Testimony of Ken Stewart

Chair, Board of Trustees, American Forest Foundation and

Deputy Director, Renewable Bioproducts Institute, Georgia Institute of Technology

November 5, 2015

Before the

U.S. Senate, Committee on Agriculture, Nutrition, and Forestry

Hearing on Wildfire: Stakeholder Perspectives on Budgetary Impacts and Threats to Natural Resources on Federal, State and Private Lands

Chairman Roberts, Ranking Member Stabenow, other distinguished Senators, thank you for the opportunity to share the views of the American Forest Foundation (AFF) and the 22 million family landowners in the U.S. that AFF works with, on the issue of wildfire and the budgetary impacts and threats to natural resources on federal, state, and private lands.

AFF is a non-profit conservation organization that works on-the-ground with families, teachers and elected officials to promote conservation and stewardship and protect our nation's forest heritage. Our goal is to engage and support the nation's more than 22 million family forest owners, who care for the largest portion of America's forests, to sustain the benefits we all enjoy from our forests: clean air and water, wildlife and fish habitat, forest products, and recreation opportunities, to name a few.

In addition to serving as the Chair of AFF's Board of Trustees, I retired from Georgia Tech (GT) but am continuing to work as Deputy Director, Renewable Bioproducts Institute at GT. The Renewable Bioproducts Institute was recently created from the Institute of Paper Science and Technology in order to represent the broader pulp, paper and green chemicals, fuels and materials industries. We believe bio-based, renewable raw materials including cellulose will be the backbone of the chemicals and materials industries of the future.

I also bring over four decades of experience from both the corporate and government sectors, most of which has been in forestry. Just prior to my role with Georgia Tech, I served as Commissioner for Georgia's Department of Economic Development, where much of my work was focused on enhancing Georgia's significant forest-based economy. The forest products industry is still the 3rd largest employer in Georgia as is the case in many southeastern states. Prior to that, I served as Georgia's State Forester, where I was responsible for the stewardship of 24 million acres of Georgia's forest land, both public and private lands, leading the 600 person Georgia Forestry Commission.

Mr. Chairman, members of the Committee, you may be familiar with a new report just released by the American Forest Foundation, which tells a new piece of the story regarding the wildfire threat in the West. The report, included along with my testimony, *Western Water Threatened* *by Wildfire*, which I'd like to request be inserted into the record, highlights, in a first of its kind analysis, how the wildfire threat in the West is not just a public lands issue. The report shows that over one-third of the lands in the West with high fire threat are private and family land. What's more, the report demonstrates that over 40% of the lands at high fire threat in critical watersheds, are private and family-owned lands, highlighting the threat wildfires pose to drinking water supplies.

Wildfire Threat's Impact on Water

As this Committee knows, wildfires, especially the catastrophic wildfires we've seen of late in the West, cause devastation to homes and lives and communities, wildlife and fish, and air quality. With more than 9.2 million acres burned in 2015 alone, making 2015 one of only four years since 1960 to see more than 9 million acres burn, there are few communities in the West that haven't been touched by the impact of wildfire. The drought in the West, combined by the overly-dense conditions of forests, make it not a question of whether, but when, Western forests will burn.

While wildfires are a natural part of the West's forest ecosystem, the drought and fuel buildups in the west have resulted in abnormal, catastrophic wildfires, that burn extremely hot, charring soils and vegetation, making recovery to a healthy ecosystem a much more difficult process.

But wildfires, especially catastrophic wildfires, don't just impact the forests and the people and wildlife that live in and around them. The impact of these fires is often felt hundreds of miles away in communities, cities and municipalities that rely on upstream forests to purify and store their water supplies.

While only 30% of the West is forested, some 65% of the West's water supply is cleaned and stored by forests. This natural filtration and storage is essential for no less than 64 million Westerners who rely on surface water flowing from forested headwaters to meet their daily needs. In drought conditions (in some areas we are seeing the worst drought conditions on record) this water supply is more than critical to Westerners and the agriculture and other businesses that rely on it.

Many Western communities are now feeling the aftermath of this summer's severe wildfires, as the rains begin and the charred landscapes burned by catastrophic wildfires now become sources of contamination and sedimentation in critical water supplies. Just last week, for example, California Geological Survey issued an advisory to California residents to be aware of increased potential for landslides, particularly within the perimeter of this summer's Butte fire.

When wildfires burn extremely hot, it hardens the soil, forming almost a "parking lot" effect. The soils and trees no longer filter containments and sedimentation from the water or store the water to release it gradually—it runs into streams and rivers that run directly into reservoirs and water storage facilities. Municipalities then need to spend, in some cases millions of dollars, treating their water supply to ensure continued fresh drinking water.

Impact of Wildfire Felt Outside the West

While AFF's report highlights the challenges in the West, wildfire is not just an issue in the West. Wildfires have significant impact on forests and communities east of the Mississippi as well. The south, Mississippi, Louisiana, and Texas, just recently had another flare up of wildfires that luckily have been slowed by the rains now heading across the south.

In my tenure as Georgia's Economic Development Commissioner, we saw the largest wildfire in Georgia's history—which, combined with several other significant fires came to be called the Georgia Bay Complex. This fire burned over 564,000 acres in Georgia and Florida between April and June of 2007, among the 25 largest fires in the U.S. since 1997. This fire complex, caused more than \$60 million in damages to Georgia's forest land, making it both a safety and economic issue in Georgia.

But even for those of us who live where wildfire is not a significant threat, wildfires should still be top on our minds.

The cost to fight these growing wildfires continues to rise. This year, the US Forest Service alone spent close to \$3 billion on firefighting. In a no-increase budget situation like we are faced with right now, because these firefighting expenses are budgeted for within the Agency's normal spending, the rising costs of firefighting means that other agency program shrink. This includes programs that work to prevent wildfires on both public and private land, as well as those that address a myriad of other forest issues from insects and disease to development pressures.

In 1995, the US Forest Service spent \$367 million to fight fires, some 16% of the Forest Service budget. In 2025, the Agency predicts it could spend close to 67% of its budget fighting fires, meaning it has some half a billion less to spend on preventative efforts and other critical forest issues.

Between the last fiscal year and this year, the 10-year average - used to calculate the suppression budget - increased by \$115 million and non-firefighting programs were reduced by that equivalent.

We estimate that in the last five years, State and Private Forestry programs, including those that fund State Fire Assistance as well as non-fire programs, have seen roughly a 12% decline in funding, and some programs like the Forest Service Forest Health program have seen as much as a 22% decline in funding in this same time period.

What's worse, even as wildfire costs are consuming more and more of the Forest Service budget, the Agency has also, in 8 of the last 15 years, still run out of firefighting funds before the end of the fiscal year, forcing the Agency to "borrow" from other programs. This year, the Forest Service borrowed some \$700 million from non-firefighting accounts, including preventative accounts and accounts that help address issues outside of the West, like invasive species and other challenges. While we're grateful that Congress acted quickly to repay these accounts, the impact is still felt when programs are halted mid-season and in some cases work cannot be resumed until the next season.

The impacts of this fire funding issue, on states like Georgia and on private and family landowners across the country, especially in the south, is significant. With the shrinking budgets and the disruptive borrowing, programs that provide private and family landowners with technical assistance to get ahead of wildfire problems are significantly short changed. But there's other non-fire impacts as well. Programs that help detect and prevent spread of invasive and native insect and disease issues, like the hemlock wooly adelgid or the Syrex Wood Wasp are also impacted. In 2012, due to the fire borrowing, a multi-state effort to improve forest resilience, which include significant coordination across states, was cancelled.

The impact is not just on programs that provide assistance to private and family landowners. Important research and development efforts, such as those that help stimulate new markets and infrastructure to support the needed restoration treatments on the landscape, are also stymied by this fire funding issue.

Solution to Reducing Wildfire Threat Must Include Both Public and Private Lands, Landscape Approach

To address the growing wildfire threat in our forests, while also reducing wildfire fighting costs in the long-run, AFF's report demonstrates there is a clear need to address the wildfire threat on private and family lands, in addition to public lands. Since more than 40% of the lands facing a significant wildfire threat in critical watersheds are private and family lands, action on both public and private lands, especially given the patchwork of ownership, is needed to truly address this significant threat.

Treatments such as thinning overly dense stands and in some cases prescribed or wildland use fire are needed. This will reduce the fuel for wildfires, helping ensure that when wildfires happen, they do not burn with such intensity to damage the watershed and water supply.

But even then, if we're to protect communities and water supplies, silo treatments on public and private lands will still not be enough. Wildfires don't respect property lines and if treatments aren't coordinated to achieve sufficient scale in a landscape, the work of one or two landowners to reduce wildfire threat can very quickly be consumed by a catastrophic wildfire that burns through neighboring land that hasn't been treated. We must take a landscape approach with fire treatments, where treatments on both public and private lands add up to a scale that will truly address the wildfire threat and protect the watershed from catastrophic wildfire.

For example, in Oregon's Blue Mountains, federal and state agencies, university extension programs, and national, state, and local non-profits are partnering to help landowners restore their forests and reduce their fire risk across nearly 200,000 acres, complementing the work of

their neighbors- both public or private- all in an effort to increase by four-fold the pace and scale of cross-jurisdictional forest restoration.

Private and Family Landowners Are Ready to Act

We know how to reduce the wildfire threat. We also know that private and family landowners are ready and motivated to take action on their land. AFF's report includes the results of a West-wide survey of landowners that shows most landowners are aware of the threat and, ready to act, to be responsible stewards. In fact most are more concerned about fire today than they were five years ago.

But AFF's survey also uncovered that only 25% of Western landowners plan to take action in the near future to thin their forests.

Why this disconnect? If landowners are concerned and motivated, why are only a few of them planning to act? AFF's report also uncovered two very significant barriers to private and family landowner action: cost and lack of neighboring land action.

While landowners want to be responsible stewards and understand the responsibility they have to take care of the land, the cost of treatments for many is insurmountable. Landowners will contribute their own money, time, and effort but even then, that's still not enough for many, especially when treatment costs run several thousand dollars per acre in some parts of the West. The need for action and high cost are largely due to influences and circumstances outside the control of landowners: the prolonged drought and record high temperatures are making forest health conditions worse, and the loss of market infrastructure in many parts of the West makes treatments very costly.

Lack of neighboring land action is also a serious barrier to private landowner action. While landowners are willing to put in their own resources, they know that if their neighbors, whether they are public or private landowners, don't also take action, their work could be for nothing. Thus, a landscape approach makes sense both ecologically and as a strategy to motivate private and family landowners.

Strategies that help reduce costs, provide landowners with both technical and financial assistance, and support a landscape approach, will go a long way towards empowering private and family landowners to take action.

Policy Can Address Growing Cost and Threat Posed By Wildfires

The good news is this: we know how to reduce wildfire threats and protect water supplies; we know that the solution needs to include both public and private lands in a landscape approach; and we know private landowners are willing to take action if we can help address their biggest barriers. We also know how to fix the problems with how wildfire fighting is paid for at the federal level.

Addressing all these issues will help reduce the cost of fighting wildfires in the long-run and will help reduce the local community costs of cleaning up water supplies in the aftermath of wildfires.

A set of policy solutions can be enacted to help support and address these issues. AFF's report includes a set of solutions that we believe can garner bi-partisan support:

- First, we need to fix how wildfire fighting is funded at the federal level. Congressional
 action is needed so that wildfire fighting costs, especially those costs that are truly
 catastrophic in nature, are treated like other federal disaster emergency funding. The
 solution must address both the rising costs of wildfire fighting that leads to continuous
 shrinking of other programs and the disruptive practice of fire borrowing.
- Secondly, authorities and funding are needed to better enable treatment on the ground on private and family lands and support a landscape approach. While there are a range of authorities and funding sources to address fire mitigation, most do not take a landscape approach or coordinate work on both public and private land. Most also do not offer significant resources for private lands work.

AFF has found success in several landscapes in the West, as well as in other parts of the country, through a collaborative, coalition approach that brings all the various organizations, landowners, and other stakeholders together in a landscape to develop and implement a landscape strategy. These successful efforts, supported in part by the US Forest Service and Natural Resource Conservation Service, have involved coordinated private landowner outreach, reducing duplication of resources, to provide landowners with the needed technical and financial assistance in support of the larger landscape goals. We recommend examining existing authorities, in both the US Forest Service and the USDA Natural Resource Conservation Service, to find ways to encourage strategies such as these successful landscape scale efforts.

Third, we need to find ways to catalyze market infrastructure to support the needed
restoration work on-the-ground. There will never be enough public funding to support
all the needed restoration work, but public funding can help stimulate private sector
investments. Catalyzing infrastructure, including mills, loggers, foresters, that can work
on both public and private lands to remove the restoration by-products and make use of
these byproducts, will go a long way towards reducing treatment costs. Concentrating
public investments to support infrastructure where the work is happening on public and
private lands, will mean a better return on the investment. Additionally, public
investments are needed to encourage research and development in new market uses of
restoration by-products, such as nano cellulosic technologies, new building technologies
that use wood, and biomass energy technologies.

Thank you Mr. Chairman, Ranking Member Stabenow, members of the Committee for your time and attention today. I look forward to responding to any questions you may have.