Chairwoman Murkowski, Ranking Member Cantwell, and Committee Members, the California Forest Watershed Alliance (CAFWA) is pleased to submit this statement for the record for the November 17, 2015 hearing to review past wildfire seasons to inform and improve future federal wildland fire management strategies. CAFWA is a unique alliance of disparate interests including organizations that represent water, environment, local government, timber, and agricultural interests all dedicated to finding a solution to California’s ever-growing forest health and fire risk issues. The members of CAFWA, the Association of California Water Agencies, California Farm Bureau Federation, California Forestry Association, The Nature Conservancy California Chapter, and Rural County Representatives of California, are working together to seek new ways to promote proactive, science-based, and ecologically sound forest management practices that will reduce the risk of destructive megafires. Our goal is to protect our forests, our natural resources, and our local economies by accelerating the pace and scale of forest restoration.

**Background:** Accelerating forest restoration and hazardous fuels reduction is essential to securing multiple benefits from our National Forests. These benefits include wildlife habitat, clean water supplies, recreation, forest products, carbon sequestration, forest health, reduced burned acres in wildfires and reduced fire severity, and healthy rural communities and economies.

Inaction on forest health is contributing to catastrophic megafires. CAFWA encourages Congress and the U.S. Forest Service to quickly address the known budgetary and policy obstacles that are contributing to this crisis.

CAFWA believes that any policy or legislative reforms that promote improvements to and expansion of forest restoration activities should be ecologically sound, and advance research to improve the state of scientific knowledge to better direct future land management decisions.

**Problem Statement:** California forests, and other forests across the western United States, are at serious risk of large, high-severity wildfires that threaten lives, communities, water resources, wildlife habitat, and recreation. Recent examples, such as the Butte and Valley Fires which were both federally declared disasters, and together destroyed over 2200 homes, infrastructure, and unique habitats and have left behind communities which will remain fractured for years to come in their wakes. Although forest thinning and controlled burning are proven methods of reducing the risk of destructive megafires, the current pace and scale of forest management activities are inadequate given the scope of the problem. Our fire season is starting earlier and lasting longer with fires burning hotter than ever before. The growing cost of Forest Service fire suppression
activities is negatively impacting the budget available to carry out critical restoration projects that protect forests and will reduce firefighting costs over the long term. Severe drought in western states is also exacerbating the decline of forests due to beetle bark infestations. There is an urgent need to restore our forests to a more resilient condition to protect our water resources, communities, and ecological values.

2015 Wildfire and Budget Impacts: According to the California Department of Forestry and Fire Protection (CAL FIRE), almost 306,000 acres of private and state land and another 400,000 acres of federal lands have been affected by wildfires this year alone and the state estimates that $209 million will be spent, just in suppression costs. Similarly, at the national level, the U.S. Forest Service estimates that this year it will spend 52% of its entire budget on wildfires, with that amount expected to increase to 67% by 2025. Contrast that to 1995, when the Forest Service spent 16% of its budget on wildfire costs; such drastic increases in the percentage of their budget that is used for fighting fires cuts into non-fire programs such as restoration and land management, which, in turn, increases the likelihood of catastrophic wildfires the following year.

CAFWA Statement of Purpose: CAFWA believes healthy forests matter, not just to those living in and around those forests, but to all Californians who rely on clean water, clean air and recreational opportunities. The impacts of forest wildfires on our water, energy, environment and economy are felt by Californians throughout the state. It is time to take a serious look at current forest management policies, and to expand programs to improve forest health. The members of CAFWA are working together to seek new ways to promote proactive, science-based, and ecologically sound forest management practices that will reduce the risk of destructive megafires.

WHAT’S AT RISK?

Water Supply and Storage: Unhealthy forests and catastrophic wildfires affect the short and long term management and sustainability of water supplies. Wildfires in untreated areas cause burned areas to produce increased loads of sediment, ash and debris which cause reservoirs to fill up faster and reduce the life and storage capacity of reservoirs. Burned watersheds without trees and ground cover will result in snowpack melting more quickly. The resulting runoff will be less predictable, and less timely, increasing the difficulty of managing water supply throughout the west.

A recent study by The Nature Conservancy (TNC) analyzed the potential water yield benefits from ecologically-based forest management in the northern Sierra Nevada and concluded that, if conducted at a landscape scale, fuels reduction in Sierra forests can potentially increase water yield by up to 6 percent. Dr. Roger Bales (UC Merced) in his 11/29/2011 publication predicts that up to 16% could be increased in water yield. The TNC report also found that it makes economic sense for water suppliers and utilities to invest in ecologically based thinning. Increased water that comes from thinning small trees could have significant economic benefits for downstream hydropower and water users, potentially off-setting between one-third and the full cost of the thinning.
**Water Quality:** Post-fire flooding has short and long-term impacts throughout watersheds which can extend far beyond the area of the fire. Ash, sediment, nitrogen and phosphorus can severely impact the taste and purity of drinking water, and negatively impact fish and other aquatic species that require clear, oxygenated water. Increased sediment deposited behind reservoirs can impact the taste, clarity and odor of water as dissolved organics increase in the water, requiring elevated water treatment costs.

**Ecosystem and Wildlife:** Destructive megafires have numerous impacts on the ecosystem and wildlife. High severity fire can scorch soils, removing valuable organic carbon on the surface and in the soil profile, reducing its water holding capacity. When this occurs on slopes, the fire-sterilized soil is more likely to be carried down-slope, causing erosion and reversing hundreds to thousands of years of natural soil building processes. Wildlife habitat is also impacted by high severity fire as ecosystems shift from cool, canopy covered refugia to hot, exposed, and eroded barrens. Some wildlife can exploit these newly disturbed areas and brush lands, while others may need to migrate elsewhere to survive. Newly disturbed sites are also prone to invasion by non-native plant species that grow quickly and take advantage of recently released nutrients and bare, mineral soil. Additionally, some treeless patches are so severely sterilized that new sources of seeds do not exist and the area must be replanted, incurring greater costs and raising uncertainty about success in a continuing drought.

**Rural Economies:** The absence of forest management creates devastating economic hardship and danger for those living and working in California’s rural communities. These megafires often result in millions of dollars worth of infrastructure damage and devastation to the landscape that require lengthy rehabilitation periods. Rural communities also rely on healthy forests for revenues generated from the multiple uses our National forests provide including, but not limited to, timber harvest, grazing, tourism, and recreation.

**OPPORTUNITIES**

Unfortunately, fuels reduction projects in overgrown forests continue to face numerous obstacles. Despite partnerships between stakeholders and federal, state and local governments, and science that clearly demonstrates the benefits of fuels reduction projects, the pace and scale of proactive forest management is not nearly keeping up with the increased size and severity of wildfires in our western forests. CAFWA believes there are opportunities to help accelerate forest restoration and is undertaking the following actions:

- Building a diverse, bipartisan, urban-rural coalition in California to advocate for increasing the pace and scale of ecologically-based active management in California’s forests and watersheds.
- Communicating the importance of California’s healthy forests by emphasizing the multiple values that they provide including, but not limited to, water resources.
- Pursuing increased funding and new funding sources for forest management from federal, state, and private sources.
- Advocating for policy and legislative reforms that will promote ecologically sound forest restoration.
Advancing monitoring and research to improve the state of scientific knowledge to better direct future land management decisions.

*CAFWA encourages Congress to pass federal legislation that addresses the following issues:*

**Promote Landscape-Scale Collaboration** -- Congress should incentivize and reward landscape-scale collaboration with local governments and diverse stakeholders by expediting environmental review for collaboratively-based projects that address insect or disease infestation, reduction of hazardous fuels particularly near communities, forest health restoration, wildlife habitat improvement, or protection of municipal water sources.

**Fix “Fire Borrowing”** -- The structure of wildfire funding desperately needs to be changed to prevent so-called “fire borrowing” - or the shift of dedicated forest management funds at the U.S. Department of Interior and the U.S. Department of Agriculture, to fund wildfire suppression activities – *in addition to*, addressing the increasing costs of suppression over time, which continues to erode program budgets. Currently, the Wildfire Disaster Funding Act is the only proposal positioned to address the multiple complexities of fire budgeting. Resolution of this issue, whether through the Wildfire Disaster Funding Act or an alternative methodology, is critical to the constituencies CAFWA represents.

**Expedite Forest Restoration** -- Congress should consider providing additional direction and incentives to the Forest Service to undertake fuels reduction and forest management activities on a landscape scale, where supported by effective collaborations. This could include a combination of (1) financial incentives for landscape-scale forest management, possibly tied to a job-creation program to bolster rural economies and provide more certainty over multiple years, and (2) regulatory incentives. Regulatory incentives may include providing direction to the Forest Service to encourage management of the national forests on a landscape scale, including innovative approaches to complying with the National Environmental Policy Act (NEPA) that would meet the policy’s goals while expediting forest management. This approach might include, for example, increased use of landscape-scale Environmental Impact Statements (EIS) that consider environmental impacts and alternatives at a whole-watershed scale while allowing the Forest Service to implement site-specific projects without additional extensive NEPA review, as long as projects are ecologically sound. This may also significantly decrease per-acre analysis costs and expedite project implementation.

**Address Pace of Judicial Process** -- CAFWA shares the concern that legal challenges can reduce the pace of forest management necessary to reduce wildfire risk and promote more resilient forest conditions. CAFWA recognizes there are several different approaches being debated on how best to address this concern. The goal should be to expedite collaborative, ecologically-based landscape-scale management--while still ensuring that agencies are held accountable and projects are ecologically sound. Congress should work on a solution that advances this goal.
Funding for Forest-Water Research and Demonstration Projects -- Congress should build upon the link between healthy forests, watersheds, and downstream water quality and quantity by funding landscape-scale research and demonstration projects. The goal of such research should be to document and quantify the extent to which landscape-scale forest management serves to safeguard water supply by reducing the risk of high-severity wildfires and resulting erosion and sedimentation, by increasing water yield, and in other respects.

CONCLUSIONS
Accelerating forest restoration and hazardous fuels reduction is essential to securing multiple benefits from our National Forests. These benefits include wildlife habitat, clean water supplies, recreation, forest products, carbon sequestration and healthy rural economies.

Inaction on forest health is contributing to catastrophic megafires. CAFWA encourages Congress and the U.S. Forest Service to quickly address the known budgetary and other obstacles that are contributing to this crisis.

If you would like to reach a member of CAFWA for further details on our position, please contact Erin Huston of the Farm Bureau at ehuston@cfbf.com, Dave Reynolds representing ACWA at dreyns@sso.org, Thane Young representing RCRC at tyoung@vsadc.com, David Edelson at dedelson@tnc.org, or Steve Brink with CalForests at steveb@calforests.org.