



Testimony

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**Chairman Tom McClintock
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Introduction

Thank you Chairman McClintock and Ranking Member Tsongas and members of the House Subcommittee on Federal Lands, for the opportunity to testify on the impacts of catastrophic wildfire on communities and vital water resources in the West.

My name is Andrew Fecko and I serve as the Director of Resource Development for Placer County Water Agency (PCWA), and as a member of the National Water Resources Association's (NWRA) Federal Affairs Committee and a Co-Chair of its Forest Health Working Group. I help operate PCWA's water, energy and recreation infrastructure in the heart of California's Sierra Nevada mountains.

About PCWA

Placer County Water Agency owns and operates the Middle Fork American River Project, providing water supplies, hydroelectric power, public recreational opportunities and environmental stewardship for the people of Placer County and the region. The people of Placer County built the Middle Fork Project in the 1960s to develop local water resources for the long-term public benefit. Placer County Water Agency was created to ensure, and remains committed to supporting, diligent management of those water resources.

About NWRA

NWRA is a nonpartisan, nonprofit federation made up of agricultural and municipal water providers, state associations, and individuals dedicated to the conservation, enhancement and efficient management of our nation's most important natural resource, water. NWRA represents a diverse group of agricultural and municipal water users and water providers from throughout the American West and portions of the Southern United States. Our members provide clean water to millions of individuals, families, agricultural producers and other businesses in a manner that supports communities, the economy and the environment.

California Water

PCWA is one of some 50 water and energy utilities that operate in the Sierra Nevada mountain range, which provides approximately 65% of California's water supply on an annual basis. Simply stated, California's mountain headwaters and the rain and snow that falls in these watersheds make it possible to supply clean drinking water to 38 million Californians and the homes, farms and businesses that support a \$1.6 trillion dollar annual economy.

Why Federal Land Policy Matters in California

Approximately 45% of California is owned and managed by the federal government, and well over 75% of our headwaters are managed by the US. Bureau of Land Management or the U.S. Forest Service. This means that while local agencies own and operate water and hydroelectric systems through-out these headwaters, the land from which our water and energy supplies are derived are managed by policies that are not locally derived and which often have far-reaching economic and societal impacts throughout the state.

Our Recent Experiences

PCWA is located in the Middle Fork American River watershed, about 2 hours east of Sacramento, California. Our watershed spans some 412 square miles, and provides enough drinking water for 250,000 citizens and enough renewable hydroelectric energy for 100,000 homes. 36% our watershed, some 150 square miles – has burned since 2000. While some of these fires have been mild in nature, others have been increasingly devastating because of the intensity and severity with which they engulf the landscape. This troubling trend, fueled by decades of active fire suppression and changes in forest management policy and exacerbated by natural drought conditions, has led to a situation that puts California’s water supplies at great risk, and leaves local agencies like mine bearing the consequences.

King Fire

Our experience with the King Fire in 2014 offers a good example. The King Fire was ignited on the afternoon of September 13, 2014 in El Dorado County. For the first 4 days, the fire burned in a mix of privately managed timberlands and the El Dorado National Forest, growing to approximately 20,000 acres by the morning of Wednesday, September 17, and spreading at a moderate rate. Wednesday afternoon brought extremely low humidity and increased wind speed, which drove the fire into the remote and densely forested Rubicon River canyon, an important tributary to the American River. Once it reached the Rubicon canyon, the fire exploded.

In the next 12 hours, the fire grew by almost 50,000 acres, making a run of almost 16 miles overnight. Fire officials on the ground used words like “unprecedented” and “unheard of” to describe the speed and intensity at which this fire destroyed the landscape. A rare mid-September rain storm and a calming of wind conditions were the only two factors that halted this fire from continuing its advance into the Lake Tahoe watershed and even more devastating consequences.

The King Fire ravaged the Rubicon River watershed with high-severity incineration. Complete loss of vegetative cover has exposed soils to erosion on thousands of acres of steep, sloping river canyons. Sediment and debris derived from this erosion threaten the integrity and function of hundreds of millions of dollars of water and power infrastructure, as well as miles of aquatic and riparian habitat vital to frog and fish species of concern to state and federal regulatory agencies.

All told, the King Fire burned 153 square miles in three watershed and two counties. More than 60% of the fire burned at high intensity. The costs were tremendous, and are ongoing:

\$118,500,000 in direct firefighting costs was borne by the public;

\$8,000,000 in immediate costs to repair and protect water and energy infrastructure was borne by local utilities like mine;

Untold costs to roads, cultural resources, and wildlife habitat, and soil resources;

Ongoing costs to local utilities that must now deal with the aftermath.

The Aftermath

The effects of large catastrophic wildfire on natural and man-made infrastructure lasts for decades, and the effects on the forest itself can last for centuries. In the case of water and hydroelectric utilities that operate in California's watersheds, the aftermath is often worse than the event itself.

Wildfires in the Sierra tend to occur at the worst possible time of year, at the end of summer. Not only are forest fuels at their driest, but the transition from the arid California summer to the wet fall can happen quickly and with devastating results. Particularly in the case of high-intensity fire, trees whose root systems once held steep slopes in place are now dead. Soils that were once a rich and stable organic ecosystem that was resistant to erosion are now baked into a loose cake which has a tendency to reject water from rain events and then all at once become a muddy slurry that tumbles off of canyon walls and into rivers and streams. As the receivers of mud, rock and dead trees, our river systems become overwhelmed with this debris and transport it downstream during high flow events.

Once this debris enters lakes and reservoirs, it fills in valuable storage space, blocks spillways and ruins equipment and generating machinery. PCWA has experienced this before. The Star Fire that burned in 2001 is still depositing large dead trees and tons of sediment into our facilities some 14 years later. We, like many other utilities in the Sierra, must regularly, and at great cost to our ratepayers, clean our reservoirs of sediment, rock and trees or they would become useless mud flats.

In the case of the King Fire, the U.S. Forest Service estimates that over 300,000 of tons of topsoil are poised to erode into Rubicon River from King Fire burned area the first year after the fire. Ralston Powerhouse and Afterbay Dam are located a short distance below 19 miles of scorched Rubicon River canyon and when this reservoir fills up, hydropower production and water flow for our citizens is stopped for months at a time. This stretch of river has also been identified by PCWA in collaboration with regulatory agencies as important habitat for frog and fish species of concern, habitat which will be severely impacted by fire-induced sedimentation.

This impact can last for many years. While trees and brush can begin to regrow within a decade of even an intense fire, the fertile soils that have taken millennia to establish are damaged for many centuries. This long after-effect means that our facilities are ultimately less valuable, our water dirtier, and our ability to serve a growing California economy water and energy products diminished for many decades.

Destined for Disaster?

Recent scientific findings point to an increase in the frequency and intensity of large wildfires in the West. While there are many potential causes, we believe that at least part of the problem lies with a century of wildfire suppression and a recent reduction in active timber management on public lands. It is clear in our watershed that fuel loads, particularly small trees and brush,

have increased to an extent that where a person could once walk through a forest of large, mature trees, one now finds impenetrable brush fields and thousands of small, unhealthy trees. Under natural conditions, the Sierra landscape would have seen much more frequent and lower intensity fires which would have cleaned the forest of these fuel loads and left the forest healthier for it.

In our view, because of decades of increasing fuel loads, it is not currently possible to return to this natural fire pattern without great risk to valuable human infrastructure. However, we believe that using a combination of techniques that include active mechanical harvesting of smaller fuels, logging of appropriate larger trees, controlled burning, and replanting, land managers can return the system to a much healthier equilibrium that brings the forest into balance without the risk that untrammelled natural burning would incur. Implemented appropriately, these programs have the potential to be financially self-sustaining, while benefitting the economies of rural communities in our watersheds.

Returning to a balanced approach to forest management will take time and focus. In California, much of the forest product infrastructure that existed in our rural communities in the past has been consolidated into centrally located mills that have limited capacity, and often cannot process smaller logs. If we can begin to rebuild our forest management capacity, we believe there will be opportunities to rebuild sustainable forest product infrastructure in our rural communities in the form of biomass energy, fuel wood and fuel pellet, and milled lumber products. Working within the construct of a public and private partnership, the health of our rural communities and the health of our watersheds can be sustained in perpetuity.

Water and hydropower utilities throughout the West have come together with private landowners and local governments to begin the conversation of returning our forests to a more sustainable condition. We believe that by applying the following principles to our publicly owned forest and rangelands, we can achieve a balanced result that will benefit our water supplies, our recreational opportunities, ecosystem health, and help to restore communities that rely on natural resources to power their economies.

Policy Principles:

- Current laws and regulations must be improved to reflect the urgency of reducing fire risk in Western forests and to recognize that catastrophic wildfire is the greatest risk to forest ecosystems and species, and to the water quality and water supplies that originate from our headwaters.
- Forest management tools such as forest thinning, biomass management and controlled burns that reduce fuel loading, and consequently, the risk of catastrophic wildfires should be accelerated to the extent feasible. Federal laws and regulations that slow or limit such efforts should be reassessed to enable broad and active utilization of these management tools.

- Best available science should be continually applied to forest management. New developments in landscape management techniques that benefit water quality and water yield should be integrated as pilot and demonstration projects in the ongoing management of federal lands.
- It is imperative that the Congress provide adequate and stable funding to the Department of the Interior and the Department of Agriculture to support sustained development and implementation of programs that improve the condition, trend and resiliency of federally managed headwaters. Stability in funding necessitates that the fighting of large, catastrophic fires be funded from emergency management funds rather than borrowed from regular agency operating budgets.
- For catastrophic wildfire mitigation projects intended to reduce the likelihood and severity of wildfire, National Environmental Protection Act (NEPA) and Endangered Species Act (ESA) compliance should weigh the long-term impacts to species and ecosystems of catastrophic wildfire when analyzing any short-term impacts of pre-fire mitigation actions.
- For post-fire forest restoration actions, time is of the essence to protect the natural and man-made infrastructure of our watersheds. National Environmental Protection Act (NEPA) and Endangered Species Act (ESA) compliance should be greatly streamlined and weigh the overall long-term health of the landscape against any short-term impacts of mitigation actions.
- Litigation is often the cause of lengthy delays in pre-fire mitigation and post-fire forest restoration projects. Given the risks and impacts of a catastrophic wildfire, a higher standard should be required to stop or delay projects in high-risk watersheds. Congress should act to limit the scope, standing and timelines associated with the filing of suits that delay action on federal lands.
- Federal law and agency policies should allow local stakeholders to partner with the federal land managers to pursue opportunities to conduct the planning and implementation of fuels reduction and restoration projects on federal lands.

Summary and Conclusion

Land management in the West is at an important crossroad, and requires bold actions by Congress and compromise on the part of many stakeholders. As water and hydropower utilities that serve a growing population and are tenants and stewards of federal lands, we have a vested interest in the success of headwaters management. The science of forest management has advanced greatly, and to put it simply, federal, state and local land managers now know how to manage our forests better to achieve multiple ecosystem and societal needs in a balanced way. However, we require flexibility in federal law and federal agency rules and regulations to test, experiment and ultimately apply the best available science to forest management for the benefit of all. We hope that as Congress takes up the issue of federal land management, you call upon us to help define the parameters of a successful future so that the next generation of Americans will continue to enjoy our forest and rangelands.