

Little Hoover Commission
Hearing on forest management and tree mortality

Thursday, January 26, 2017

9:30 a.m.

State Capitol, Room 437

Sacramento, CA

Thank you for welcoming me here today to talk about the impacts of environmental change on California's 33 million acres of forest.

Simply put, California would not be California without our iconic, native trees, the Cascades, the Sierra, and all the parks and retreats that both residents and tourists clamor to visit every year.

Beyond recreational, tourism and existence value, these forests are of critical importance to the public and natural resource health of the state and of relevance to the boards, departments and offices of CalEPA.

- Well-managed, healthy watersheds are the source and pathway for clean, high quality water for highly populated urbanized areas.
- They can provide clean air and act as the lungs for the state.
- They provide forest products that keep jobs and wood resources within the state.
- They can maintain ecosystem function and ensure that 33 million acres of forest and downstream meadows, rangelands and streams support wildlife and people.
- And finally, well-managed, healthy forests can sequester carbon and ensure that the state meets and maintains our ambitious climate goals.

The ability to both reduce emissions AND sequester carbon is unique to natural and working lands, including forests. But the threats to the health of these lands are increasing.

Due to years of activities that emphasize fire suppression without full accounting for environmental change, minimal funding for forest health from both the federal and state government, uneven development in the wildland-urban interface, and funding streams that fail to prioritize the true value of forests - both market and non-market value - our watersheds are in poor shape.

Compounding these issues are the climate changes already occurring in California. Both daytime and nighttime temperatures have increased, making it harder to kill off the bark beetles that parasitize trees. These increases have also shifted timing of bud bursts and the type and location of precipitation throughout the state. Add to these already occurring climate changes the unprecedented drought, and we have a cocktail that produces forests at great risk of conversion, fire and diminishing water content and capacity.

In August 2015, the Carnegie Airborne Observatory recorded the canopy water content of trees throughout forested regions the state. The researchers who performed the study found that nearly 900 million trees spread over more than 16 million acres (or about half of our forested acres) lost measurable water content and 58 million trees were dead or dying as a result of pest impacts, the drought, and ongoing climate change. The US Forest Service regularly conducts flyover assessments of forests throughout California. The June, 2016 Forest Service assessment increased the number of dead trees to 66 million. Only a few months later, in November, 2016, the number of dead trees increased to 102 million.

When ignited, these increasingly dry trees and understory produce enormous, high heat fires that destroy more than what we would see were a natural fire regime to exist in California. Wildfires can create poor air quality, destroy water conveyance infrastructure, electric transmission lines, homes and other buildings throughout the wildland urban interface. The fires also decimate ecosystem function by burning completely through soil layers, sending tons of sediment into already impacted waterways, and result in the need for waste clean-up of home sites and other structures using public funds; these fires also reduce insurance availability for homeowners in the wildland urban interface.

As we saw this month, burn scars and atmospheric rivers do not mix. Our rivers, dams, and roadways were all significantly impacted by decimated soil running off as a result of intensive rainfall at all elevations of our watersheds.

So what is California doing to address the loss of forest lands, the risk of wildfire, the threat to natural resource and public health, and the loss of forest carbon attendant with those risks?

Our activity has occurred at three scales – the State-wide scale, in the form of our Scoping Plan and Forest Carbon Plan; the Regional scale, in the form of the Tree Mortality Task Force; and the Local scale, in the form of the Watershed Improvement Program, the Community and Watershed Resilience Program, and funding from the Greenhouse Gas Reduction Fund.

All of the speakers here today are working on these initiatives. It has been refreshing to know that we share a common vision of healthy forests that sustain the values important to all Californians.

- Motivated by the 2014 Scoping Plan update, CalEPA and CNRA worked collaboratively through the Forest Climate Action Team on a Forest Carbon Plan, published this month and heard at this month's Board of Forestry meeting, to develop targets and pathways for healthy forests in California that, first and foremost, sequester carbon, but also prioritize other ecosystem services and benefits that help the state thrive. The Forest Climate Action Team is populated by both state and federal agency partners as well as regional representatives.
- The State's 2030 Target Scoping Plan was also published this month, and will be reviewed by the Air Resources Board at a hearing tomorrow. In the plan, we present modeling work completed by the Lawrence Berkeley National Labs that demonstrate the carbon costs and benefits of actively managing our forests for health.
- For both of these plans, the Air Resources Board, CAL FIRE, the Resources Agency, CalEPA, the Department of Conservation and the Governor's Office of Planning and Research worked together with stakeholders and academia

to understand existing carbon stocks and changes to those stocks over time and set science-based, realistic goals.

- As you will hear from Chief Pimlott, Director Dougherty and other speakers, the Governor's Emergency Proclamation on Dead and Dying Trees and Tree Mortality Task Force has accelerated work to develop and support in-state markets for wood products and wood-based energy and fuels; consider alternative management techniques including prescribed fire; and target tree removal investments to the highest hazard areas around the state. CalEPA is active in the regulations working group of the task force to smooth pathways to managing the crisis, including work with the US EPA and ARB on regulations affecting vehicles and equipment used in processing dead and dying trees. As the work of the Tree Mortality Task Force continues, so too does innovation. A Berkeley-based company called All Power Labs has developed portable units that convert wood to electricity and can be connected to buildings and homes. CalEPA is actively interested in this emerging technology as a way to maximize the benefits of forest health treatments state wide.
- To date, the Administration's proposed budgets for forest health expenditures from the Greenhouse Gas Reduction Fund, the fund that houses fees collected from the State's Cap and Trade Program, have resulted in appropriations of \$49 million in funding to CAL FIRE for activities that would support watershed health and increase carbon sequestration on the forested land base throughout the state, \$33 million for urban forests, and \$29 million for restoration activities in mountain meadows and wetlands downstream of forests (to CDFW). An additional \$80 million was appropriated to the Resources Agency in 2016 for an urban greening program that could include trees. On January 10 this year, the Administration proposed \$120 million for forest health, urban forestry and urban greening.
- Additionally, the state, through the Sierra Nevada Conservancy, is working with the US Forest Service on the Watershed Improvement Program, which Executive Director Branham will address when he speaks with you. CalEPA works with the Conservancy to support the WIP and advance joint management goals across forest jurisdictions.

- And finally, The Governor’s Office of Planning and Research, CAL FIRE, CalEPA, Housing and Community Development and Tuolumne County developed a Community and Watershed Resilience Program to combine mitigation, recovery and resilience efforts in forested watersheds through investments in community resilience centers, biomass energy infrastructure and forest health. The program pilot in Tuolumne County, funded by a grant from federal Housing and Urban Development and the National Disaster Resilience Competition, is the first of its kind in the nation. It focuses on the Rim Fire burn area, covering private, county and federally-managed lands. With \$70.3 million in federal funds, all of the partners listed will implement the program, resulting in healthier forest acres, new economic opportunities for rural residents, and secure locations for County and adjacent residents to use in the event of future disasters.
- Through all this work, we aim to ensure that expenditures made in the forest sequester carbon and reduce near, medium and long-term greenhouse gas and black carbon emissions sources.

All of these programs and initiatives have forest health at their core, but may prioritize one or more outcome that results from healthy, well-managed forested watersheds. Whether the initiative or plan ultimately targets forest carbon, wildlife protection, water supply or forest products, the goals are the same as we all look to provision the immeasurable resources healthy forests provide for California.

The issues confronting our forests are manifold. But the efforts to work collaboratively to address those issues, motivated by crisis and interest in carbon sequestration, or simply the understanding that forests and watersheds are the source of so much intrinsic value to the state, are also manifold.

We expect to make some headway this year on addressing forest health. We also aim to invest state funding strategically through the state to address forest health, should funds be appropriated for that goal.

Thank you for your time. I’m happy to answer your questions.