



Addressing the Ongoing Impacts of Climate Change

California and the West continue to experience some of the largest, most deadly, and most destructive wildfires in history. Northern California Power Agency's (NCPA's) 16 members are committed to providing safe, reliable, and affordable electric service to their communities. Our members are diligently working to adapt their practices to the changing conditions of our climate, and are committed to partnering with federal, state, and local agencies to develop solutions to prevent and mitigate the impacts of wildfires.

As many NCPA members are local government entities, they are uniquely positioned to coordinate closely with other city departments on emergency planning and response efforts. Through public review processes, NCPA and our members have prepared wildfire mitigation plans that promote safety and reduce the risk of fires near electric utility infrastructure. NCPA offers its members a venue for sharing best practices related to wildfire mitigation and response. From evaluating opportunities to harden utility infrastructure in fire-prone areas, to increasing investments in vegetation management, NCPA members continue to make proactive operational and maintenance decisions with a focus on public safety and reliability.

In addition to ongoing local and state efforts, complementary federal actions are needed to reduce wildfire risks and improve the resiliency of critical infrastructure.

Federal Wildfire Mitigation Efforts

Recently, the U.S. Department of Agriculture unveiled a 10-year strategy to confront the wildfire crisis in areas at high risk of conflagration. Its *"Confronting the Wildfire Crisis: A Strategy for Protecting Communities and*

Improving Resilience in America's Forests" plan is a much-needed step toward advancing the pace and scale of forest health treatments across the West, particularly in California where millions of acres of public land are at high fire risk. While this strategy is much needed, additional tools are needed at the federal level to hasten the speed by which hazardous fuels and forests are treated to avoid future record-breaking wildfires from occurring.

To that end, NCPA supports bipartisan legislation introduced by Representative Bruce Westerman (R-AR), the Resilient Federal Forests Act, that builds upon reforms in the 2018 Farm Bill and the 2018 Omnibus Appropriations Act to address vegetation management and hazardous fuels cleanup on federal forest land. As well, Representative Doug LaMalfa (R-CA) introduced the Clearing Lines Along Electrical At-Risk Zones (*CLEAR Zones Act*), which would expand the areas around rights-of-ways to allow for more robust vegetation management activities. Both of these bills would make important contributions toward strengthening forest resilience and decreasing the carbon emissions and safety risks associated with wildfires.

NCPA encourages Congress to support the enactment of federal legislation, such as the measures outlined above, to provide much-needed financial resources, streamlined processes, and other policy changes that can facilitate adaptation to the ongoing impacts of climate change, and effectively minimize the occurrence and impacts of wildfires.

Accelerated Sediment Buildup at McKays Point Reservoir

NCPA operates the North Fork Stanislaus River Hydroelectric Development Project (FERC Project No. 2409) on the North Fork of the Stanislaus River in California's Alpine, Calaveras, and Tuolumne Counties.

The Project, which has the capacity to generate 256 megawatts of power, includes the McKays Point Reservoir. During the construction of this project, NCPA worked with the U.S. Forest Service (USFS) to successfully obtain Special Use Permits for two sites where excavated sediment could be safely relocated onto adjacent federal land.

When the reservoir was completed in 1989, there was an estimation made about future sediment buildup in the new reservoir—and it was projected that between 1989 and 2018, the total sediment deposits would amount to approximately 43,560 cubic yards. However, the effects of climate change have led to an increased frequency of extreme weather events, including floods, droughts, and wildfires, leading to greater rates of erosion within the surrounding landscape that eventually flows into hydroelectric reservoirs. As a result, debris flows into the reservoir *from USFS land* in 2018 amounted to 519,040 cubic yards—nearly 12 times greater than originally anticipated. This sediment buildup has limited the

water storage capability of the reservoir, degraded the water quality, and reduced overall generation of a clean and renewable resource that plays a key role in advancing the state's decarbonization goals. If the deposits continue to grow, it can lead to potential dam safety concerns as well. The McKays project is not alone—these effects of climate change are impacting reservoirs across the West.

In light of the rapidly increasing accumulation of sediment, it is imperative that the debris in the reservoir be removed, and a location for placement of the sediment be identified. Preliminary estimates put the cost of removing, hauling, and disposing of *half* of the sediment on private lands at between \$50-\$80 million. As well, these costs do not account for the economic impact of the loss in power generation from the facility or the air quality impacts caused by transporting the sediment over long distances.

Given the likelihood of more frequent extreme weather events in the future, and the high financial and environmental costs associated with removing and disposing of this sediment that is rapidly depositing into hydroelectric reservoirs, federal permitting processes must be reformed to recognize and reflect the time-sensitive climate adaptation challenges this presents.

From both an environmental and cost standpoint, redepositing the eroded debris that came into our project from federal land back onto the same adjacent federal land, is by far the most workable and timely solution. Yet, after an extensive consultation process related to McKays Reservoir, the USFS still has not provided a Special Use Permit for relocation of sediment on USFS lands for beneficial uses—such as road reinforcements and fire breaks.

The process has proven to be time-consuming, inconclusive, and unworkable. Most importantly, the review process fails to account for the urgency of the growing challenges that climate change is presenting for hydropower operators throughout the western states. It also does reflect the critical role hydropower plays in decarbonization and the ongoing state and federal efforts to address climate change.

NCPA urges Congress and the Administration to consider reforms of the Special Use Permit process for sediment removal in order to reduce the risk of lost electric generation, assure needed water storage, and adapt to the impacts of the changing climate around us.