AGENDA

JOINT INFORMATIONAL HEARING: WILDFIRE IMPACTS ON WATERSHED LANDS

ASSEMBLY BUDGET SUBCOMMITTEE NO. 3 ON RESOURCES AND TRANSPORTATION
AND
ASSEMBLY COMMITTEE ON NATURAL RESOURCES

CHAIRS: RICHARD BLOOM AND LAURA FRIEDMAN

WEDNESDAY, FEBRUARY 13, 2019

9:30 A.M. – STATE CAPITOL, ROOM 444

I. **Opening Remarks and Introductions.**

II. **Overview of Climate Change and Wildfire Impacts on Watershed Lands.**

a. Thom Porter, Director, Department of Forestry and Fire Protection

b. Jim Thorne, PhD, Climate Modeler, UC Davis

III. **Overview of current watershed restoration activities and how those activities are coordinated.**

a. Rachel Ehlers, Legislative Analyst's Office

b. Keali'i Bright, Department of Conservation

c. Angie Lottes, Department of Forestry and Fire Protection

d. John Donnelly, Wildlife Conservation Board

e. Angela Avery, Sierra Nevada Conservancy

f. Edie Chang, Air Resources Board

IV. **Discussion on the use of natural infrastructure restoration to increase water storage and climate adaptation.**

a. Laurie Wayburn, Co-Founder and CEO of Pacific Forest Trust

b. Ann Bartuska, Ecosystem Ecologist, VP for Land, Water, and Nature at Resources for the Future

c. Malcolm North, PhD, US Forest Service Research Ecologist

V. **Public Comment.**

BACKGROUND

Wildfires in the past two years have been among the most devastating in California's history. Among other factors, three primary reasons why California wildfires have become more devastating are: (1) the climate is becoming warmer; (2) more people live in combustible places; and (3) more fuel. Fires today burn twice as many acres and for twice as long as they did in the 1990s.

Scientists state that climate change is a central factor in creating the atmospheric ingredients that make wildfires like California's more extreme. Warmer global temperatures, driven by the greenhouse gases emissions, has led to droughts as well as more extreme heat waves that last longer. As the climate warms, the fuel conditions on the ground and increasing warm spells create opportunity for fire. Over the past generation, the fire season has grown at the front end by approximately 30 days and has extended about 30 days at the back end as well.

Increased frequency of wildfires are detrimental not only to our communities but also the state's natural resources. Wildfires fires can cause serious harm to wildlife, destroy wildlife habitat, cause sediment accumulation that impedes stream flows, and impact watershed health, causing downstream degradation of streams, lakes and reservoirs. Depending on the intensity and duration of the fires, they can negatively alter soil characteristics, such as decreasing its water infiltration ability thereby compromising it ability to absorb water and ultimately impacting the state's water resources.

California's forested watersheds provide the overwhelming majority of water utilized for urban and agricultural uses. While watersheds throughout the state are the origin for regional water systems, the large reservoirs that serve the urban and agricultural users reliant on the Central Valley Project and the State Water Project are primarily supplied by the watersheds in Northern California, in the Sierra Nevada and Cascade mountains.

Healthy watersheds will be instrumental to our ability to adapt to the changing climate. The natural areas that comprise California's watersheds are subject to a number of stressors and degradation, including past logging, mining, and grazing of dense forests, due to fire suppression policies of the last century. Changing precipitation and weather patterns due to climate change are exacerbating these existing challenges, which has extended the fire season later into the fall and increased the impact of the recent historic drought.

Healthy, well-functioning watersheds, serve an essential role in preparing for future climate scenarios. Extreme weather events are likely to increase in number, causing both more droughts and large storm events. Healthy watersheds help buffer the impacts of large rain events by absorbing water and releasing it slowly; as we experience large rain events from atmospheric rivers, having watersheds that can absorb and slow the runoff into reservoirs mitigates the peak flows of those events, reducing the likelihood of catastrophic events such as the Oroville dam situation in 2017. Slowing the flow of water

through the watershed has the practical effect of increasing the capacity of the reservoir, as runoff is easier to capture and utilize later into the summer than during peak flows associated with a storm.

The largest reservoirs are Shasta (supplied by the Pit, McCloud, Upper Sacramento and Upper Trinity rivers) and Oroville (supplied by the Feather river). A 2017 assessment by the Pacific Forest Trust found that almost 65 percent of the forests in this region, and over 90 percent of the meadows, are candidates for restoration activities to help restore and maintain natural function. Other forested watersheds in the Sierra and Cascade regions may require restoration activities as well.

Recent years have brought increased legislative attention to the role of healthy watersheds in maintaining the reliability and function of the state water system. AB 2480 (Bloom, 2016) established that source watersheds are recognized as integral components of California's water infrastructure, and that specified restoration and conservation activities are eligible for the same financing mechanisms as built infrastructure.

AB 2551 (Wood, 2018) called for the California Natural Resource Agency (CNRA) and the California Environmental Protection Agency to collaborate on a spatially explicit plan, to prioritize and implement forest and watershed investments in the watersheds supplying Oroville and Shasta reservoirs. That bill also called for a pilot project in this region for the coordinated permitting of restoration activities identified in AB 2480, including vegetation management, meadow restoration, road removal and repair, and stream channel restoration. Implementation of this plan is contemplated in draft program guidelines currently being circulated by the CNRA.

SB 901 (Dodd, 2018) made a variety of changes to streamline vegetation management and fire preparedness, and dedicated $200 million of GGRF annually to these activities.

STAFF COMMENTS

Preparing for climate change will require increasing the pace and scale of restoration and conservation of natural and working lands. Areas for improving current program delivery include:

1. Streamline the delivery of the various grant programs, aligning the application format, timing, and process to the extent possible. In the past many programs have rewarded "matching" state programs against each other, rather than prioritizing efficient distribution of funds to advance state goals.

2. Identify priority landscapes for focused multi-year investments to better achieve significant impacts on climate resiliency, wildfire mitigation, carbon sequestration, wildlife adaptation, and rural economic sustainability.

3. Increase funding for natural and working land programs focused on climate adaptation and mitigation.