

Executive Summary

California's forests are reaching a breaking point. Poor management policies that interrupted the natural and historical cycle of fire, combined now with a changing climate, have left forests vulnerable to disease, insects, catastrophic fire and drought. If the state does not take appropriate action soon, Californians risk losing the priceless benefits provided by forests. One forest supervisor told the Commission that management decisions made during the next five to 10 years will determine the forests' condition in 100 to 200 years.

The Commission is encouraged that state leaders recognize the need for decisive action to restore California's forests to resiliency. But much work is needed to change a culture focused almost solely on emergency firefighting to one that supports long-term forest restoration and management.

Prioritizing forest management for the long run – for the healthier, less overgrown forests that enhance watersheds and wildlife, reduce the scale of catastrophic wildfires and better withstand the scourges of bark beetles and a warming climate – will require more money and staff. The Commission typically does not recommend increasing financial and human resources to fix problems, but here it recognizes the savings that ultimately will result from such investment.

Today, California spends all too much for the immediate, emergency consequences of its long-neglected forests. Massive landscapes once sustained by beneficial, low-intensity wildfire are overrun with fire-intolerant trees and thick carpets of forest fuels that can turn even the smallest campfire or sparking power line into a raging firestorm. Property damage and firefighting costs for local, state and federal governments run into the billions of dollars annually. Property damage for the wildfires in October 2017 alone exceeded \$9 billion dollars, and the state spent approximately \$700 million fighting fires between July 2017 and mid-January 2018.¹ After devastating fires, local water districts pay millions more to remove tons of eroded soils from mountain reservoirs that

supply downstream customers. Now state government has invested millions of dollars responding to the horrific damage of bark beetles and the tree mortality crisis in the Sierra Nevada; when CAL FIRE testified before the Commission in January 2017, only 15 months following Governor Brown's declaration of a State of Emergency for tree mortality, it already had allocated more than 80,000 hours of staff time and \$43.6 million dollars solely to responding to the crisis. Local governments and private landowners also are spending heavily to remove hazard trees as a result of the tree mortality crisis. The costs of long neglecting and mismanaging forests have become an unsustainable burden in California.

The new investments the Commission recommends are intended to drive a strategy in which the state pays more for front-end forest management, and eventually, pays less reacting to crises and disasters.

The Commission's findings and recommendations (listed in full at the end of this section) fall into five categories:

- ***Increasing Pace and Scale of Forest Restoration through Collaboration.*** Speeding up and expanding treatments to restore forests to good health demands greater teamwork between state government and the federal government, which owns nearly 60 percent of the forest land in California. California has authority to conduct forest restoration work on federal land through the Good Neighbor Authority authorized in the 2014 Farm Bill. Success will depend on joint government plans and work at the ecosystem and watershed level.
- ***Creating a Culture where Fire is a Tool, not a Threat.*** California's forests evolved with fire and were shaped by fire. Though the increasing number of homes built in or near forests means fire cannot feasibly be returned to the forest everywhere, prescribed fire, where possible, should be used to treat forests. Prescribed fires

work in calm conditions that prevent fire from burning out of control and limit smoke and carbon emissions.

- **Developing a Long-Term Plan for Forest Materials.** Appropriate management will result in trees being removed from the forest. When possible, this wood should generate income for forest management. The state already is working to boost demand, within state government and externally, for California forest products, particularly from smaller-diameter trees that historically have had little value. Bioenergy from forest biomass is another option for smaller-diameter wood. The Commission heard important arguments for and against forest bioenergy. As the Commission monitors state efforts to maximize demand for removed wood, it would like the state to develop a long-term bioenergy plan – one that clearly delineates the state’s position on bioenergy and mitigates the effects of using or rejecting it.
- **Educating Californians on Forest Resiliency.** Californians are woefully uneducated on the importance of healthy forests and the benefits they provide. The state should invest in a large-scale outreach and education campaign to inform the public about the ecological importance of forests and the necessity for prescribed burns to bring about a lasting culture change in how the state views and treats its forests. Fortunately, a model already exists in California in how the state has approached drought education.
- **Planning for the Long Term and Ensuring Accountability.** Formalizing a multijurisdictional planning process will be necessary to undertake the long-term work of restoring California’s forests. Here, too, the state has a successful model in the Tree Mortality Task Force. A scaled-down version of this task force could be used as a steering committee for the larger forest restoration effort. Ensuring accountability for goals stated in the state’s Forest Carbon Plan also will be critical in successfully managing the forests of California. The Commission recommends regular reporting on progress toward these goals, and may hold future hearings on the topic.

Little Hoover Commission Recommendations on Forest Management

Recommendation 1: Led by CAL FIRE, the State of California must engage in collaborative landscape-level forest management for long-term forest resiliency. This planning process should include stakeholders at all levels of government, Native American tribes, scientists, environmental and environmental justice groups, private industry representatives and local residents. Because forest health impacts Californians in urban and coastal areas, efforts should be made to include representatives from non-forested regions to elevate the importance of California’s forests to the entire state’s wellbeing. Leaders also should review existing forestry practices and procedures, including the state’s Forest Practice Rules, to assess whether they facilitate forest resiliency in a changing climate.

- Over time, funding gradually should be shifted from reacting to the consequences of poor forest management to preventative treatments that promote forest health and resilience. This should include spreading the costs among a greater array of beneficiaries of healthy forests statewide.
- State agencies should plan to make greater use of the Good Neighbor Authority to perform treatments on federal land.
- State leaders should continue to remind federal lawmakers and policymakers of federal obligations to its forests within California.

Recommendation 2: On CAL FIRE funds that have time constraints for encumbrance and liquidation, the Department of Finance should allow longer timelines to facilitate collaborative large-scale forest management planning.

Recommendation 3: The State of California should lead a policy shift from fire suppression to using fire as a tool.

- This should include creating dedicated prescribed fire crews. These job classifications should be designed to attract the state’s top talent, with pay comparable to non-prescribed fire crews.

Recommendation 4: Treating the land at the scale outlined in the draft Forest Carbon Plan will require more resources. CAL FIRE, local air districts and other affected agencies should develop a list of positions they will need to meet the draft Forest Carbon Plan goals of treating 500,000 acres of nonfederal land per year, 500,000 acres of USDA Forest Service land per year and 10,000 to 15,000 acres of Bureau of Land Management land per year. State agencies should assume that at least part of the federal lands acreage treated will be by state entities working under the Good Neighbor Authority, and predict their staffing needs accordingly. The Legislature should then fund these extra positions, including the positions at the local level.

- As more funding – such as the jump from \$40 million to more than \$200 million in Greenhouse Gas Reduction Funds between FY 2016-17 and 2017-18 – is allocated for forest management to CAL FIRE and other agencies, these entities must be responsible for properly planning for its use, including an adequate number of staff with necessary skills. If new positions are necessary, CAL FIRE and other agencies and departments should not be penalized for developing the resources needed to successfully administer the forest management program.

Recommendation 5: The California Air Resources Board, land managers and other stakeholders should continue to actively work to find ways to increase prescribed burning through better use of technology, including modeling software, traditional portable air quality monitoring and new low-cost sensor monitoring.

- State agencies and other stakeholders should continue to participate to the extent possible in the Fire MOU and Air, Land and Water meetings, as well as other collaborative cross-jurisdictional efforts to overcome the barriers to prescribed fire. Pertinent agencies that currently do not participate in these efforts should participate.

Recommendation 6: The State of California should encourage the development of additional infrastructure to utilize material removed from the forests as part of long-term forest management.

- The California Natural Resources Agency, along with members of the steering committee and the interagency leads for each recommendation, should report back to the Commission on the implementation of the SB 859 working group's recommendations.
- The state should issue grants to small communities so they can develop infrastructure according to their needs.

- The state should develop a statewide biomass policy that takes into account the needs of different parts of the state. All stakeholder communities, including environmental justice, should provide input into this policy.
- Part of this plan should explore the potential of biomass near forested communities with newer, cleaner facilities vis-à-vis the economies of scale provided by larger facilities.
- Additionally, this should include research on the public benefits provided by biomass energy within the context of the Renewables Portfolio Standard policy of "least cost best fit," and whether those benefits qualify biomass energy as the best fit in certain situations. Further, analysis of public benefits should give consideration to whether biomass should receive subsidies to lower costs in certain cases, particularly in facilities developed or retrofitted with cleaner technology.

Recommendation 7: To better educate Californians about the suite of benefits healthy forests provide to the state, the state should consider the following:

- The state should invest in a long-term forest health campaign similar to Save our Water by contracting with an organization that can use its expertise to raise public awareness of forest health issues. A high-ranking person within the Governor's Administration – preferably the Governor – must champion this effort. Outreach messages should be based on research.
- The Legislature should fund extensive statewide public outreach campaigns for CAL FIRE to continue to educate the public on the benefits of healthy forests and prescribed fire.
- The California Natural Resources Agency should work with the Department of Education to catalog existing educational resources on resilient forests, the history of fire in California's ecological development and from where pupils' water originates to allow teachers to easily access and incorporate the information into their curricula. Additionally, the California Natural Resources Agency should advertise this collection to teachers to spread awareness of these resources.
- The California Natural Resources Agency should collaborate with state colleges and universities offering forestry programs to increase awareness of forest health concerns in their communities, to both educate the public and increase enrollment

- in these programs. Forestry technical advisors affiliated with universities should be consulted on where they are encountering educational gaps to help identify where efforts should be targeted.
- Water districts should play a greater role in educating their customers on the sources of their water. To facilitate this, the state should provide funding for an organization to create educational toolkits that water agencies easily can customize.
- The state should provide grant funding for an educational organization to bring lawmakers, policymakers and their staff to forests to teach them about the benefits provided by forests, the consequences of forest neglect and the different forest treatment outcomes. The organization should work closely with the Legislature and other appropriate bodies to overcome logistical hurdles.
- Californians' knowledge levels and attitudes toward forest health should be measured at the onset of educational campaigns, and policymakers should set clear goals for the changes they would like to see in those attributes. These should be measured throughout the campaigns, with course corrections designed as necessary if the state does not meet its outcomes.

Recommendation 8: The Tree Mortality Task Force should evolve into a forest management planning entity, with dedicated funding.

- It should help set a strategic direction for forest management, identify measureable goals, decide how to track results and recommend course corrections to better achieve those goals.
- It should advise on how to incorporate technology in assessing and improving forest health.
- This should include reviewing the planning process and developing recommendations on where streamlining can occur.

Recommendation 9: The California Natural Resources Agency, its relevant departments and the California Environmental Protection Agency should regularly report to the Legislature and post online progress on the metrics listed in the Forest Carbon Plan, as well as the steps it is taking to begin implementing the plan. The Commission may hold a follow-up hearing on these steps as well as the progress made on its recommendations.