

The Dispute for Water in the Bay-Delta Watershed

Questions

1. How much of a danger is monetizing water by trading certain parts of it on the commodities market/stock exchange?
2. It sounded like Jon was concerned about the decrease in fisheries. I thought they were bad for native species.
3. Please address the eradication of Tulare Lake to the health of this ecosystem.
4. Can you provide a link to report on water supply needs for the delta?
5. What, if any, consideration of Indigenous Nations' rights were included in the development of any of the pathways to establish standards?
6. What would your call to action message be to people if there was more of a buzz? The campaign can be -where does your water come from. But connecting that to urgency around addressing the bay delta ... going to a meeting while a good suggestion - doesn't quite seem enough.
7. If an organization had the resources to sue the State Water Board, with the goal of goading them into action, what would be the 'best' set of laws upon which to base the lawsuit?
8. How much should we encourage or discourage upstream dams which affect flow? Should we build Sites? Should we divert to groundwater? Should we remove the reservoir at Hetch Hetchy in Yosemite?
9. Will the proposed diversion tunnel through the Delta help or harm the achievement of improved water quality and species protection in the SF Bay-Delta?
10. Tam says the environmental documentation for the Bay-Delta Plan Update should include a "concrete" Voluntary Agreement alternative. Are the Voluntary Agreements well-defined enough to constitute a CEQA alternative? If not, how long must we wait?
11. Are SGMA plans and goals coinciding with the state water board's goals? How does SGMA impact voluntary agreements?
12. Enviro needs to do social media campaigns to save the Delta — Restore the Delta has done this for years. Does she mean environmental groups more broadly?

Chat Log

I have read in news articles in the past that Delta area farmers also don't support efforts to "save" the Delta, specifically the levies protecting it? how can that be? I am a suburban/city mouse so keep it simple. I don't understand.

Bay-Delta Flow Criteria are available at

https://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/final_rpt.shtml

Q: How will the Board set the "appropriate Delta flow criteria" required by the Delta Reform Act

for Rachel: Enviro need to do social media campaigns to save the Delta — Restore the Delta has done this for years. Does she mean environmental groups more broadly?

Maintaining the integrity of the Nation's water, particularly regarding stream flows, pollutant loading, habitat for flora and fauna were among the items linked to the "overall health of downstream waters of the United States." Among these, are intermittent streams and their "important ecological functions", the hydrologic connectivity they provide and the "[r]ich biotic communities [that] often exist in ephemeral stream channels and in the surrounding riparian zones". How important are these considerations?

I have recently heard from some groups in the San Joaquin Valley that water flows are only one of many factors determining the health of delta ecosystems (thereby minimizing the importance of these conversations and encouraging conversation about other factors). How would you all reply to that comment?

Short answer is NGOs say "address both flows and other stressors" while water users say "address other factors instead of flows"

What about the Public Trust?

Reducing Inequality through Better Groundwater Management

Questions

1. Will you discuss protection of groundwater for the environment through the Public Trust? How is groundwater being protected in public lands and other lands since the first use is supposed to be for the environment and people, as I understand.
2. Why hasn't there historically been a basin-wide well monitoring program and what are the steps to include a comprehensive well-monitoring program in SGMA... some program that allows numbers to show disparities in demand of water and address those mostly contributing to GW decline? Basically to point fingers appropriately
3. What impact is AB 685, the Human Right to Water act having on the management of groundwater?
4. I have learned that other States impose fines on domestic well and septic users who fail to address their septic and water quality standards. Does this happen in California and if so, how can we eliminate this?
5. My second question is about septic systems and their effect on water quality for domestic well use. Is this an additional cause of water degradation? Please elaborate.
6. How are unincorporated, white area, small farmers who rely on only GW for their farming operations as well, and not just communities, included in SGMA discussions? Are these smaller farmers being targeted in white areas?
7. Similar to the Bay-Delta issue, it appears that commenting and political action to the State Board and DWR is needed to highlight the impacts on these disadvantaged communities. What actions have been done to date, and who is (or can) pay for these actions?
8. How can a small community become a "prioritized" basin? Previously, I think, only high and medium priority basins could be required to have a GSA. Who would do this process?
9. The Department of Water Resources (DWR) is comfortable with its technical assistance role under the Sustainable Groundwater Management Act (SGMA) but less comfortable with its regulatory role in approving or disapproving plans. What needs to be done to encourage DWR to use its regulatory role to protect domestic wells?

Chat Log

Domestic well impacts: https://waterfdn.org/wp-content/uploads/2020/05/Domestic-Well-Impacts_White-Paper_2020-04-09.pdf

Water Quality impacts: https://waterfdn.org/wp-content/uploads/2021/01/Groundwater-Constituent-Impacts-and-Trends-in-California-Domestic-Wells-and-Public-Water-Systems_12042020.pdf

Drinking Water Well Mitigation Framework can be found here:

https://d3n8a8pro7vhm.cloudfront.net/communitywatercenter/pages/3928/attachments/original/1590776730/Well_Mitigation_Print.pdf?1590776730

Domestic wells in the great central valley are usually located in a shallow portion of the aquifer system that overlies the pressurized confined deep aquifer that is tapped by large diameter irrigation wells. When the pressure is reduced by big pumps the overlying aquifer leaks into the deep aquifer. Monitoring must include deep wells to identify long-lasting impacts.

: A lot of this "critical thinking" has been developed for decades in the "development" literature. One scientific foray was conducted at the International Institute for Applied Systems Analysis (IIASA) and resulted in the publication of "Uncertainty on a Himalayan Scale: An Institutional Theory of Environmental Perception and a Strategic Framework for the Sustainable Development of the Himalayas" in 1986. Has your group looked at any of this? Michael Thompson and Dipak Gyawali published "Aid, Technology and Development, Lessons from Nepal."

...much of the water in the upper unconfined zone of the aquifer system leaked downward through the confining beds into the lower confined aquifer after development. Groundwater development in the San Joaquin Valley has reduced the effectiveness of the confining beds within the aquifer. Thousands of wells with casings perforated for much of their length have been drilled through the clay confining units. Where these wells are open to the unconfined and confined aquifers, they allow virtually unrestricted vertical flow through the well bore. The amount of water that flows downward through one large-diameter well has been estimated to be equivalent to the natural leakage through the "E-clay" over an area of approximately 7 square miles.

For those who want a citation or summary of the Scott River public trust case:

Environmental Law Foundation v. State Water Resources Control Board (2018) 26 Cal.App.5th 844. The public trust doctrine applies to groundwater extractions to the extent those extractions adversely affect public trust uses in navigable waters. The Sustainable Groundwater Act does not supplant the public trust doctrine.

We are just about to start dealing with this in the SGMA process.

Can you speak to any regulations and enforcement of pumping of treated wastewater for aquifer storage? Particularly about toxics of emerging concern, currently not regulated, but known (esp. in other countries) as a hazard. Also, combination products in these water pools.

How can domestic small water systems, who are appropriators and have the lowest or no water rights in an over drafted basin, be protected if overlying water users have priority water rights

Tribes have SOVEREIGNTY as well....,

Alaska film: "The Third Trustee" could be useful in sovereignty discussion.

How are other State Programs, SAFER funding and CV-SALTS Basin Plan Amendments etc. being integrated?

Aren't "Communities " already involved? The need for "outreach" is sometimes over-emphasized; perhaps efforts toward better listening?

"Everybody knows water doesn't flow uphill toward money, but you get better results in California if you assume it does...."

Similar in the SJV: Almond planting in the Valley increased throughout the drought, when thousands of families' wells were going dry

One addition on the groundwater rights discussion: There can be priority for overlying pumpers versus appropriators, but it depends on historic use, especially in overdrafted basins because appropriative rights can turn into "prescriptive" rights if they pump adversely during times of overdraft... which has been much of the history of the San Joaquin Valley. Past legal cases have shown that municipal appropriators have high priority. Domestic wells also are overlying users, so they have top priority regardless of how you look at it.

Public Trust requires "burden" reversal- interesting?

Does the Public Trust Doctrine apply to groundwater basins? to water derived from wells (and therefore to the wells themselves)?

Opportunity to "Revalue assets" during Covid Pause while we're "sheltering in place?"

What is the citation to the scott case re: public trust?

<https://legal-planet.org/2018/08/29/california-court-finds-public-trust-doctrine-applies-to-state-groundwater-resources/>

The documents are at envirolaw.org

<https://www.envirolaw.org/documents/ScottCourtOfAppealOpinion.pdf>

Covid provides a unique opportunity because investment markets are temporarily disconnected. We don't have to have either a war or global depression because the biggest "public trust" of all is "money" itself. Instead of ascribing "truth" to talk show economists like Milton Friedman, look toward more traditional advice from monetary disequilibrium theory. This has been absolutely great!

Another addition on the groundwater rights discussion: when a domestic system fails, the user is sometimes told to join a small community water system, which transforms that user from an overliar to an appropriator, but that user would have no historic prescriptive right.

When you have extreme uncertainty, exploratory and inclusive is more appropriate than adversary and exclusive-