h[f]). Pg 5
<http://www.usbr.gov/recman/pec/pec05-01.pdf>

withdraw all of the proposed renewal contracts and reinitiate negotiations after adequate environmental review and consultation have been completed.

By way of example, each of the new “interim two year” contracts contains language that basically perpetually renews the contracts: CONTRACT NO. 14-06-200-495A-IR2, for example, provides in pertinent part:

1. Except as specifically modified by this Contract, all provisions of IR2 are renewed with the same force and effect as if they were included in full text with the exception of Article 1 of IR2 thereof, which is revised as follows:

(a) The first sentence in subdivision (a) of Article 1 of IR2 is replaced with the following language: “This Contract shall be effective from March 1, 2012, and shall remain in effect through February 28, 2014, **and thereafter will be renewed as described in Article 2 of IR1 if a long-term renewal contract has not been executed with an effective commencement date of March 1, 2014.**” [Emphasis added]

(b) Subdivision (b) of Article 1 of IR2 is amended by deleting the date “February 29, 2012,” and replacing same with the date “February 28, 2014.”²

The contract language “will renew” was not disclosed in the one EA/FONSI that analyzed three Delta Division and five San Luis Unit interim renewal contracts for: Pajaro Valley Water Management Agency, Santa Clara Valley Water District, City of Tracy (two contracts) and Westlands Water District (five contracts). Nor was it disclosed in the second EA/FONSI that analyzed eight Cross Valley interim renewal contracts and Article 5 exchanges for: County of Fresno, Hills Valley Irrigation District, Kern-Tulare Water District (two contracts), Lower Tule River Irrigation District, Pixley Irrigation District, Tri-Valley Water District and County of Tulare.

A contract that binds the United States to renewal of interim contracts is contrary to Section 3404 (c) of the CVPIA which reads in pertinent part as follows:

(c) Renewal of Existing Long-Term Contracts.—Notwithstanding the provisions of the Act of July 2, 1956 (70 Stat. 483), *the Secretary shall, upon request, renew any existing long term repayment or water service contract for the delivery of water from the Central Valley Project for a period of 25 years and may renew such contracts for successive periods of up to 25 years each.*

(1) No such renewal shall be authorized until appropriate environmental review, including the preparation of the environmental impact statement required in section 3409 of this title, has been completed. *Contracts which expire prior to the completion of the environmental impact statement required by section 3409 may be renewed for an interim period not to exceed three years in length, and for successive interim periods of not more than two years in length, until the environmental impact statement required by section 3409 has been finally completed, at which time such interim renewal contracts shall be eligible for long-term renewal as provided above . . .* [Emphasis added.]

² http://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2012_int_cts/14-06-200-495A-IR3_WestlandsWaterDist_12%205%202011.pdf

The contract improperly asserts and assumes that Reclamation *will approve renewal of the interim contracts*. This is contrary to section 3404 (c) of the CVPIA which expressly authorizes Reclamation to decline to execute an interim contract. Thus the contract provision asserting Reclamation *will* renew is contrary to Congressional intent and the law's plain language.

The contract also violates Reclamation's duties to comply with NEPA.³ Reclamation's commitment to renew the contracts before environmental review takes place renders that review a meaningless charade. Pre-deciding an action precludes meaningful analysis and weighing of project alternatives. Moreover, compliance with other environmental laws such as the ESA, CESA, CEQA, MBTA and the Fish and Wildlife Coordination Act is likewise rendered meaningless because approval of the action is preordained. Some of the undersigned have already commented on the failure of the EA to sufficiently analyze the full range of alternatives. We reiterate those comments, which are attached, and incorporate them by reference.

Just as Reclamation's environmental analysis failed to consider the impacts of the proposed action upon the water source, these interim contracts will perpetuate these impacts without sufficient analysis and mitigation of the impacts to the areas being dewatered—the American, Trinity, and Sacramento rivers, and the Delta. Limiting the study area and analysis to the lands receiving the water deliveries precludes meaningful analysis of the impacts to the watersheds where the water is being diverted and extracted. Reclamation's decision to enter into a contract to deliver water *by taking it from these watersheds and water sources* has significant impacts on fish and wildlife. These cumulative impacts will be compounded by this ever renewing "interim" contract for water diversion and delivery. Reclamation's deficient review and failure to disclose its "will renew" commitment to the public most impacted by the water diversions renders unlawful Reclamation's proposal to execute these flawed contracts.

Another fundamental flaw is Reclamation's reliance on the outdated and unrealistic quantity terms of the old 1940's and 1950's CVP contracts that exaggerate water supplies and fail to consider the environmental impacts of continuing to irrigate toxic soils that poison lands and waters downstream while deforming migratory birds and other wildlife. Reducing these inflated quantities to reflect these factors is also clearly required by the reasonable and beneficial use requirements of federal and state law. Therefore, Reclamation's decision to roll over all previous maximum water quantity terms, regardless of Reclamation's ability to provide such water quantities, and then by contract to obligate the federal government to such renewals, is a fundamental policy mistake and an illegal agency action.

The defects in the quantity terms are part of a larger problem in that the contracts fail to make adequate provision for environmental protection and mitigation required to restore fish and

³ When entering new, renewed, supplemented, or amended contracts, appropriate environmental compliance will be performed. See Reclamation Manual Policy ENV P03 (NEPA) and ENV P04 (ESA); Departmental Manual 516 DM 14; and see Pub. L. 91-190; 42 U.S.C. § 4321, et seq. (NEPA); Pub. L. 93-205; 16 U.S.C. § 1531, et seq. (ESA). See Reclamation Manual Directive and Standard WTR 02-01. Pgs 3-4

wildlife impacted by these water diversions and extractions that have left source areas with lethal temperatures, poor water quality, and insufficient water to serve area of origin and public trust needs. This defect is compounded by the adoption of contract language that states the federal government “will” renew the contracts for these exaggerated quantities of water that are not deliverable without devastating impacts. The interim contracts fail to ensure existing standards under the ESA, CVPIA, Clean Water Act, and state water law will be met and implemented as part of these new contract commitments. Specifically the export contracts have not considered the potential impacts to the Delta, the San Joaquin River, Sacramento River, American River and Trinity River. Reclamation’s failure to provide for adequate environmental protection in the contracts or even to adequately consider and evaluate the environmental impacts of the proposed contracts, means that the Bureau cannot legally execute the proposed contracts.

A mechanical rollover of all pre-existing and in the case of Westlands Water District ever expanding amounts does not meet the state and federal requirements of reasonable and beneficial use. The cursory “water needs” just added to the final EA without public review, suggests that the analysis is little more than a rubber stamp on an arbitrary and capricious decision to commit the identical inflated quantity for virtually all these contracts indefinitely.

Similarly, Reclamation’s decision to set water prices at the lowest possible level and to perpetuate federal taxpayer subsidies for the maximum possible time flies in the face of federal reclamation law and applicable court decisions. Under Reclamation policy, repayment requirements must be met even in the face of inflated contract totals and drainage repayment contracts. By policy and law the Secretary must establish the rates to ensure prompt and adequate repayment, full cost recovery and encouragement of additional conservation. It is unclear why operation and maintenance fees are being credited back to Westlands under their federal Delta Habitat Conservation and Conveyance Program which seems to circumvent Congressional intent and Bureau policy.

Further, in its responses to comments and in the Final EA, the Bureau continues to ignore its duty to prepare an EIS for the present contract renewals. First, the Bureau attempts to argue that it has no discretion to modify or refuse entry into the interim contracts, citing the Reclamation Project Acts of 1956 and 1963. Nothing in these acts, however, addresses serial renewal of interim contracts or otherwise negates the CVPIA’s explicit grant of discretion to the Bureau to reduce the contract amounts or refuse to enter into the contracts altogether, as discussed above. Indeed the CVPIA, as the most recent and specific statutory directive, is given much more weight than the Reclamation Project Acts cited by the Bureau. *Simpson v. United States*, 435 U.S. 6, 15 (1978) (later statutes receive precedence over earlier statutes); *Busic v. United States*, 446 U.S. 398 (1980) (specific statutes receive precedence over general statutes); *Kidd v. United States Dept. of Interior*, 756 F.2d 1410 (9th Cir.1985) (same). The use of the term “may” in Section 3404(c) of the CVPIA demonstrates that Congress intended to make entry into interim contracts a completely discretionary action. The Bureau ignores this statutory language. Moreover, the Bureau’s preparation of the EA in the first place is an admission of its discretion to modify or refuse to enter into the contracts – as NEPA only applies to discretionary acts.

The Bureau also fails to address section 3404(c)(1) of the CVPIA, which provides that “interim renewal contracts *shall be modified to comply with existing law*, including provisions of this title.” *Id.*, emphasis added. This provision directs the Bureau to determine the environmental protection required by all the existing laws that apply to these contracts and their impacts, including, *inter alia*, ESA, NEPA, CWA, and MBTA, and then to *modify* the contracts – including the quantities of water delivered thereunder -- to bring them into compliance with those laws. Thus, section 3404(c)(1) not only invests the Bureau with the very the discretion it claims it lacks, but also *requires* the Bureau to *exercise* that discretion to bring the contracts into compliance with existing laws.

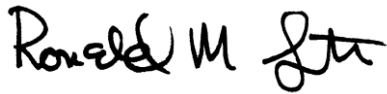
Second, the Bureau relies on the “short term nature” of these interim contracts. Final EA, App. D, p. 2. However, as discussed above, the auto-renewal clauses in the present contracts raise the specter of many *more* years of interim contract renewals with no further progress on completion of the Final EIS for the long-term, renewal contracts. The CVPIA did not contemplate 20-30 years of unstudied water diversions and use by the contractors, particularly in the context of the accelerating decline in the ecosystem health of the Bay-Delta and impending extinction of imperiled species including the Delta Smelt, Spring-run Chinook, and Winter-run Chinook. Thus, the Bureau cannot claim that the impacts of these contracts are *de minimis*, or otherwise inconsequential, because of the so-called short term nature of these contracts.

Third, the Bureau invokes the concept of tiering and attempts to rely on the CVPIA Programmatic Environmental Impact Statement (“PEIS”), prepared over 12 years ago. However, many important changes to the CVP, its operations, and the affected environment have occurred since the preparation of the CVPIA PEIS. Further, “tiering does not eliminate the EIS requirement when a proposed project significantly affects the environment.” *Western Watersheds Project v. Bureau of Land Management*, 774 F.Supp.2d 1089, 1095 (D.Nev. 2011), *citing* 40 C.F.R. §§ 1502.20, 1508.28. Here, as discussed in previous comments, the Bureau’s entry into the interim contracts causes direct harm to endangered fish species and degrades the water quality in many water bodies throughout much of the state. Thus, the Bureau’s attempt to rely on tiering to obsolete and superseded documents is unavailing.

The duty to study the effects of these interim contracts is critically important given the auto-renewal nature of the 2012-2014 interim contracts, which may tempt Bureau decision makers in the future to forego NEPA review altogether when faced with the next round of interim renewals. Indeed, it seems that the Bureau’s continuing efforts to evade its duties under the CVPIA to analyze the impacts of the contracts have produced 15 years of meaningless paperwork and no solutions to the ever-mounting environmental destruction directly attributable to the contracts.

For all of these reasons we urge Reclamation to rescind these interim contracts and abide by federal and state law.

Thank you for your consideration



Ronald Stork
Senior Policy Advocate
Friends of the River
rstork@friendsoftheriver.org



Jonas Minton
Planning and Conservation League
Senior Policy Advisor
jminton@pcl.org



Carolee Krieger
Board President and Executive Director
California Water Impact Network
caroleekrieger@cox.net



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance
deltakeep@me.com



Conner Everts
Executive Director
Desal Response Group
Southern California Watershed Alliance
connere@west.net



Caleen Sisk
Spiritual Leader and Tribal Chief
Winnemem Wintu Tribe
caleenwintu@gmail.com



C. Mark Rockwell
Vice President
Northern California Council
Federation of Fly Fishers
mrockwell@stopextinction.org



Jim Metropulos
Senior Advocate
Sierra Club California
jim.metropulos@sierraclub.org



Bruce Tokars
Salmon Water Now
btokars@salmonwaternow.org



Barbara Vlamis, Executive Director
AquAlliance
barbarav@aqualliance.net



Zeke Grader
Executive Director
Pacific Coast Federation of Fisherman's Asso.
zgrader@ifrfish.org



Larry Collins
President
Crab Boat Owners

Frank Egger, President
North Coast Rivers Alliance
fegger@pacbell.net

CC: Senator Feinstein
Senator Boxer
Interested Parties

Attachment A: Documented Public Interest & Comments Incorporated by Reference

- 1. 1-29-10 "Draft Environmental Assessment and Finding of No Significant Impact for the San Luis Unit Water Service Interim Renewal Contracts" To Rain Healer from Joseph Membrino for Hoopa Valley Tribe.**
- 2. 1-29-10 "Comments of The Bay Institute and NRDC on Draft Environmental Assessment (EA) and Draft Findings of No Significant Impact (FONSI) for the San Luis Unit interim renewal contracts (Central Valley Project, California)" To Rain Healer from Hamilton Candee**
- 3. 2-18-2010 "Comments Re Two Year Interim Renewal Central Valley Project Water Service Contracts: Westlands Water District [WWD] Contracts 14-06-200-8237A-IR13; 14-06-200-8238A-IR13; WWD DD1-Broadview 14-06-200-8092-IR12; WWD DD1 Centinella 7-07-20-W0055-IR12-B; WWD1 Widren 14-06-200-8018-IR12-B; WWD DD2 Mercy Springs 14-06-200-3365A-IR12-C. To Karen Hall, USBR, from 11 Conservation, Fishery and Community Organizations.**
- 4. 3-2-2010 "Final Scoping Comments for Westlands Water District [Westlands] Proposed "Conveyance of Nonproject Groundwater from the Canal side project using the California Aqueduct". The project proposes to discharge up to 100,000 acre feet of groundwater into the State Water Project California Aqueduct, a Drinking Water Supply for Approximately 20 Million People". To Russ Freeman from 14 Conservation, Fishery and Community Organizations.**
- 5. 5-19-10 Letter to Donald Glaser, USBR From David Ortmann, Pacific Coast Management Council**

6. 7-30-2010 "San Joaquin River Central Valley Selenium Basin Plan Waiver, 303 (d) Delisting of San Joaquin River for Selenium and the California Toxics Rule" To Jared Blumenfeld, EPA from 16 Conservation, Fishery and Community Organizations.
7. 9-22-2010 USFWS "Comment Letter – San Joaquin River Selenium Control Plan Basin Plan Amendment" To: Ms. Jeanine Townsend, Clerk to the Board from Susan K. Moore.
8. 11-16-2010 "Letter to Senator Feinstein on Long Term Solution to Westlands Drainage Problem" To Commissioner Connor from Environmental Working Group.
9. 12-13-2010 Comments on the Draft Finding of No Significant Impact [FONSI] San Luis Water District's [SLD] and Panoche Water District's [PWD] Water Service Interim Renewal Contracts 2011-2013 FONSI-10-070. To Rain Healer, USBR, From 8 Conservation, Fishery and Community Organizations.
10. 2-28-2011 "Scoping Comments Proposed Ten Year North to South Water Transfer of CVP and Non CVP Water Using State Water Project (SWP) and Central Valley Water Project (CVP) Facilities" To Brad Hubbard, USBR et. al from 10 Conservation, Fishery and Community Organizations.
11. 5-5-11 "Request for Revised Notice of Intent for the Bay Delta Conservation Plan (BDCP) that Recognizes Water Supply Realities" To Deputy Interior Secretary Hayes from 16 Conservation, Fishery and Community Organizations.
12. 8-11-2011 "Opposition to the Proposal to Curtail Monitoring at the Grassland Bypass Project." To Michael C. S. Eacock (Chris), Donald R. Glaser, USBR and Ren Lohofener USFWS et. al from 7 Conservation, Fishery and Community Organizations.
13. 10-17-2011 "Comments on Draft EA/FONSI (DEA) for the San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District's San Joaquin River Improvement Project (SJRIP) FONSI-10-030" To Rain Healer, USBR from 8 Conservation, Fishery and Community Organizations.
14. 11-15-2011 "Full Environmental Impact Statement Needed for San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District [FONSI-10-030]" To Donald Glaser from 13 Conservation, Fishery and Community Organizations.
15. 11-16-2011 Notice Inviting Public Comment on BDCP MOA to Hon. Kenneth Salazar, Secretary John Laird, Secretary from 190 Conservation, Fishery and Community Organizations.
16. 1-5-2012 "Comments on Draft EA/FONSI for Three Delta Division and Five San Luis Unit Water Service interim Renewal Contracts 2012-2014" To Rain Healer from Stephen Volker on behalf of 4 Tribal, Conservation, Fishery and Community Groups.

- 17. 1-18-2012 “Comments on Draft EA/FONSI for Oro Loma Water District Partial Assignment of Central Valley Project Water to Westlands Water District FONSI-11-092” To Rain Healer, USBR from 12 Conservation, Fishery and Community Organizations.**
- 18. 1-20-2012 “Delta Division, San Luis Unite and Cross Valley CVP Interim renewal contracts—Comments of the Hoopa Valley Tribe on draft EA-11-049 and EA-11-011 and FONSI 11-049 and FONSI 11-011” To Rain Healer, USBR from Leonard E. Masten Jr. Chariman.**
- 19. 2-13-2012 “Comments on FONSI-070-103 Long-term Warren Act Contract and License for Delta Lands Reclamation District No. 770 EA-07-103.” To Rain Healer, USBR, From 11 Conservation, Fishery and Community Organizations.**

Other Historical Documents adopted by reference:

- A. 12-7-2000: NRDC, Hamilton Candee, Comments to Mr. Al Candlish, USBR, Comments on the Draft EA on long-term renewal of Central Valley Project water service contracts prepared by the Bureau of Reclamation.**
- B. 1-9-2001: NRDC, Hamilton Candee, Comments on Proposed CVP long Term Renewal Contracts for Friant, Hidden Buchanan, Cross-Valley, Feather River and Delta-Mendota Canal Units. To David Hayes, Deputy Secretary of Interior et. al.**
- C. 8-4-2005 NRDC, Hamilton Candee to Richard Stevenson, USBR “Comments on Proposed CVP Long Term Water Service Renewal Contract for Westlands Water District.”**
- D. 9-14-2005: NRDC, Hamilton Candee to Richard Stevenson, USBR “Additional Comments on Draft Renewal Contract for Westlands Water District.”**
- E. 4-17-2006 NRDC, Hamilton Candee to Richard Stevenson, USBR: “Final NRDC-TBI Comments on Long-Term Water Service Renewal Contract for Westlands Water District.**
- F. 9-7-2007: California Water Information Network to Ms. Sheryl Carter, USBR “San Luis Unit Interim Renewal Contracts”**



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November 23, 2010

The Honorable John Garamendi
House of Representatives
2459 Rayburn HOB
Washington, D.C. 20515

Re: Request SEC Investigation of Westlands Water District for Misrepresentations and Omitted Statements in the Sale of Bonds to Finance the Preliminary Phase of the Peripheral Canal

Dear Congressman Garamendi:

We seek your help to request the Securities Exchange Commission to investigate whether Westlands Water District (Westlands) engaged in material misrepresentations and omissions in connection with the offer and sale of certain municipal securities, including those issued by the

Westlands and the San Luis & Delta Mendota Water Authority (Authority). The specific securities in question involved a \$50 million Revenue Notes, Series 2009A, CUSIP 798544AM4, issued in March 2009.¹

How could the largest irrigation district in the United States with declining revenues, highly leveraged debt, an uncertain water supply, and few actual water rights, borrow \$50 million in a bond market still reeling from the credit collapse of 2008?² Add to this Wall Street mystery, the fact that the borrowing was to quietly finance the early phase and highly uncertain phase of California's most controversial public works project--- the "Peripheral Canal" -- a massive project previously defeated by the state's voters in 1982.³

Except for a vague reference to a water "conveyance" facility, investors were never told about the history of controversy of the project to be financed. Nor were they informed that this offering was being sold more than one year and a half before even a draft of the new Peripheral Canal project proposal was finalized, any of the required federal, state, and local permits had been approved, or the lands/right of ways purchased upon which the proposed facilities could be built. Investors solicited to purchase these securities should have been informed of the uncertainties and controversy surrounding these notes and that the project's future was uncertain where Westlands proposed use of these funds for the early phase of the Peripheral Canal. Like the subprime mortgage crisis of 2008, the derivatives-driven bankruptcy of Orange County California in December 1994,⁴ and the California energy crisis of 2001, the complexity of circumstances surrounding this offering appears to have been used to mask its true risks for both private investors and taxpayers.

The bond offering relied heavily on Westlands misleading statements that the borrowing was secured by the districts revenues based on federal "water entitlements." The offering, as well as rating service information made available to investors used language that confused "water rights" with "water entitlements."

"Public entities that issue securities are primarily liable for the content of their disclosure documents and are subject to proscriptions under the federal securities laws against false and misleading information in their disclosure documents."⁵

Westlands and the Authority were aware that water entitlements are not "water rights," and that Westlands did not actually own the rights to 1.15 million acre feet of federal Central Valley Project (CVP) water contracts. Yet this claim in the offering served as the very foundation for the Westlands' assets and revenues and, thus constituted the security for the borrowing.

Based on these facts, an investigation is needed to answer fundamental questions and ascertain whether federal law has been violated:

1. Did Westlands Water District intentionally mislead investors by confusing “water entitlements” (contracts for CVP water) with CVP water rights in fact owned by the public?
2. Did Westlands intentionally mislead investors to believe that part of its borrowing was secured by illusory CVP “water rights” instead of inferior CVP water contracts? Specifically, did Westlands mislead investors into believing the borrowing was secured by 1.15 million-acre feet of water rights it did not own?
3. Did Westlands mislead investors by asserting that the federal CVP long term water contract renewal at full contract amounts was likely?⁶
4. Should Westlands have informed investors that its “potential” to sell federally subsidized agricultural water to Southern California and the San Francisco Bay area “at a higher price” was dependent on uncertain legislation still pending before Congress?⁷
5. Should Westlands have told investors that the transfer of 1.15 million acre feet of water rights currently owned by the public to Westlands would constitute the largest privatization of federally owned water rights in the history of the nation?

Background

Westlands Water District (Westlands) is the largest irrigation district in the United States. The district is a quasi-public agency with a highly concentrated private corporate ownership. Nine directors control Westlands, which is one of the strongest proponents of a Peripheral Canal-type isolated water conveyance system for moving Sacramento River water around the San Francisco Bay Delta to the San Joaquin Valley and beyond. The California Delta Habitat Conservation and Conveyance Program (DHCCP) is expected to announce a plan for a massive publicly financed Peripheral Canal-type plan as early as November 2010.

The \$50 million offering that is the subject of this request for investigation is being used to finance the initial studies and engineering development costs of this new Peripheral Canal proposal. In March of 2009, Westlands anchored the \$50 million dollar offering of Revenue Notes, Series 2009A , to finance the California Delta Habitat Conservation and Conveyance Program (DHCCP) under the auspices of the San Luis & Delta-Mendota Water Authority in California. To quote the FitchRatings report on the bond offering:

“Financial strength is derived from the obligor’s, the Westlands Water District (WWD, or the district), credit quality (revenue bonds rated ‘A’ by Fitch Ratings), based on satisfactory historical financial operations and high commodity value.”

“The DHCCP consists of joint efforts by agencies of the federal government, the state of California, and local agencies to fund and plan habitat conservation and water supply activities in the Sacramento San Joaquin River Delta/San Francisco Bay Estuary (the Bay Delta); including Bay Delta water conveyance options. The cost of the DHCCP project is currently uncertain but is expected to be substantial. The current issuance will finance the CVP portion of development costs pursuant to a memorandum of agreement. The ultimate source of funding for such a massive undertaking remains to be determined.”⁸

The DHCCP likely will announce the draft plan for the San Francisco Bay-San Joaquin Delta in late November 2010. This bond offering, however, took place one and a half years prior to the expected release date of the *draft* DHCCP for compliance with the endangered species act. It is widely expected that the proposed DHCCP will embrace the Westlands-backed Peripheral Canal-type option. Cost estimates for the canal or tunnel alone are over \$10 billion, with urban water users in Southern California, Santa Clara and Alameda counties slated to pay the majority of the bill for a project that will primarily benefit would-be agricultural water merchants (primarily Westlands).

The Facts

1. Westlands Water District’s General Manager has publicly conceded that Westlands does not have “water rights” to water delivered pursuant to CVP contracts: “The contractors who receive Central Valley Project Act water do not hold water rights. Those rights are held by the United States [for the benefit of the contractors.]”⁹
2. “Water entitlements” are not the same as “water rights.” Westlands holds interim CVP water contracts, where Westlands has junior contracts for supplemental water up to 1.15 million acre-feet of water a year. Even these contracts are not guaranteed, despite Westlands claims to the contrary. Now and at the time the bonds were issued, Westlands holds interim water contracts, which are subject to the discretion of the Secretary of Interior and balancing other Congressional directives. These water contracts are also subject to the state and federal laws, which have in the past limited water deliveries. Westlands water contract allocations are also subject to the Bureau of Reclamation’s CVP allocation formulas designed to account for various weather conditions.
3. The rating agency and Westlands may have misled potential investors in the \$50 million offering by confusing “water contracts” or “water entitlements” with “water rights.” The

documents misrepresented one of the six key bond rating rationales by claiming it can sell water “entitlements” (contracts), but such sale is not assured under existing federal law. Westlands allows the impression that the revenues of intermittent interim water contracts will be enough to securitize \$50 million dollars of debt:

“The value of the WWD’s entitlement to a substantial amount of water (1.15 million acre feet) offers financial flexibility, as it can be marketed for municipal and industrial uses at a higher price if the water is not sold for agricultural purposes.”¹⁰

This statement is speculative in that in that Westlands’ entitlements to water are not certain, as explained above. This is not a legal and certain right and it misrepresents Westlands’ capabilities by implying that the full amount of this supplemental contract water could be marketed under existing law.

The rating agency documents describing Westlands’ bond offering baits investors with a misleading claim about Westlands “potential” for becoming a major water wholesaler to Southern California and the San Francisco Bay area:

“...The WWD potentially has the ability to sell and transfer water rights outside the district should agriculture cease to be economic, as the demand for water in Southern California and the San Francisco Bay area by users with connectivity to the CVP is very high.”¹¹

However, Westlands failed to inform investors that such “a potential” to sell its contract water “at a higher price” would require regulatory approvals and could only be sold for a short time period until the term of the interim contract expires. At the time of the bond offering, and currently, these water rights are owned by the public and such long term sales are not guaranteed.

4. Westlands also potentially mislead investors into believing that its previous heavily leveraged borrowing would be secured by (1) CVP water rights it did not own and, (2) likely inflated real property values:

“The district’s high leverage position is somewhat offset by **the value of water rights** and real property held by the district, which is not included in fixed assets. The net long-term debt outstanding includes those obligations incurred for water rights acquisition as well as debt for land purchased. At the end of fiscal 2008, the district’s water rights net of accumulated depreciation totaled \$102.5 million, and real property held was valued at \$105.7 million.”¹² [Emphasis added.]

These figures in the offering do not appear justified based on actual values of the primarily water entitlements (not water rights) held by Westlands.

The Law

SEC Rule 10b-5 states that it shall be unlawful for any person, directly or indirectly, by the use of any means or instrumentality of interstate commerce, or of the mails or of any facility of any national securities exchange:

1. To employ any device, scheme, or artifice to defraud,
2. To make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or
3. To engage in any act, practice, or course of business this operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.

Investors and other third parties are entitled to objective information and data free from bias and inconsistency, regardless whether such bias and inconstancy is deliberate. Therefore, financial accounting relies on certain standards or guides that are called "Generally Accepted Accounting Principles" (GAAP).

Conclusion

Investors who purchased the \$50 million in revenue notes should have been fully informed that their funds were to be used in a risky scheme to privatize 1.15 million acre feet of federally owned water rights and the building of the massive and controversial Peripheral Canal water conveyance system around the San Francisco Bay Delta. Tax-exempt bonds are now being used to develop a conveyance system using phantom water rights as collateral. The appearance that the bonds would likely be rolled over or remarketed in 2014 also is unlikely,¹³ despite the fact that this was a key ratings driver for the debt.¹⁴ More broadly, a default on these bonds would not only harm bondholders, but could also have the potential to disrupt municipal bond debt.¹⁵ This risk was recently recognized in a study reported on in the New York Times.¹⁶ This planning project now has an anticipated shortfall of approximately \$100 million. Additional debt and obligation will be needed to complete the studies.¹⁷ Taking action to ensure adequate disclosure of the risks to bond investors is at the heart of our financial system. Last, but vitally important, the undue risks associated with leveraging the sale of inflated amounts of water likely will put increased bias and pressure on federal and state regulators to either bail out these bond holders or skew environmental and water policy. We urge you to seek this investigation and to enforce the disclosure laws before additional debt is issued.¹⁸

Thank you for your assistance,



Jim Metropulos
Senior Advocate
Sierra Club California



Steven L. Evans
Conservation Director
Friends of the River



Conner Everts
Executive Director
Southern California Watershed Alliance



Larry Collins
President
Crab Boat Owners Association Inc.



Carolee Krieger
Board President and Executive Director
California Water Impact Network



Bill Jennings
Chairman Executive Director
California Sportfishing Protection Alliance



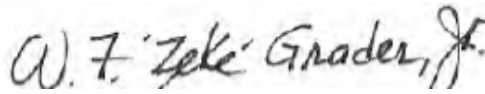
Mark Franco
Headman
WINNEMEM WINTU TRIBE



Wenonah Hauter
Executive Director
Food and Water Watch



Barbara Vlamis
Executive Director
AquAlliance



Zeke Grader, Executive Director
Pacific Coast Federation of
Fishermen's Associations



Byron Leydecker
Chair Friends of Trinity River



Bruce Tokar Co-Founder
Salmon Water Now

Frank Egger, President
North Coast Rivers Alliance

ENDNOTES

¹ See <http://emma.msrb.org/SecurityView/SecurityDetails.aspx?cusip=798544AM4> (Official Statement).
<http://emma.msrb.org/MS279708-MS278527-MD564986.pdf>

² These are revenue notes that rely on the use of what is known as joint powers authorities—a coalition of public and/or private entities that pool resources for project where they can avoid voter approval of the bonds by obtaining a majority vote of the entity's board. [See California Government Code Division 7 Chapter 5 [6500-6599.3].

³ In 1982, California voters defeated the Peripheral Canal (a trench to carry water around the Sacramento-San Joaquin Delta for export south), voting by a 3-2 margin in favor of Proposition 9 (a veto referendum on the Legislature's SB 200 package of statewide facilities and related requirements).

⁴ See Municipal Bond Participants: Public Officials and Obligated Persons Public Officials Report under Section 21(a) of the Exchange Act *Report of Investigation in the Matter of County of Orange, California as it Relates to the Conduct of the Members of the Board of Supervisors.*, Exchange Act Release No. 36761 (January 24, 1996), available at:

<http://www.sec.gov/info/municipal/mbonds/publicof.htm#PO1> (SEC investigation report involving material misrepresentations and omissions in connection with the offer and sale of certain municipal securities issued by the County of Orange, California).

⁵ *Ibid.* See March 1994 Release; 1989 Release, *supra* note 5, at 18,199-10 and n.84; see also *In re CitiSource, Inc. Securities Litigation*, 694 F. Supp. 1069, 1072-75 (S.D.N.Y. 1988); *Draney v. Wilson, Morton, Assaf & McElligot*, 597 F. Supp. 528, 531 (D. Ariz. 1983).

⁶ See <http://emma.msrb.org/MS279708-MS278527-MC564986.pdf>. "The District now expects the long-term Water Contracts to be renewed during the term of the IRD, and in any event before February 10, 2010." D-7. The long-term water contracts were not renewed. Currently, Westlands is still operating under interim contracts with the Bureau of Reclamation.

⁷ See S. 1759 Senator Dianne Feinstein's Water Transfer Facilitation Act of 2009 pending before the Senate.

⁸ FitchRatings Report, San Luis and Delta Mendota Water Authority, California: Delta Habitat Conservation and Conveyance Program Development Project. March 12, 2009, p. 2.

⁹ Tom Birmingham, General Manager, Westlands Water District, Testimony Before the Assembly Water, Parks and Wildlife Committee, May 11, 2010. See <http://www.vimeo.com/11771367>

¹⁰ FitchRatings Report, San Luis and Delta Mendota Water Authority, California: Delta Habitat Conservation and Conveyance Program Development Project. March 12, 2009, p. 2
(*"There is concentration among the WWD's water purchasers. But offsetting this risk somewhat is the value of cash crops farmed in the district (about \$1.3 billion in fiscal 2008) and the absence of alternative/equivalent supplies or infrastructure to deliver water. In addition, the WWD potentially has the ability to sell and transfer water rights outside the district should agriculture cease to be economic, as the demand for water in Southern California and the San Francisco Bay area by users with connectivity to the CVP is very high."*).

"The inherent value in the district's extensive water entitlements through its role as the contractor with the federally owned Central Valley Project (CVP) is a credit strength. Offsetting credit considerations are the risk of the availability of CVP water, its increasing costs, high revenue concentration resulting from the small number of customers/land owners of the WWD, and future capital needs, potentially substantial, to secure future CVP water deliveries." [pp1-2 Credit Summary]

¹¹ FitchRatings Report, San Luis and Delta Mendota Water Authority, California: Delta Habitat Conservation and Conveyance Program Development Project. March 12, 2009, p. 2.

¹² Ibid., p. 6.

¹³ See Del Puerto Water District Benefit Assessment Evaluation California Proposition 218 Engineer's Report Summers Engineering January 2010. In order to pay back the principle instead of only the interest, a 340% water rate increase was sought by the District to avoid a projected deficit of \$4,382,280.

"In addition to the forecasted operational budget, the District also has a principle debt obligation due in March of 2014 to fund its share of the Delta Habitat Conservation and Conveyance Program. This \$150 million effort, which is being cost-shared equally between State and Federal Contractors, will select and design a preferred Delta conveyance alternative for South-of-the-Delta water supplies. Del Puerto's share of this program is \$3,692,405. The annual interest-only obligation currently associated with this debt is being paid as a component of the District's SLDMWA dues. While it is anticipated that the Contractors will be able to "roll" this principle obligation into a construction bond in 2014, no such opportunity currently exists. Due to this uncertainty, the District believes it is prudent to fiscally prepare to meet this debt obligation." P16.

¹⁴ Ibid. FitchRatings. "Key rating drivers are the ability to remarket the notes upon maturity in 2014, the WWD's ability to levy and collect increased land assessments, and ultimate costs attributable to the WWD and authority associated with the expected construction of the DHCCP". [pp1-2 Credit Summary]

¹⁵ *The Muni-Bond Debt Bomb* by [Steven Malanga](#) Wallstreet Journal JULY 31, 2010

New Risks Emerge in Munis Debtholders Are Left Steamed as Some Cities Forgo Repayment Promises, M. Corkery Wallstreet Journal 11-10-2010

¹⁶ See Leurig, Sharlene, Ceres Analysis, *The Ripple Effect: Water Risk in the Municipal Bond Market*, A Ceres Report, October 2010, available at: <http://www.ceres.org/Document.Doc?id=625>; see also

Water Scarcity a Bond Risk, Study Warns (New York Time, October 20, 2010), available at: <http://www.nytimes.com/2010/10/21/business/21water.html>.

¹⁷ San Luis & Delta-Mendota Water Authority Minutes – Delta Habitat Conservation and Conveyance Committee/Special Board Of Directors Meeting Workshop June 24, 2010.

"Executive Nelson reviewed additional funding needs to complete the development of the DHCCP. Nelson reviewed the most recent budget and indicated that the program continues to track around \$100 million over budget. Nelson indicated that our share of the original \$140 million commitment will likely provide sufficient cash flow through December 2010. We will need to have additional funding available by then to allow continuation of the project without delays. Nelson reported that we had initiated discussions with Dave Houston and Bond Counsel Doug Brown to secure funding and that we were looking at bonds that would mature 3/1/14 (date of maturity of original DHCCP bond financing). The expectation is the payments through maturation would be interest only and that the bond would be refinanced as part of

the financing for the construction of the project. Nelson reported that the Direct Funding Agreement 1st Amendment with DWR had been executed. Rathmann indicated that she was working on a draft Activity Agreement amendment to accommodate the increased funding.”

¹⁸ First Amendment to the Agreement for Funding Between the Department of Water Resources and the San Luis & Delta Mendota Water Authority for the Costs of Environmental Analysis, Planning and Design of Delta Conservation Measures, Including Delta Conveyance Options. 6-13-2010.

DHCCP Workshop Minutes (7-28-10) *“Nelson reported that we had initiated discussions with Dave Houston and Bond Counsel Doug Brown to secure funding and that we were looking at bonds that would mature 3-1-14 (date of maturity of original DHCCP bond financing). The expectation is the payments through maturation would be interest only and that the bond would be refinanced as part of the financing for the construction of the project.”* “Nelson reminded the Committee that although our original funding commitments would cash flow the project through the end of the year, we will need to commit to additional funding through the approval of Task Orders, probably by the beginning of October.”