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Testimony of Ken Pimlott, California State Forester
On Behalf of the California Department of Forestry and Fire Protection and the National Association of State Foresters

Submitted to the U.S. Senate Committee on Energy and Natural Resources Hearing to Receive Testimony on the Discussion Draft Entitled -
"Wildfire Budgeting, Response and Forest Management Act of 2016"

Chairwoman Murkowski, Ranking Member Cantwell, and Senators of the Committee, thank you for inviting me to testify before you today. My name is Ken Pimlott and I am the Director of the California Department of Forestry and Fire Protection (CAL FIRE) and the California State Forester. As a member of the National Association of State Foresters (NASF), I am also representing that organization's perspective on the draft before you today.

I am here today to speak to the upcoming California fire season, the tree mortality emergency that we are currently facing, and the work that is already underway in the State to address this disaster. I will also speak to the requests that we are making of the Federal Government, and the portions of the *Wildfire Budgeting, Response, and Forest Management Act of 2016* that could be beneficial to the ongoing health and recovery of California's Forests.

California's Forests and Fire Season

CAL FIRE is responsible for the prevention and suppression of wildfires across 31 million acres of State Responsibility Area, which comprises roughly one-third of the lands in California. Although these are predominantly private lands, California has a vested interest in the protection of these lands, as they are the critical watersheds, forests, and other open spaces upon which we rely for our water supply, recreation, clean air, habitat and many other benefits.

Nationally, State Foresters deliver technical and financial assistance, along with forest health, water and wildfire protection for more than two-thirds of the nation's 751 million acres of forests. In 2014, eighty percent of nation's wildfires (representing twenty-seven percent of the acreage burned) were on state and private lands where fire suppression is the responsibility of the State Foresters.

California forests--including the mixed conifer forests referenced in this draft--face a number of significant challenges that have the potential to change the structure of the forested landscape in California. We are seeing a drastic increase in the occurrence of

large, damaging fires with over half of the State's 20 largest fires in recorded history having occurred just since 2002. Fires are burning with damaging intensity, so damaging that the soil becomes hydrophobic, contributing to a host of post fire environmental impacts. In some cases, the damaged forest undergoes a conversion to brush and without significant human intervention, it will not return to a forested landscape.

Thirty-year fire service veterans, me included, have seen unprecedented fire behavior the last two years. For example, the 2014 King Fire along Highway 50 burned 15 miles in less than one day, and the 2015 Rocky Fire in Lake County destroyed 20,000 acres in less than 5 hours with no wind pushing it. With overall conditions trending towards a more flammable landscape, I fear this type of extreme fire behavior is now our 'new normal.'

Research from the University of California, Merced conducted by Dr. Anthony Westerling shows the mean temperature increasing, contributing to longer fire seasons. The research is showing that fire season is up to 78 days longer in the Western United States than just 30 to 40 years ago.

California is ramping up for what may be another challenging year for wildfires. Though welcome rain occurred during the winter in the Northern part of the State, it was already too late for the tens of millions of trees that have died due to the historic drought and epidemic bark beetle infestation. Already there have been over 2,000 fires in the State this year, with 255 new fires alone in the week of June 13th.

Though natural disturbance agents such as wildfire, drought, insects and disease eventually restore a balance in natural ecosystems, the drastic and periodic disturbances of catastrophic wildfires and large-scale tree mortality from bark beetles are not compatible with a population of 38 million people, many of whom like to live in a forested environment.

The State's Response to the Tree Mortality Crisis

On October 30, 2015, Governor Edmund G. Brown Jr., proclaimed a state of emergency due to unprecedented levels of dead and dying trees in California. Based on U.S Department of Agriculture (USDA) Forest Service (USFS) Aerial Detection Surveys, it is currently estimated that more than 40 million trees are dead due to pests, exacerbated by severe drought. New surveys in the current year are expected to double or triple that number.

Conditions are ripe for this epidemic to spread substantially in 2016, resulting in an increased threat to lives, property, critical infrastructure, and California's precious natural resources.

Immediately following Governor Brown's proclamation, a Statewide Tree Mortality Task Force was formed to assist local jurisdictions and implement the Governor's directives. Consisting of more than 80 entities, the Tree Mortality Task Force represents Federal, State, local and tribal governments, non-governmental organizations, and utility and energy companies. Task Force members and other stakeholders have prioritized the most critical needs and coordinated the expenditure of funds toward equipment, grant funding to address some of the most pressing hazards, and the redirection of existing State and local resources to address impacts posed by the widespread tree mortality.

In addition to the State's proclamation, numerous counties have also declared local emergencies requesting assistance from the State and Federal governments. These local jurisdictions are currently impacted by thousands of dead trees posing direct threats to critical public infrastructure, roads, public water conveyance systems, communication sites, communities, schools and lives. These trees pose a falling hazard and substantially increase wildfire risk near communities where massive fires such as the King (El Dorado County), Butte (Amador and Calaveras Counties), Rim (Tuolumne County) and Rough (Fresno County) have recently burned. Currently, it is estimated that there are over 325,000 trees that pose a direct threat to critical infrastructure, with a projected cost of removal and disposal of over $390 million.

California government entities, both State and local, have committed significant resources to date along with the utility companies. For example:

- CAL FIRE has redirected over 80,000 hours of staff time to work on addressing tree mortality. Over $24 million has been committed to address mortality either in direct CAL FIRE costs or in funding for local entities.
- California Office of Emergency Services (Cal OES) has over $100 million in California Disaster Assistance Act Funding available for counties for tree removal around infrastructure.
- California Department of Transportation (Caltrans) has committed over $50 million to tree removal around State highways.
- The 10 affected counties have spent over $650,000 to date on their efforts and will likely spend much more in the coming year.
- Just one of the affected utilities, Pacific Gas & Electric (PG&E) plans to remove 160,000 hazardous trees that could come into contact with its electric facilities, costing approximately $152 million in 2016. PG&E's overall drought and bark beetle program will cost $173 million and includes enhanced vegetation inspection and mitigation, debris management, local funding for fire safe councils, aerial fire patrols and lookout cameras, and public messaging.

CAL FIRE, along with the U.S. Forest Service (USFS), the Sierra Nevada Conservancy and many other partners, is working on implementing cross-boundary projects that leverage multiple programs, initiatives and funding sources. Projects will include a balanced mix of activities such as thinning, reforestation, prescribed burning and fuel reduction, intended to increase carbon storage in forests, reduce wildfire emissions and protect upper watersheds, where much of the California's water supply originates. This work will involve a multitude of partners, including large and small private landowners, Federal and State agencies, conservation groups, the forest products industry and other stakeholders.

Recent interagency agreements will help provide tools and resources for working across these ownership boundaries. The Good Neighbor Authority, authorized under the 2014 Federal Farm Bill, is an agreement between the California Natural Resources Agency and the USFS, allowing the signatory agencies to conduct restoration projects on the landscape seamlessly across ownership boundaries. In addition, a prescribed fire Memorandum of Understanding among the USFS, Sierra Forest Legacy, CAL FIRE, and other partners has been initiated that will help us apply prescribed fire to the landscape at a meaningful ecological scale.

Addressing California's forest health issues and engaging in active forest management in a meaningful way requires a long-term investment. No single agency, organization or program is going to solve the wide range of threats to California's forests alone. It is going to take a balanced approach of all the agencies, funding sources and management options available to address the impacts to California's forests as a result of an evolving climate.

Although the epidemic tree mortality we are facing is devastating, it has galvanized partnerships at all levels and placed a renewed interest toward engaging in our forests unlike any I have ever seen. With disaster comes opportunity.

The California Governor has recently made a request to the USFS Regional Forester for Region 5 for increased funding and operational support for tree removal in high hazard areas. While we understand that USFS Region 5 has redirected existing funds to this effort, we also understand that the Region has over 125,000 acres of National Environmental Policy Act (NEPA) ready projects to address tree mortality that would require an additional $30 million to complete, along with an additional 20,000 acres in the NEPA-planning stage that would require an additional $40 to $50 million to implement. The State of California and local governments continue to expend tens of millions of dollars on an emergency basis to address this epidemic. With over two-thirds of the mortality occurring on National Forest lands and over a million acres currently impacted, it is critical that the USFS provide adequate funding and resources to reduce this threat.

Given this daunting emergency, it is critical that Federal land managers are given every tool possible to confront the tree mortality epidemic and to increase the pace and scale of work on the landscape.

I will now turn my comments to the draft of the *Wildfire Budgeting, Response, and Forest Management Act of 2016*. In general, we are supportive of the intent of this legislation and some of the changes it could bring to critical areas of forest management in the State. Specifically I will speak to the issue of fire borrowing, NEPA relief, accelerated forest restoration and risk mapping.

Wildfire Disaster Funding Authority

On behalf of California, as well as with the National Association of State Foresters, I have long advocated for a fix to the USFS' and the Department of the Interior's (DOI) firefighting budgets and the increasing frequent annual cycle of fire borrowing that places non-fire programs in jeopardy. These critical programs including forest restoration, and fuels management and others on public and private lands are continually put at risk by fire borrowing, further exacerbating the poor forest health conditions and forest stressors and challenges.

We recognize and appreciate the *Wildfire Budgeting, Response, and Forest Management Act of 2016* for making progress towards this fix. Ending the practice of late season fire borrowing will go a long way to protecting important forest health programs.

However, fire transfers represent just one part of the broader wildfire funding problem. In recent years, the portion of the USFS's overall budget allocated to fire programs has

significantly grown. Suppressing fires is becoming more expensive and complex as a result of issues including prolonged drought, lack of active forest management, and more people moving into Wildland Urban Interface (WUI) areas. In fiscal year (FY) 1995 fire costs accounted for 16 percent of the USFS's budget, this has grown to over 50 percent in FY 2015 and is expected to increase.

As more funding is allocated to fight fires, less is allocated to other areas of the USFS budget. Agency staff has noted that the trend is a $100 million reduction per year in funding available for non-fire suppression programs, including fuels and forestry work that would minimize wildfire impacts, and the host of critical forestry programs important to the management of the nation's state and private trees and forests. As funding for programs such as Forest Health, Forest Stewardship and State Fire Assistance are reduced, active management and rapid response capabilities are also reduced at the time they are needed most.

There is a critical need to access disaster funding to pay for catastrophic (large, costly, extreme) wildfires - placing these fires on par with other natural disasters or fund wildfire suppression beyond a certain limit in increasingly challenging wildfire years. The two other legislative proposals are funding above a fixed fire suppression appropriation amount through: 1) a budget cap adjustment or 2) the FEMA Disaster Relief Fund. We do not have a preference in how this challenge is resolved, only that it is resolved.

National Environmental Policy Act (NEPA)

We also support the suggested efforts at streamlining the NEPA analysis for priority projects that address wildland fire issues by limiting alternatives to a no-action and recommended action analysis. This would streamline the process and save both time and funding for agency planning staff.

Removal of a large portion of dead and dying trees in California's National Forests also appears constrained by a lack of tree removal projects that have cleared review required by NEPA and other environmental laws. With over a million acres impacted, and only 125,000 treatment acres currently through NEPA review on the three Sierra National Forests, there is clearly a need to evaluate options to increase the number of acres cleared for treatment. Expediting NEPA clearance of projects in high hazard areas is critical to enable tree removal at the pace and scale required to facilitate wildfire risk reduction as well as ongoing bioenergy production.

As you know, the Chief of the USFS has designated substantial areas of California forests affected by insect or disease as "priority treatment areas" under the 2014 Farm Bill. These areas largely overlap with high hazard areas defined by the State. We request that the USFS take maximum advantage of the NEPA categorical exclusion that is available through 2018 for treatment and restoration projects in these designated areas (for projects up to 3,000 acres that are located in the WUI or other specified high-risk areas). We also encourage the USFS to take maximum advantage of the other NEPA streamlining provisions for hazardous-fuel-reduction activities, including the reduced requirements for analyzing alternatives in the Healthy Forest Restoration Act when NEPA does apply, and the NEPA categorical exclusion in the Healthy Forest Initiative for prescribed fire up to 4,500 acres and mechanical removal up to 1,000 acres in the WUI or other specified high risk areas.

Accelerated Restoration Program for Ponderosa Pine and Dry-site Mixed Conifer Forests

Again, we are supportive of any initiative that increases the pace and scale of forest restoration, particularly on USFS land. The types of forest proposed for the pilot programs in this draft include the forest types that are particularly impacted by the current tree mortality emergency in California. These types of forests have also seen some of the most devastating and destructive fires in recent years, fires that are resulting in the wholesale conversion of vegetative species. In short, we have the potential to lose much of our mixed conifer forests in the central and southern Sierra.

If such a pilot program were put into place, we would welcome the opportunity for some of these projects to take place in California. This would be an opportunity to demonstrate techniques for recovery and resilience in the wake of the tree mortality emergency as well as sound forest management techniques that could be more widely applied.

Fire Risk Maps

In general, we support the additional funding for risk mapping that is included in this draft. Given efforts that are currently underway, both at the state and local level as well as within the different regions of the USFS, we would welcome the opportunity to discuss ways to make this effort complimentary to the work that is ongoing. As many members of this Committee are aware, wildfire risk maps aid in recognizing the potential for catastrophic wildfire across landscapes and serve as tools to assist in prioritizing activities including wildfire planning, operations, and mitigation work.

At present, there have been significant investments made by individual states as well as federally - by the USDA Forest Service and the Department of the Interior - to complete wildfire risk mapping or similar activities at state, regional and federal levels. These previously completed risk maps, and those currently underway, supply advantageous information relevant to this section. We believe it critical that these efforts be sustained, and as such, I would encourage continued support for the state, regional, and federal wildfire risk mapping projects to continue in conjunction with the requirements of this draft.

In California, we have a long history of using hazard mapping to drive risk mitigation efforts related to wildfire planning and prevention, including changes to our building codes and our requirements for property owners. Following the Oakland Hills Fire in 1991, the State passed the Bates Bill, which required the mapping of Very High Fire Hazard Zones in both the State Responsibility Areas and also Local Responsibility Areas. Over time, California has required that new or rebuilt dwellings or structures requiring building permits within the hazard zone shall be constructed in accordance with current wildland construction requirements (Chapter 7A of the California Building Code). The code provisions specify construction criteria for eaves, vents, exterior coverings, windows doors and roofing. This hazard mapping was also the basis for legislation passed in 2012 that gave the fire service input into planning decisions made at the local level in these areas.

As I stated at the start of my testimony, fire seasons in the West are getting longer and fire conditions are getting more severe. As our population continues to grow and expand into these WUI areas, we will have to do a better job at engineering fire safety into our

buildings and landscape. In California, we have used hazard mapping as a building block of these activities.

Thank you again for the opportunity to speak to you today on these important issues and on the draft of *Wildfire Budgeting, Response, and Forest Management Act of 2016.* We would welcome the opportunity to continue to work with you and your staff on these important issues.

KEN PIMLOTT
Director

Attachment: Letter dated May 19, 2016, to Randy Moore, USFS, Region 5

May 19, 2016

Randy Moore
Regional Forester
United States Forest Service
1323 Club Drive
Vallejo, California 94592

Dear Mr. Moore,

Thank you for the collaboration of the U.S. Forest Service (USFS) to date addressing epidemic tree mortality across California. As you know, recent estimates indicate 29 million dead trees across the state, with over two-thirds of these trees estimated to be located on USFS lands. Rural communities face urgent public safety hazards from falling trees and increased wildfire risks as whole landscapes across the state are blanketed with dead trees.

We write this letter following correspondence between Governor Brown and Secretary Vilsack to request the USFS take specific actions to address this crisis on Forest Service lands. Forest Managers of the Sierra, Sequoia and Stanislaus National Forests are estimating that over one million acres are suffering from high tree mortality in these forests alone. This tree mortality is only expected to grow in the foreseeable future. Tree removal is required to prevent trees from falling on structures and roads, avert catastrophic wildfire, and provide feedstock to keep needed biomass energy facilities in operation, so these facilities are not closed and dismantled. USFS plays the primary role determining whether and how quickly trees in these high hazard areas can be removed.

Three specific actions by USFS appear necessary to address high hazard areas on USFS land:

1. <u>Increase dedicated funding and resources to address tree removal</u>.

   Increased federal funding and operational support is urgently needed to enable tree removal in high hazard areas. While we understand that USFS Region 5 has redirected existing funds to this effort, we also understand that the Region has over 125,000 acres of National Environmental Policy Act (NEPA) ready projects to address tree mortality that would require an additional $30 million to complete, along with an additional 20,000 acres in the NEPA-planning stage which would require an additional $40 to $50 million to implement. State and local governments continue to expend tens of millions of dollars on an emergency basis to address this epidemic. With over two-thirds of the mortality occurring on National Forest lands and over a million acres currently impacted, it is critical that the USFS provide adequate funding and resources to reduce this threat.

2. Expedite NEPA project approvals in high hazard areas.

   Removal of a large portion of dead and dying trees in California's National Forests also appears constrained by a lack of tree removal projects that have cleared review required by NEPA and other environmental laws. With over a million acres impacted, and only 125,000 treatment acres currently through NEPA review on the three Southern Sierra National Forests, there is clearly a need to evaluate options to increase the number of acres cleared for treatment. Expediting NEPA clearance of projects in high hazard areas is critical to enable tree removal at the pace and scale required to enable ongoing bioenergy production, as well as wildfire risk reduction.

   As you know, the Chief of the Forest Service has designated substantial areas of California forests affected by insect or disease as "priority treatment areas" under the 2014 Farm Bill. These areas largely overlap with high hazard areas defined by the State. We request that the USFS take maximum advantage of the NEPA categorical exclusion that is available through 2018 for treatment and restoration projects in these designated areas (for projects up to 3,000 acres that are located in the wildland urban interface or other specified high risk areas). We also encourage the Forest Service to take maximum advantage of the other NEPA streamlining provisions for hazardous-fuel-reduction activities, including the reduced requirements for analyzing alternatives in the Healthy Forest Restoration Act when NEPA does apply, and the NEPA categorical exclusion in the Healthy Forest Initiative for prescribed fire up to 4,500 acres and mechanical removal up to 1,000 acres, in the wildland urban interface or other specified high risk areas.

   We also believe it is important for the Forest Service to seek an extension beyond 2018 regarding the authority to apply the NEPA categorical exclusion for projects in "priority treatment areas" considering the vast amount of existing tree mortality and continuing spread of the beetle infestation into new areas of California.

3. Confirm an increased, reliable stream of feedstock from high hazard zones to biomass facilities.

   Several existing biomass facilities can convert dead and dying trees from high hazard zones into renewable energy. This activity is vitally important to address the tree mortality crisis, as biomass energy production is currently the only large-scale method to remove and safely dispose of trees from high hazard areas that provides an alternative to open burning. The California Public Utilities Commission (CPUC) oversees utilities with expiring contracts for existing biomass plants, and is implementing two statutorily-required programs to enable ongoing biomass energy. In order to extend current biomass facility contracts that would keep facilities from closing and to initiate the two new programs, USFS must confirm that sufficient volumes of feedstock can be sourced from high hazard zones on USFS lands. To date, USFS has provided very low estimates of available trees in the coming years from high hazard zones on its lands. In fact, this amount of feedstock is estimated to supply only half of one biomass facility for one year, when the number of trees that must be removed from high hazard zones is many times higher. Given the USFS' stated commitment to reducing the threat of wildfire on National Forest lands, we urge the USFS to provide a significant commitment towards the 4.5 million bone dry tons of feedstock needed to keep existing biomass facilities operating.

Maintaining a strong, unified commitment to address this unprecedented tree mortality remains necessary to avoid the worst impacts of this crisis. Thank you once again for your ongoing commitment to tackling this grave challenge.

Sincerely,

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