Brief Thoughts on the Complexity of Wildland Urban Interface Policies and California Wildfire Solutions

By: Howard Penn, PCL

(not a researched analysis, but a discussion instigator)

As the largest populated state in the union, Californians’ footprint on the land has expanded as we have grown and created impacts up and down our geographical landscape. Additionally, as one of the largest GHG producers in the country, our climate crisis is defining how we cohabitate with wildfires. After decades of debating legislative solutions, local resource management policies, and political differences between diverse stakeholder groups, we are primed to continue nibbling around the edges of various WUI and wildfire policy solutions all while becoming known for the top ten most costly wildland fires in the U.S. in 2019 (most likely we will win the same top spot in 2020).

The following talking points are the beginning of a much larger and drastically needed “pragmatic” dialog on California’s wildfire crisis. “Pragmatic” because our strategies have largely been siloed in arenas such as forest management, wildland urban interface (WUI) policies, building codes and structure hardening, homeowners’ insurance, and political/environmental/financial debates among stakeholders.

To start, here is a recent article on wildfires in the LA Times that touches on a number of the relevant topics below.

Wildland Urban Interface (WUI)

Let us first start with the definition of WUI. This is not well established or agreed upon in California statute and how and what it should entail will be a debate in-and-of-itself. Past legislation has attempted to address WUI wildfire threats with either planning restrictions, building code requirements, evacuation planning and routes, and a myriad of other policy objectives to better plan, manage, and implement future development in the WUI. Little if anything has been done to address existing development in the WUI and what to do about the extensive growth in the WUI that has already been built to date. Mapping of the WUI is also an ever-moving target and often too outdated to base real-time planning on.

There has been little success in passing WUI legislation and the ones that have passed the Governor’s desk have been mainly focused on building codes and fire standards. Additionally, there is a debate about whether the WUI is really the best area or only area to focus on since California has very large WUI “zones”. Here is an abstract that highlights the challenges of that analysis and proposes it is more a geographical topology problem than just a regional WUI issue.

Due to the highly charged political issues around development, housing needs, existing private property rights, government over-reach, private and public financial burdens, unforeseen land use consequences, and other challenges of managing growth (see several below), legislating WUI policies touch on just about every political hot-button known in the land use sector. No wonder we are not that much farther along in protecting or preventing growth in the WUI any more than we are solving the climate crisis by reducing VMT.

Prescribed Burns

Native Americans performed prescribed burns to manage their interactions with the land... and although I appreciate that historical tidbit, it does not help as an analogy for land use management today. The United States is not one person per square mile or less anymore. Given that our expansion into the
forests, grasslands, and mountains of California exploded after WWII, there are very few places left that do not have the need for better fuel reduction practices that don’t overlap with human settlement and/or development. Prescribed burns are an often-promoted solution for many resource management agencies looking for an effective and less expensive approach to mitigating fire risks. Because manual removal of a fuel load is time-consuming, expensive, and in many areas problematic, prescribed burns are preferred. There is much science around the benefits of prescribed burns as well but that is not the limiting factor. It often comes down to logistics and funding. The window of opportunity to execute prescribed burns in many areas is becoming narrower and less predictable. The risks factors in surrounding areas are becoming more severe and air quality in many regions reduces the window even more. In the end, although prescribed burns are highly desirable in many applications, the execution of that is fraught with challenges and because of these additional challenges, the cost of prescribed burns is increasing as well.

Forest Management
Although there are many debates on how to best manage our forest, there is one component we should be mindful of when looking at long term policies for wildland and wildfire management. When encouraging or requiring landowners to clear brush (defensible space around structures) or force jurisdictions to address their planning strategies for approving developments in wildfire areas and/or WUI’s, incenting destructive approaches to meeting those requirements is problematic and usually detrimental to ecosystems, watersheds, and resource management goals. Simply put, clearcutting land in advance of a development application to avoid restrictive wildfire/WUI regulations is a very probable outcome and similar to changing the baseline requirements on a parcel before initiating a CEQA EIR.

Evacuation Plans and Routes
Evacuation routes and planning has been a source of recent policy debate around land use planning requirements. If we are going to continue building in the WUI and wildfire zones, then jurisdictions should plan better for evacuation and emergencies in advance. This seems reasonable but the catch is the consequences of building additional roads or expanding current capacity for evacuation without restricting future growth on those routes. Not acknowledging induced demand for emergency transportation infrastructure is short-sighted at the least.

Rooftops Drive Economies
This is a dynamic and political topic that could in-and-of-itself require many pages of explanation. However, the relevant point that relates to WUI and wildfires is the desire for jurisdictions of all types to build sprawl housing as a generator of property taxes to fulfill budgetary needs. Many rural and suburban jurisdictions look at rooftops as their only reliable tax revenue to cover budgetary demands and increased costs and restricting them in doing so undermines their financial sustainability. If the state is going to realistically address the concerns and costs of increased wildfire risks in WUI regions then the financial impacts of those policies need to be addressed as well. Furthermore, affecting the production of housing given the housing crisis debate as well as the loss of tax revenue for jurisdictions is a recipe for a political battle on all fronts. This is a prime example of the uphill battle placed on WUI legislation.

Homeowners Insurance
Homeowners insurance has become a topic of major concern for local economies affected by wildfires. People that do not live in high wildfire areas may not be aware of the constant non-renewals of homeowner insurance policies throughout the wildfire zones — thousands of homeowners not being able to insure their homes. It is somewhat obvious why the insurance companies don’t want to underwrite high-risk properties and especially don’t want to be “over-saturated” with exposures in high-
risk areas, i.e. Merced Insurance’s insolvency due to the Camp Fire in Pioneer. What is not so obvious is the underlying factors that are contributing to the non-renewals and subsequent increase of coverage by the California FAIR Plan, a high-risk fire insurance pool made up of an association of admitted property insurers in California. This FAIR plan is now on the brink of being “over-subscribed” in high-risk areas and property values and sales are being affected by the ability to find cost-effective homeowners’ insurance on the private market. Suffice to say, this is contributing to the increased anxiety and local political climate around preventing wildfires. Additionally, insurance companies don’t use a standardized approach to assessing risk and their contracted risk assessments do not take into account individual property owner’s prevention measures or house hardening efforts. If requiring upgraded building codes for new homes, as well as possible requirements on remodels or upgrades, does not benefit one’s risk rating, it may all be for not if you can’t insure your home for a reasonable price.

Public vs Private Lands Management
Our WUI communities are now a checkerboard of private and public lands. Better forest management on public lands can only help the wildfire situation but will not solve the problems. With the influx of private residents into the WUI, protecting people, structures, and infrastructure from devastating wildfires is only becoming more demanding and costly. Our state and federal budgets are not keeping up with the backlog of forest management projects and private landowners often do not have the resources to clear their own properties. This is a critical illustration of how we are all dependent on each other. One property may be cleared but is surrounded by neighbors’ brush and fire fuel. Local ordinances to require brush removal are impeded by costs, physical ability, and willingness to change one’s perceived quality of life (“I live in the forest for a reason”). Furthermore, the common conversation of “let’s manage our forests better so we can reduce wildfires” is not the accurate truth of the matter. Most human caused wildfires do not start in a “forest” or at least what we think of as a typical forested area. They often start along roadways or in the interface between open spaces and forested areas and human settlement. These interfaces could be managed better to help stop ignition points. This is not to say that managing the forests better does not reduce the overall severity of incidents but acknowledging the nuances of ignition points and wildfire causes may help us better understand financially and strategically effective solutions.

Conclusion
For the last several decades, we have been kicking this can down the preverbal road. Whether it is land use or building practices that have avoided the pressing issue of putting more population in the WUI or implementing policies to protect that growth or not acknowledging the economic and social pressures that have incented those short-sighted practices or executing forest management practices on a small all-be-it valuable scale or not appreciating earlier the existential threat of climate change on just about every environmental and human interaction, we are where we are due to a misjudgement of the consequences. An integrated, whole-of-government approach to addressing these issues is needed... and urgently needed now.

We have also identified a gap in our current planning policies. Nothing is currently in statute to help jurisdictions pre-plan for rebuilding after a disaster. We have emergency response plans in place but once a disaster such as fire, flood, or earthquake happens, the rebuilding is fairly ad hoc. Current CEQA exemptions exist for rebuilding the same footprint as before, but what if a community or jurisdiction wants to rebuild more “smartly” or responsibly? We are proposing a policy shift from reacting to post disaster rebuilding such as Santa Rosa or Butte County has done in recent years to a more proactive pre-planning process with financial and regulatory incentives for jurisdictions to rebuild better. This would be a smart way to encourage jurisdictions to think about what, where, and how they want to rebuild after a catastrophic disaster. All components of well-thought-out neighborhoods, which we understand
much better now than when most communities in California were built, could be addressed and implemented. Although this does not solve the problems discussed above, it solves a different problem that is not currently addressed by Californian’s planning policies.