

**IMPROVING FOREST HEALTH AND SOCIO-
ECONOMIC OPPORTUNITIES ON THE NATION'S
FOREST SYSTEM**

HEARING
BEFORE THE
COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

ON

**IMPROVING FOREST HEALTH AND
SOCIOECONOMIC OPPORTUNITIES ON THE
NATION'S FOREST SYSTEM**

MARCH 24, 2015



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TUESDAY, MARCH 24, 2015

U.S. SENATE
COMMITTEE ON ENERGY AND NATURAL RESOURCES
Washington, DC.

The Committee met, pursuant to notice, at 10:03 a.m. in Room SD-366, Dirksen Senate Office Building, Hon. Lisa Murkowski, Chairman of the Committee, presiding.

OPENING STATEMENT OF HON. LISA MURKOWSKI, U.S. SENATOR FROM ALASKA

The CHAIRMAN. Good morning. We are calling to order the Energy Committee hearing this morning. Welcome everyone.

We are here today to review the management of our national forests and what we can do together responsibly to make them healthy and productive for the people who enjoy them and who rely on them.

Over the last 20 plus years the management of our forests, and I would probably say reluctantly the lack of management thereof, has resulted in a crisis of epic proportions for local communities. According to the Forest Service's own statistics there are 65,000,000 to 82,000,000 acres in need of some kind of restoration treatment, because they are at high risk from severe wild land fires that threaten human safety and ecosystem integrity.

I noted in my hometown newspaper just over the weekend that with the low snow pack, low precipitation over the winter and probably an early spring that we are looking at an early and perhaps an extensive fire season. That does not make us feel too good up there. Mr. Bonnie, you know what I am talking about.

Of the acreage that requires restoration treatment, 12-1/2 million acres require some level of mechanical treatment to thin overly dense stands. Nearly 18,000,000 acres of conifer trees have been lost to bark beetle alone and recently the Forest Service designated 45,000,000 acres as insect and disease epidemic areas in need of treatment at the request of governors under the 2014 Farm Bill. A million and a half of those acres are in my State of Alaska.

At the same time the annual timber cut has dropped by more than 80 percent resulting in the loss of tens of thousands of timber jobs, closed schools and local government budget shortfalls.

The Secure Rural Schools program provided a temporary lifeline to timber dependent communities, but in these tough budget times

paying for it is increasingly difficult and the prospect of simply continuing to make payments from the Federal Treasury is increasingly unsustainable.

The California loggers who visited my office last week had it right. American forests work only if they do.

Now there are many factors that have contributed to where we are with this crisis situation. The policies that govern our national forests have evolved over time to reflect new, sometimes competing, priorities of a changing society. Policy makers and the Forest Service have not done a very good job of effectively integrating the body of laws, regulations and court decisions so there is no clear guidance for the management of our national forests. Still gripping the Forest Service is what former Chief, Dale Bosworth described as “analysis paralysis.”

This maze of congressional mandates, Administrative directives, executive orders, Secretarial memos and court decisions is a mine field of litigation opportunity as some have only been too eager to exploit. Progress today has been redefined to be the completion of the process rather than implementation of a project on the ground.

Southeast Alaska is a case in point. Its forest industry, once the second largest in the state, is barely hanging on. We have one medium size sawmill that is left.

In 1990, a decade after passage of the Alaska Lands Act that cut Federal timber harvest in Southeast Alaska by more than half, timber accounted for 6,113 direct and indirect jobs or 79 percent of all manufacturing jobs in the state. By 2000, due to a host of restrictive factors like the 1990 Tongass Timber Reform Act and the Inventory Roadless Area Rule, timber accounted for only 1,500 manufacturing jobs. By early 2014 there were only 547 wood and forestry jobs left in the state accounting for just 1.5 percent of our employment.

Now some may welcome the demise of our forest industries. I certainly do not, and many in Southeast share my concern.

We saw a net loss in population in the area between the year 2000 and 2010. While mining and seafood industries have picked up some of the economic slack, the region’s economy is still weak. Unemployment was at 17 percent last month on Prince of Wales Island, the largest remaining timber producing area in the state.

Now the Secretary of Agriculture is ready with, what I have said, could be the final nail in the coffin and that is this transition moving from harvesting old growth to second growth in 10 to 15 years. Now to its credit the Forest Service recognized that there is not enough young growth to support the current forest products industry, so it put up the Big Thorne Stewardship Contract to provide this bridge timber. The notice of intent for Big Thorne was issued in February 2011, over 4 years ago. The sale was awarded last November. Since then this critical project has been tied up in litigation.

We passed a big hurdle last Friday on Big Thorne when a Federal District Court judge upheld the sale and dismissed the claims challenging it. The lawsuit though, we know, is not necessarily over. The environmental activist plaintiffs could appeal the decision to the Ninth Circuit and seek an injunction. The Forest Service Tongass Supervisor eloquently stated the problem with that

when he mentioned this to the Juneau Empire last November. He said, "The plaintiffs don't have to win. They just have to delay. And if they delay long enough Viking goes out of business." Some would argue that has been the plan all along, not to cut it off but to delay enough that those in the industry just give up. That is not what a forest policy should look like, and that is why many communities including in Alaska believe the only solution is to get out from under the existing management structure and take control of their own destiny. Given everything we have seen it is sure hard to blame them. The goal of this Committee and this Congress will be to help them, and that is what my intention is this morning.

I want to thank all of our witnesses who are here with us today. Some of you have traveled long distances to be with us, and we certainly appreciate that. We look forward to your comments and your perspectives this morning.

With that, I turn to my Ranking Member, Senator Cantwell.

STATEMENT OF HON. MARIA CANTWELL, U.S. SENATOR FROM WASHINGTON

Senator CANTWELL. Thank you, Madam Chair, and thank you for holding this important hearing.

Mr. Bonnie, I want to thank you for coming today to talk about the U.S. Forest Service and for your time appearing before this Committee in your role as Under Secretary.

I also want to recognize Duane Vaagen, who is here from the Pacific Northwest. Mr. Vaagen lives in Colville, Washington and has experience partnering with the Forest Service on many of its restoration initiatives and for our region has been a leader. So thank you very much for being here today.

I want to start by reflecting on the lawmakers of the 60's and 70's. These members saw the problems that were being created with the way the Federal Government was managing our forests, and they set out to fix them. They passed some of the most sweeping reforms in the 20th Century and we really have not seen anything like it since.

In recent years I have seen a lot of attempts in various piecemeal fashions and what is really needed, I think, is an overall 21st Century Management Plan. We need a strategy that will improve the health of our national forests, conserve important areas and encourage recreation, and public input needs to be unambiguous in the plan.

Most of us would agree that our forests are in pretty bad shape. One hundred years of fire suppression has left our national forests prone to catastrophic wildfires, and decades of clear cutting have left the overall structure of our national forests unbalanced. In many places habitat, for our threatened and endangered species, is in short supply.

Here are a few of the sobering facts. Over the last decade bark beetles destroyed 32,000,000 acres of 193,000,000 acres managed by the Forest Service. I think that was the same factoid you just mentioned.

The CHAIRMAN. Yes.

Senator CANTWELL. So we agree on that. The National Forest's latest disease model shows that another 37,000,000 acres of the na-

tional forest will die from disease before 2027. Here is another one. Another model shows 58,000,000 acres are at risk of imminent burning in a catastrophic fire.

As we talk about this we need to assess how much these percentages are related to the lack of management and how many are made more difficult by the changing climate.

So how do we move forward? That is obviously the topic of today's hearing. We have serious challenges, and we need to address them in a shorter amount of time than the 100 years it took us to get to this place. We need to be more efficient in ways to manage and restore our forests.

To do that the Forest Service needs to use management approaches that are different than the approaches of the last century. The previous approaches created the conditions today. In the past 2 years we have seen restoration efforts take hold when the Forest Service has collaborated with stakeholders. Collaboration on watershed issues has been particularly important in the Pacific Northwest where salmon receive and deserve so much attention. These collaborative efforts around watershed management have been very helpful.

Now restoration projects need funding to move forward. As such, markets for forest products are also critical to the success of these projects. To expand forest restoration efforts we need to expand markets. We have to figure out how to generate moderate value products from low value wood and how to generate them at a scale large enough to reduce the increasing devastation of wildfires. The increased use of cross-laminated timber and wood pellets could provide us with such an opportunity. I will say that the Forest Service really needs to also use different technologies.

One example worth highlighting just because later today we are having a hearing in the Commerce Committee on this, is drones. Multiple organizations now have built drones that can be used to reforest areas. Each of these drones would be able to plant 36,000 trees per day at 10 percent of the Forest Service's current cost. After the devastating wildfires like we had at the Carlton Complex, there is a need to obviously stabilize and restore these areas.

Overall the Forest Service is working hard to restore the health of the forest, but trying to measure the agency's success only in the amount harvested is simply misguided. We need to look at other things as well. The Forest Service must keep mills nearby. I think I have already talked about the importance of markets, but we also need to make sure that we talk about stewardship contracts and their access to some of these smaller mills and also recreation.

Recreation on national forests contributes \$13 billion to our economy, about 40 percent of their total contribution to the economy. In conversations that will be unfolding I believe recreation also deserves consideration in revitalizing and expanding recreation on our national forests.

We had a hearing earlier about this and had a lot of questions of the Forest Service on just how difficult or challenging it is for school organizations to get access to our Forest Service lands without these permits. So I think we need to look at that.

We all know that wildfires are probably the biggest problem facing the forests every summer. That is why I look forward to work-

ing with Chairman Murkowski and my colleague, Senator Wyden, with whom I am happy to co-sponsor his legislation, to put resources at play to help us manage this.

Finally I want to reiterate the importance of the public's input in management decisions. This has been very important. With any bill in this Committee I want to make sure that we continue to streamline the process but also receive input, and it must remain a major building block of how we manage our public lands.

So thank you to all the witnesses for being here today. And thank you, Madam Chair, for this important hearing.

The CHAIRMAN. Thank you, Senator Cantwell.

With that we will proceed to our witnesses. I will introduce each of you, and then we will just go down the line.

I would ask you to try to keep your comments to 5 minutes, then we will have an opportunity to present our questions to you. Your full testimony will be included as part of the record.

We will lead off the panel with Mr. Robert Bonnie. Mr. Bonnie, thank you for being before the Committee today. It is greatly appreciated, in your capacity as Under Secretary for Natural Resources and the Environment there at the Department of Agriculture. Thank you and we appreciate your work.

Next we have Mr. Brian Brown. Brian is the Director of Alcan Forest Products out of Alaska. Thank you for being here this morning, and thank you for traveling so far.

Next we have Mr. Carlton Owen, the President and CEO of U.S. Endowment for Forestry and Communications, Incorporated. Good morning to you and welcome.

We also have Mr. Mark Peck, who is the Commissioner in Libby, Montana. Thank you for joining us.

Rounding out the panel we have Mr. Duane Vaagen, who is President of Vaagen Brothers Lumber. Thank you for joining us as well.

With that, Mr. Bonnie, if you can lead off the panel and good morning.

**STATEMENT OF ROBERT BONNIE, UNDER SECRETARY FOR
NATURAL RESOURCES AND THE ENVIRONMENT, U.S. DE-
PARTMENT OF AGRICULTURE**

Mr. BONNIE. Madam Chairman, Ranking Member Cantwell and members of the Committee, I want to thank you for the opportunity to be with you today and to talk about the U.S. Forest Service efforts to increase the pace and scale of forest restoration and management on the national forests.

There's a growing consensus around the need to restore and manage our national forests to address climate change, catastrophic wildfire and watershed conservation while providing economic opportunities for local communities. In national forests across the country we have moved from the timber wars of the past to a more collaborative approach that brings forest industry, local communities and conservation groups together to develop plans and projects that make our forests more resilient to a variety of threats.

In Idaho, for example, former foes from the environmental community and forest industry are charting a path in the national for-

est of that state to address forest health while providing a sustainable timber supply to local mills. In Arizona later this spring the Forest Service will finalize a plan developed a diversity of stakeholders to restore Ponderosa Pine across 1,000,000 acres and four national forests. In the Malheur National Forest in Oregon environmentalists and the timber industry are working together on a 10-year stewardship contract developed collaboratively to restore the Blue Mountains, and on the Tongass National Forest in Alaska the Forest Service is working with the Tongass Advisory Committee and other stakeholders to develop a transition plan that will maintain forest industry while moving to second growth timber.

The Forest Service is developing new approaches and using new authorities to bolster projects like these across the National Forest system. Let me give you some examples.

Under the Collaborative Forest Landscape Restoration Program the Forest Service has made significant progress in reducing wild-fire threats while exceeding the program's 5-year timber target by 25 percent.

The agency is using new approaches to improve NEPA. On the Rim Fire in California we invested in science and collaboration to produce a final environmental impact statement in less than a year.

Under the new Farm Bill, last summer we announced 46,000,000 acres of lands designated as impacted by insects and disease where collaboratively developed projects will have streamlined requirements. And we're investing in markets for woody biomass, solid wood products and other forest products to bolster the forest industry.

To be sure these collaborative approaches are not a panacea. They require patience and commitment. But this approach, working with local stakeholders, using the best science and working across large landscapes is paying dividends. The agency is able to treat more acres and as a result since 2009 we have increased the amount of timber sold from the national forests. Ultimately however, the ability of the agency to further increase the pace and scale of restoration and management is not a matter of will, it is a matter of capacity.

To be blunt, the way the Forest Service budgets for fire suppression is crippling the agency. Our fire seasons are 78 days longer than they were three decades ago. Fires are larger, more severe and more expensive. In 1995 the agency spent 16 percent of its budget on fire fighting. Today the figure approaches half of our annual budget.

Since 1998 staff on the National Forest System has been reduced by 39 percent. Further, in most years the Forest Service is forced to transfer dollars from the non-fire budget to pay for fire. If there's one action Congress could take to further forest restoration and management on the national forests it's to change the way we budget for fire.

The Wildfire Disaster Funding Act introduced by Senators Crapo and Wyden will end fire transfers. Importantly that legislation which is mirrored by a proposal in President Obama's budget would allow the agency to increase the number of watersheds and

acres treated to 2.9 million acres while increasing our timber production to 3.2 billion board feet.

I want to conclude by noting the incredible commitment of Forest Service staff to the mission of the agency. Despite the budgetary challenges, despite fire transfers, despite having fewer people on the national forests, we're getting more done through gains and efficiency, innovation and hard work. Working with Congress we look forward to furthering the work to restore and manage our national forests.

Thank you very much.

[The prepared statement of Mr. Bonnie follows:]

Statement of
UNDER SECRETARY ROBERT BONNIE
UNITED STATES DEPARTMENT OF AGRICULTURE
BEFORE THE
ENERGY AND NATURAL RESOURCES COMMITTEE
UNITED STATES SENATE
March 24, 2015
Concerning

Improving Forest Health and Socioeconomic Opportunities on the Nation's Forest System

Introduction

Madame Chairman and Members of the Committee, thank you for the opportunity to present the views of the U.S. Department of Agriculture regarding improving forest health and opportunities on the National Forest System to increase the pace and scale of forest restoration and management.

Our national forests and grasslands are a national treasure. The health of the national forests and the communities they serve are our shared priority. The US Forest Service is accelerating restoration and management of the national forests, despite budgetary challenges, though we agree more must be done. My testimony details the threats to our forests and gives a few examples of our successful efforts in collaboration, innovation and increased efficiencies. It outlines our efforts to promote collaboration among stakeholders to develop larger, landscape scale projects, to improve the efficiency of the agency in delivering forest management projects, to implement provisions of the 2014 Farm Bill, and to promote markets for wood.

The good news is that the agency is making significant progress. In 2014, we exceeded our targets by producing over 2.8 billion board feet of timber. Our timber harvest has increased 18 percent since 2008. The agency is achieving these results despite the fact that since 1998, National Forest System staff was reduced by well over a third. The agency will continue to invest in a number of strategies to treat more acres and produce more wood products, but the greatest barrier it faces is the short and long term impacts of the growing fire budget. We look forward to working with the Committee and others to address this and other challenges.

Forest Management – the Challenge and Opportunity

Forests provide a broad range of values and benefits, including biodiversity, recreation, clean air and water, forest products, erosion control, soil renewal and more. Covering a third of the country's landmass, they store and filter more than half of the nation's water supply and absorb approximately 12 percent of the country's carbon emissions. Our mission of sustaining the

health, resilience and productivity of our nation's forests is critically important to maintaining these values and benefits.

Forests are an economic driver. Restoring the health and resilience of our forests generates important values as well as economic benefits. In FY 2011, for example, the various activities on the National Forest System (NFS) contributed over \$36 billion to America's gross domestic product and supported nearly 450,000 jobs. Over 68 percent of the contribution to the economy was associated with direct use of NFS lands and resources, including land use fees from privately provided recreation services – ski areas, outfitting and guiding, campground concessions; expenditures related to skiing, hiking, hunting, fishing, and other forms of outdoor recreation; the generation of energy, minerals, and traditional forest products; and livestock grazing.

Threats to Forest Health and Forests at Risk

Our forest and grassland resources are at risk due to uncharacteristically severe wildfires, severe outbreaks of insects and disease, drought and invasive species, all exacerbated by a changing climate.

Many states have recently experienced the largest and/or most destructive fires in their history. Two primary factors are contributing to larger and more destructive wildfires: climate and forest conditions. Researchers have shown a 78-day increase in the western fire season since 1970, possibly due to a gradual rising of average spring and summer temperatures. Time of snowmelt also may be a factor. If these patterns persist, scientists predict the western States will get hotter and drier by the end of the century. In such conditions, fire seasons will grow longer and fires will likely increase in number and intensity.

Forest conditions also matter to fire activity. Decades of fire suppression and other factors have led to increases of fuels in many forest types across the country. Treating these acres through commercial thinning, hazardous fuels removal, re-introduction of low-intensity fires and other means can reduce fuel loads, provide forest products to local mills, provide jobs to local communities, and improve the ecological health of our forests.

Insects and disease have exacerbated the challenge. The area affected by an epidemic of mountain pine beetle in the West has reached 32 million acres on the national forests alone. In addition, invasive weeds such as kudzu, cheatgrass, leafy spurge, and spotted knapweed have infested about 6 million acres on the national forests and grasslands, an area the size of Massachusetts.

Fifty-eight million acres of national forests are at high or very high risk of severe wildfire. Out of the 58 million "high or very high" risk acres, we have identified approximately 11.3 million acres for highest priority treatment. These acres are in proximity to the wildland-urban interface or in priority watersheds or water sources, are in frequent fire return regimes, and not in roadless or wilderness areas.

The Need for Restoration

The Forest Service is committed to increasing the pace and scale of restoration. By restoration, we mean restoring and maintaining the functions and processes characteristic of healthier, more resistant, more resilient forests, even if they are not exactly the same systems that were there in

the past. Our goal is to protect and restore the ability of America's forests and grasslands to deliver all the social, economic, and ecological values and benefits that Americans want and need from their national forests, now and for generations to come.

The Forest Service has increased the number of acres treated annually to improve watershed function and resilience. In FY 2013 the agency treated over 2.5 million acres and increased this to 2.9 million acres in FY 2014. The Forest Service has also been increasing its timber production over time. We sold 2.6 billion board feet (bbf) in FY 2013, 2.8 bbf in FY 2014 and have a target of 2.9 bbf in FY 2015. Meeting this last goal and moving our outputs higher still will require a number of strategies.

Collaboratives

The Forest Service is investing in collaborative approaches to forest restoration across the country as a way to develop better projects, to work across larger landscapes, to build public support for forest restoration and management, and to reduce the risk from litigation. Dozens of collaboratives across the country are enabling the USFS and our partners to get more work done. These collaboratives are locally led groups from local communities, environmental groups, forest industry, and others and are designing projects that address forest restoration, supply wood to local mills, conserve watersheds and provide a range of other benefits.

Collaborative Forest Landscape Restoration Program (CFLRP)

One way to support local collaboration has been through the Collaborative Forest Landscape Restoration Program (CFLRP), and we appreciate Congress' support for this innovative program. The CFLRP encourages collaborative, science-based ecosystem restoration of priority landscapes. The program currently supports 23 large-scale projects with 10-year funding to implement priority restoration work on NFS lands while engaging local communities and leveraging partner resources through collaboration, implementation, and monitoring.

The CFLR program is on track to meeting its goals over its ten year timeframe, making substantial strides in the first five years to promote forest health and resilience and reduce the risk of catastrophic wildfire. In the five years since initial program implementation, the 23 projects collectively have treated over 1.45 million acres to reduce the risk of catastrophic fire, over 84,570 acres to improve forest health, over 1.33 million acres to improve wildlife habitat, and over 73,600 acres to eradicate noxious weeds and invasive plants. In addition, these projects have exceeded their timber output goals, producing nearly 1.3 billion board feet.

These collaborative projects help rural communities by creating and maintaining jobs. Between 2009 and 2014 these projects generated \$661 million in local labor income and an average of 4,360 jobs per year. The FY 2016 President's Budget for the Forest Service includes a proposal to increase funding authority for the program from \$40 million to eventually \$80 million, with funding in FY 2016 requested at \$60 million. The funding increase will allow us to pursue up to 10 additional projects. Accordingly, the budget proposes extending authority for the program through 2024 to allow for full completion of new projects.

These collaboratives, and dozens of similar efforts, help maintain a robust forest industry with benefits flowing not only to local communities, but also to the Forest Service itself as the agency relies on local forest contractors and mills to provide the workforce to undertake a variety of restoration activities. A 2011 Forest Service study found that through work on NFS lands, the forest products industry supports about 42,000 jobs and contributes around \$2.7 billion to America's gross domestic product each year.

Chiefs' Joint Landscape Restoration Partnership

Our restoration efforts are not just confined to public lands. Recognizing that fire, insects, disease, wildlife and watersheds do not respect property lines, the Forest Service and USDA's Natural Resources Conservation Service are combining resources to expand our efforts across both public and private land. In FY 2014, Secretary Vilsack announced a multi-year partnership between the U.S. Forest Service and the Natural Resources Conservation Service (NRCS) to improve the health and resiliency of forest ecosystems where public and private lands meet across the nation. The Forest Service and NRCS Chiefs' Joint Landscape Restoration Partnership program aims to reduce wildfire threats to communities and landowners, protect water quality and supply, and improve wildlife habitat for at-risk species. By leveraging technical and financial resources and coordinating activities on adjacent public and private lands, conservation work by NRCS and the Forest Service will be more efficient and effective in these watersheds.

In FY 2014, the Landscape Restoration Partnership invested \$30 million in 13 projects in 12 states across the country. The priority projects selected for FY 2014 will continue in FY 2014. \$27 million will be provided to continue work on these projects in 2015. 15 additional projects were selected in FY 2015 and announced last month, totaling \$10 million. The 2015 projects are located where private and public lands meet, and where restoration objectives cross ownership boundaries. For example:

In the Middle Klamath River Communities of northern California, the Partnership helped support efforts by the Karuk Tribe, the Mid-Klamath Watershed Council, the Salmon River Restoration Council, several local Fire Safe Councils, and the Northwest Youth Corps who are working together to increase community safety by reducing hazardous fuels in the Wildland Urban Interface adjacent to communities along the Klamath River.

In Oregon, the Ashland Forest All-Lands Restoration Project will implement forest restoration and fuels reduction treatments through a cross boundary, all-lands approach on federal and private non-industrial lands in and around the Ashland Creek Watershed in Jackson County, Oregon. The project objectives are to reduce and mitigate wildfire threats to communities and landowners, protect water quality and supply in the watershed, and improve and protect quality wildlife habitat for threatened, endangered, and at-risk species in an area characterized by a high degree of public/private land interface. Partners include The Nature Conservancy, Jackson SWCD, the City of Ashland, the Oregon Department of Forestry, and the Lomaksatsi Restoration Project.

As another example, in Colorado, the San Juan Project addresses fuel hazard in the project area which is considered moderate to extreme. Treatments would reduce dense shrub cover through

mastication and reduce tree density through selective thinning in order to mitigate uncharacteristic wildfire behavior and improve forest health. Partners include the San Juan Conservation District, the Colorado State Forest Service, the Pagosa Lakes Property Owners Association, San Juan Headwaters Forest Health Partnership, the Mountain Studies Institute, and Hidden Valley and Eagle Peak Ranch Subdivisions.

The Tongass Advisory Committee

In Alaska, the Forest Service is working with a variety of stakeholders on the Tongass National Forest to create a sustainable transition away from old-growth timber harvesting and towards second-growth timber harvesting with the goal of maintaining a viable forest industry and a more certain supply of second growth timber. Our goal is for the transition to create a more stable platform for future timber harvesting on the forest, while also supporting a diversity of economic opportunities in Southeast Alaska. To get advice directly from members of the community and diverse stakeholders, the Forest Service chartered the Tongass Advisory Committee, which is actively working on recommendations to inform a draft Environmental Impact Statement amending the forest plan. To support the existing industry and bridge to the transition, the Forest Service last year awarded the Big Thorne sale, and is currently preparing environmental documentation on the Saddle Lakes, Wrangell Island, and Kosciusko sales with offers expected in early 2016. We are also working with USDA Rural Development on ways to support retooling efforts for industry.

Efficiencies

An important way to increase the pace and scale of forest restoration and management is to improve the efficiency of planning timber sales and stewardship contracts. We are working to identify and implement process improvements and efficiencies that help with increasing the pace and scale of restoration, while also engaging the public and developing well-planned projects. Some strategies include:

- The Forest Service is planning and implementing projects across larger areas, which spreads NEPA costs across more acres, and provides a longer term and more certain timber supply for local mills. For example, the Mountain Pine Beetle Response Project on the Black Hills National forest is implementing a landscape scale approach across 200,000 acres for treating current and future pine beetle outbreaks. The 4FRI EIS project analysis in Arizona covers about 1,000,000 acres across four national forests, with 400,000 acres of mechanical treatment, with just under 600,000 acres of prescribed fire.
- The Forest Service is developing new approaches to NEPA in the wake of catastrophic fires. On the Rim Fire, which burned 257,000 acres in the summer of 2013, the Stanislaus National Forest finalized both an Environmental Assessment for hazard tree removal and an Environmental Impact Statement for restoration and salvage in one year. The EIS projects will lessen the potential for future catastrophic fire by reducing the fuel loading and, in addition, capture some of the perishable economic commodity value of the fire killed trees through timber salvage. The agency coordinated with the Council on Environmental Quality, which approved Alternative Arrangements to expedite the NEPA

process. Overall, our partners and stakeholders appreciated the transparency while also enabling contracts to get awarded and work done on the ground.

- The agency is asking collaboratives to help with planning and implementation. The Fivemile Bell Landscape Management Project is one of the largest projects organized and developed by the Siuslaw National Forest and its partners. For this watershed restoration project, the Forest Service through active engagement and leadership from its stakeholders was able to leverage private resources to accomplish priority watershed restoration work. This collaborative approach increased the capacity of the forest to achieve more than it could have if it had utilized a more traditional approach to the NEPA process. This project was one of the Council on Environmental Quality's NEPA Pilot Projects, which were projects nominated for employing innovative approaches to completing environmental reviews more efficiently and effectively.
- Another innovative approach to environmental analysis under NEPA and stewardship contracting to increase the scale and pace of restoring forest health and to provide economic opportunities for local communities is the Mill Creek A to Z Stewardship Project on the Colville National Forest. This project was designed so that each step, from NEPA data collection to project implementation, where appropriate, will be performed and financed by the contractor, Vaagen Brother's Lumber Inc. under the supervision of the Forest Service. The Environmental Assessment for the first of the two planning areas was released for public comment recently. The contractor is planning to start presale activities this spring and vegetation treatments are expected to begin after the decision is signed this fall.

The agency has established additional categorical exclusions for restoration work, has expanded the use of focused environmental assessments, is using adaptive management to allow our decisions to last longer, and is better training employees to take advantage of new efficiencies. The Forest Service is also developing efficiencies in NEPA through technology. For example, the Forest Service's investments in using electronic applications provide considerable cost and time savings, contributing to an efficient NEPA process by reducing the administrative workload in reporting, records management, electronic document filing, and managing public mailing lists, while making it easier for the public to comment on Forest Service projects.

All of these efforts are aimed at becoming more proactive and efficient in protecting and restoring the nation's natural resources, and supporting jobs and economic vitality for American communities.

2014 Farm Bill Implementation

The tools provided in the 2014 Farm Bill significantly expand the tools that will support our ability to accomplish restoration work on the ground, such as permanent authorization for stewardship contracting and the Good Neighbor Authority. In addition, the insect and disease designations and modifications to the Healthy Forest Restoration Act included in the Farm Bill, will add to the NEPA and process efficiencies outlined above and further help accelerate the pace and scale of restoration.

The 2014 Farm Bill added authority to the Healthy Forest Restoration Act to authorize designation of insect and disease treatment areas and provide a categorical exclusion (CE) for insect and disease projects on areas as large as 3,000 acres. The new CE holds significant potential to improve efficiency, resulting in on-the-ground restoration work that is accomplished more quickly and across a larger landscape. Working with Governors, last summer Secretary Vilsack announced the designation of approximately 46.7 million acres in 36 states. Earlier this month, designations for the state of Washington added an additional 711,000 acres. The first projects using this new authority are already moving forward, and planning and implementation of projects within designated areas will expand in FY 2015 and beyond.

The Forest Service is working with States, Tribes, and other stakeholders to refine the necessary guidance for implementation of Good Neighbor Authority, which authorizes federal agencies to enter into cooperative agreements or contracts with state foresters to conduct restoration projects on federal forestland. Having heard some concerns from states as to implementation, the Forest Service is working closely with states to ensure that this new authority can be efficiently implemented. We expect to complete this guidance later this spring.

The Farm Bill also provided permanent authority for stewardship contracting. Traditional timber sale contracts will remain a vital tool for the Forest Service in accomplishing management of the National Forests. At the same time, stewardship contracting is helping the Forest Service achieve land and natural resource management goals by funding forest health and restoration projects, stream restoration, hazardous fuel removal, and recreation improvements. In many areas, stewardship contracting will allow the agency to build larger projects, treating more acres, and with broader public support. Since 2008, acres treated through stewardship contracts have nearly tripled. The Forest Service will continue to provide training across the agency and with States and partner organizations on use of this important tool.

Building a Strong Forest Products Industry through Support for Markets and Research

In addition to the innovative approaches to collaboration and efficiencies highlighted above, we have also focused on the need for strong markets for wood, both large and small diameter trees, to support restoration efforts. The Forest Service recognizes the need for a strong forest industry to help accomplish forest restoration work; one of the best opportunities for reducing the cost of these restoration treatments is to ensure strong markets for the byproducts of these treatments.

The Forest Service is a leading agency in the federal government to preferentially select domestically harvested wood products in building construction projects while increasing its commitment to green building standards. All Forest Service building projects incorporate green building principals such as energy efficiency, locally produced wood products, recycling and reuse of building materials. New building construction and major renovation projects for administration facilities or research laboratories over 10,000 gross square feet must be registered and certified using either the United States Green Building Council LEED rating system, or other accredited third-party certification systems.

The Forest Service is actively encouraging the U.S. building sector to fully consider when construction with wood is an appropriate option. We completed three primary actions to achieve this: 1) we have increased our financial support of Woodworks for their education and

technical support of architects and engineers from \$250,000 per year to \$1,000,000 per year; 2) we have expanded our biomass utilization grant program into a Wood Innovations program which generated 101 proposals for funding this year; and 3) we are actively providing technical support to USDA's Tall Wood Building Competition which will both directly help move wood building technology in the U.S. and be a highly effective awareness mechanism for the broader public on the possibilities of building with wood.

The Forest Service is leading the USDA Wood to Energy Initiative, a partnership between five agencies, including Rural Development and the Farm Service Agency. This interagency effort is focused on creating value for woody biomass by creating energy, for heating buildings, manufacturing and producing electricity. The initiative is focused on economically viable uses of wood. For example, wood chips and pellets are about half the cost of fuel oil and propane for heating. The U.S. uses about 25 billion gallons of fuel oil and propane at a cost of about \$75 billion, most of it consumed in rural America. We also continue to support incentives for biomass removal and utilization such as the Biomass Crop Assistance Program (BCAP). It is important to keep in mind that wood energy is one more part of an integrated wood products industry that produces structural material, furniture, pulp and paper. Our goal is to use all the parts of the trees for the highest value we can so that landowners can effectively manage their land whether it is public or private.

Forest Service Research and Development (R&D) provides scientific research to sustainably manage and use forest resources and forest fiber-based products. It is developing the science and technology needed to sustain and restore ecosystems in the face of changing conditions, including the expansion of existing markets for wood and the development of new markets. FS R&D continue the development of wood-based biofuels, chemicals, and products that can substitute for petroleum-based materials, including developing biomass deconstruction science and technology, conversion technologies for wood-based liquid fuels including drop-in fuels, and science and technology for manufacturing chemicals and other co-products from biomass-to-energy conversion. The FS R&D investment in wood-derived nanomaterials may create new high-value products in traditional forest products such as stronger, lighter paper and innovative new products such as body armor, automobile components and flexible electronics. Adopting wood-derived nanomaterials will promise new value-added feature in products and improve environmental performance attributes, support more efficient use of renewable materials and decrease reliance on oil-based products.

The Budget Challenge

Our efforts are showing success: we have increased timber harvest by 18% since 2008, with fewer Forest Service resources and staff. But, there is a limit to the gains we can realize through efficiencies and partnership alone. In particular, the frequency and intensity of wildfire, the rising cost of assets needed to deploy against the spread of wildfire, and the way the Forest Service funds fire suppression are slowly crippling the agency's ability to restore and manage the National Forests. In addition, in the short term, it is forcing the agency in most fire years to disrupt on-going projects – whether they are forest management, recreation, conservation, research or others – in order to transfer funding to meet fire suppression needs.

Fire Suppression Cap Funding Proposal

In fiscal year 1995, the Forest Service spent 16% of its budget on firefighting. Today the agency spends nearly half of its budget in fire management activities. This has enormous implications for how the agency carries out its mission, including taking funding from the very programs that help reduce catastrophic fire in the first place. Since 1998, fire staffing within the Forest Service has increased 114 percent from around 5,700 in 1998 to over 12,000 in 2015. Over the same period, staffing levels for those dedicated to managing National Forest System lands have decreased by 39 percent – from almost 18,000 in 1998 to fewer than 11,000 in 2015.

Fire transfers from non-fire accounts occur when the agency has exhausted all available fire resources from the Suppression and FLAME Fund accounts. From FY 2000 to FY 2013, the Forest Service made fire transfers from discretionary, trust, and permanent non-fire accounts to pay for fire suppression costs seven times, ranging from \$100 million in FY 2007 to \$999 million in FY 2002, and totaling approximately \$3.2 billion. Of the total transferred funds, \$2.8 billion was repaid, however, the transfers still led to disruptions within all Forest Service programs. Although there was not a fire transfer in FY 2014, the financial impacts to the agency were still significant given the uncertainty around fire risk and funding. Even though many parts of the country experienced lower than normal fire activity last year, the cost of suppression still exceeded the 10-year average. Our forests and grasslands lost opportunities to undertake important project work - including fire prevention work - and deferred important spending in anticipation of a very active fire season.

Each time the agency transfers money out of non-fire accounts to pay for fire suppression there are significant and lasting impacts across the entire Forest Service. When funding is transferred from other programs to support fire suppression operations, these non-fire programs are impacted because they are unable to accomplish priority work and achieve the overall mission of the agency. Often this priority work mitigates wildland fire hazards in future years. In addition, transfers negatively impact local businesses and economies, costing people jobs and income as a result.

We expect a very active fire season in 2015. The median Federal Land Assistance, Management and Enhancement (FLAME) Fund suppression forecast for the 2015 fire season is \$1.12 billion. Our appropriated funding in FY 2015 is \$1.01 billion.

Bipartisan legislation, the Wildfire Funding Disaster Act, has been introduced in both the House and Senate that will provide a much more rational approach to funding wildfire. This proposal is mirrored by a proposal in the FY 2016 President's Budget. WDFDA calls for a fundamental change in how wildfire suppression is funded to reduce fire risk, manage landscapes more holistically, and increase resiliency of the Nation's forests and rangelands and the communities that border them. The Budget proposes a fiscally responsible funding strategy that considers catastrophic wildland fires as disasters, to be funded in part by budget authority provided through a wildfire suppression cap adjustment which is outside the discretionary appropriation of the agency. This strategy provides increased certainty in addressing growing fire suppression funding needs, better safeguards non-suppression programs from transfers that have diminished their effectiveness, and allows us to stabilize and invest in programs that will more effectively restore forested landscapes, treat forests for the increasing effects of climate change, and prepare communities in the Wildland Urban Interface to manage for future wildfires.

The Forest Service estimates that the President's proposal will increase outputs from the National Forests from 2.9 billion board feet to 3.2 billion board feet. The most important action Congress can make now in advancing the pace and scale of forest restoration is to fix the fire funding problem.

Secure Rural Schools

The Secure Rural Schools (SRS) Act was passed in 2000 by Congress to help states with declining 25 percent payments due to reduced timber harvest. It has provided more than a decade of transitioning payments to eligible states and counties to help fund public schools and roads and has provided predictably declining payments to states to transition to the 25 percent payment. In addition, it also created a forum through Resource Advisory Committees for community interests to participate collaboratively in the selection of natural resource projects on the national forests. It also has provided funding to counties for community wildfire protection planning, emergency search and rescue reimbursement, and Firewise programs. The SRS payments for FY 2014 have not been reauthorized, so 25-percent payments have been made under the 1908 Act. The absence of the SRS funds has significant impacts for rural communities. The President's 2016 Budget included a proposal for continuing the Secure Rural Schools program. We stand ready to work with Congress on reauthorization.

Conclusion

I am proud of the work that the Forest Service and its employees have been able to accomplish—particularly in a time of reduced resources and staff for non-fire programs—and of the partnerships we have developed that have made that work possible. But, more work needs to be done to address a range of threats facing our National Forests.

The Forest Service will continue to work with States, local government, Tribes, industry and our many other partners to improve our forest management program through increased collaboration, new efficiencies, implementation of new authorities in the Farm Bill, and promotion of markets for wood. We stand ready work with Congress to address fire funding and the need for accelerated forest restoration.

I want to thank the committee for its interest, leadership, and commitment to our national forests and their surrounding communities. I would be pleased to answer any questions you may have.

The CHAIRMAN. Thank you, Mr. Bonnie.
Mr. Brown, welcome.

**STATEMENT OF BRIAN BROWN, DIRECTOR, ALCAN FOREST
PRODUCTS LP**

Mr. BROWN. Thank you.

Madam Chairman, Ranking Member Cantwell, members of the Committee, thank you for the opportunity to testify today.

My name is Brian Brown. I'm a director of Alcan Forest Products. We're a timber sale operator that does business in Alaska, Washington State and British Columbia (BC). We purchase timber sales from Federal, State, and private land in all three areas and harvest these sales for production by mill operators in these and other markets. We have employees in each of these three areas.

As a long time member of the Alaska Forest Association and part owner of Alcan Forest Products I am here to ask for this Committee's help. Our company's operations support over 200 jobs in Alaska. We purchase our timber from the state, the University of Alaska, Mental Health Trust as well as the U.S. Forest Service.

However, the Federal Government controls nearly 95 percent of the land in the region and a small amount of private, state and municipal lands are inadequate to sustain our operation in the future. Much of the timber we harvest on Federal lands is sold to local manufacturers. For example, over the past couple of years we have supplied virtually 100 percent of the saw logs used in the Wrangell sawmill and also to the local Ketchikan mill which provides pellets to the Federal building in Ketchikan as well as a large percentage of Viking's outside log purchases.

But all of our Federal timber sales will be harvested this year, and the Forest Service's latest 5-year schedule further reduces the already inadequate timber supply in our region. There is a small, very small, amount of young growth timber that the Forest Service indicates it will sell in the future, but most of that timber is too small and scattered to be economically viable for harvesting operations. In another 30 years there will be much larger acreages of young growth potentially available but until then the young growth cannot replace the mature timber stands that we need to remain profitable.

Alcan does about \$80 million worth of business including payroll expenses in Washington State, including Washington State resident employees located in Aberdeen and Port Angeles. We also operate a large business segment now in British Columbia. Unfortunately British Columbia is the only location near Southeast Alaska or Washington State that provides a business environment that encourages major investments in the forest products industry. Federal timber policy increasingly forces us to look to BC for our operational and investment future.

At this point I would like to submit for the record testimony from my fellow AFA Board Member, Kirk Dahlstrom.

The CHAIRMAN. It will be included as part of the record.
[The information referred to follows:]

Testimony of Kirk Dahlstrom

President/CEO

Viking Lumber Inc.

Before the Senate Energy And Natural Resources Committee

March 24, 2015

Before the Senate Energy and Natural Resources Committee March 24, 2015

Madame Chairman, Ranking Member Cantwell, members of the Committee: Thank you for the opportunity to testify today.

As the owner and operator of the only remaining mid-sized sawmill operating in Alaska, I am here to ask for this Committee's help. We must have a solution to the dire timber supply situation in the Tongass National Forest where my mill operates and upon which my mill is almost totally dependent. I have no other reliable sources of timber supply. Unlike many places in the lower 48, there is almost no state or private land from which I can secure timber for my mill.

Unlike many of the contiguous 48-States such as Washington State, which owns 2.6 million acres of state lands from which it can sell timber to local mills, the State of Alaska has a very small timber base and in our remote region the State owns only 1% of the land and is able to sell just 13 million board feet of timber per year. The State has done its best but it just cannot provide enough timber to supply my mill much less other mills in the region.

My family has been in the timber business for over 50 years. We own and operate a saw mill in Klawock, Alaska and six manufacturing operations in Aberdeen and Hoquiam, Washington. Our operations directly support over 150 jobs in Alaska that include:

- 42 Viking employees in the mill,
- 32 Papac Logging employees,
- 10 Timber Wolf Cutting employees,
- 5 independent truckers,
- 25 longshoremen,
- 5 DuRette Construction employees,
- 33 Columbia Helicopter employees

Additionally, our operations support Boyer Towing who tows our logs and wood chips and Alaska Marine Lines who trucks and barges our lumber. Our saw mill also provides the wood fiber used to heat the school in Craig, Alaska. In Washington State, our operations support another 120 direct jobs. Our Alaska sawmill provides about half of the timber that is needed for our dry kiln and planer operation in Washington; without the Alaska lumber, that operation and the jobs it supports could not continue. We also sell red cedar logs from Alaska to the TMI sawmills in Morton and Quinalt, Washington.

Our mill in Alaska is almost out of logs to saw. We currently have only about two months' supply in our log yard. We bought the most recent Stewardship sale called the Big Thorne timber sale last October from the US Forest Service. It is not a great sale and it was offered at nearly fifty million board feet less than originally intended. The sale is being litigated by many environmental groups including the Southeast Alaska Conservation Council, Cascadia Wildlands, the Sierra Club and many others. All of these groups oppose most federal timber sales in the Tongass. The sale was delayed over a year and the sale is now in litigation under three different lawsuits. The plaintiffs have just filed for a preliminary injunction even though I agreed to delay operations from October to April in hopes the litigation could be concluded. At this point I am still hoping for a decision from the Alaska a Federal Court denying any injunction and allowing me to proceed, but there is still a risk that a favorable decision from the Alaska court will be appealed to the Ninth-Circuit court.

I have agreed to start minimal operations in early April while awaiting the federal court decision, but the operating season can be short in Alaska and I must begin operations. I have attached to my testimony the declaration I filed with the Court last week which describes this situation in detail. Par. 19 states that Viking will access the timber by constructing short "spur" roads from Thorne River Road into the sale units. These spur roads are all temporary and the longest spur is only 3,000 feet, while the others are considerably shorter. After harvest, all of the spur roads will be removed; the road beds will be reseeded and then subjected to Forest Service inspection and approval.

Big Thorne is an Integrated Resources timber sale contract, and has a resource improvement (stewardship) component combined with the timber sale component. Stewardship projects that Viking must complete under the Big Thorne contract include:

- The Balls Lake Trail Renovation valued at roughly \$60,000;
- The Boy Scout Trail Renovation valued at approximately \$40,000;
- Wildlife habitat improvement on 1,652 acres through the use of pre-commercial forest thinning (i.e., the removal of relatively young, small diameter trees) valued at approximately \$553,420;
- Phase I of the restoration of Luck Creek valued at approximately \$400,000;
- Improvement of a fish passage valued at approximately \$950,000;
- Phase II of the restoration of Luck Creek valued at \$750,000 as well as,

- Wildlife habitat improvement through pre-commercial thinning of 2,711 acres valued at \$908,185.

All of these are paid for by Viking and come directly from Viking's sales of the timber sale component.

Madame Chairman, ranking member Cantwell and members of the Committee; I have no margin for error. If I am not able to operate this sale immediately, I will have to suspend operations and I may have to close permanently. Our mill has run out of timber five times in the last ten years. Time and again, we have survived only because the State was able to provide emergency timber sales from its timber base, which amounts to only about 1% of the timberland in the region.

Our lumber markets are very stable and if there had been sufficient timber available over the years we would have operated two shifts instead of a single shift in our mill. Unlike new home construction and related lumber markets in the contiguous 48-States, the markets for the products produced by Viking have remained relatively strong. This is due to the fact that Viking produces piano and guitar stock from Spruce logs; doors, windows and molding from Hemlock logs; and decking, gazebo stock and finished wood for Cape Cod-style homes from Cedar logs. Despite the last recession, the market for Spruce to make instruments remained good, as did the markets for other products produced by Viking because they are typically purchased by individuals who are remodeling existing homes, not building new ones. In fact, prices for our Hemlock and Spruce products have remained strong since 2008 and Cedar prices have rebounded since 2009.

In 1980, Congress promised that the Forest Service would provide 520 million board feet of timber annually from the national forest. That was only a small fraction of the growth potential of the forest, but it was enough to sustain the manufacturing industry that we had. In 1990, Congress allowed the Forest Service to determine how much timber our industry needed and the agency subsequently reduced the maximum allowable timber sale program to 267 million board feet. The agency never actually sold even a small percentage of that reduced allowable timber sale volume. One by one, the region's mills were starved out and closed. Our mill is the last remaining mid-size mill in Southeast Alaska and now the agency is considering reducing the timber sale program to a level that will force our closure as well.

We have tried everything to persuade and encourage the Forest Service to restore our timber supply, but the agency remains politically driven to eliminate timber production from its multiple-use mandate. At this point, there is only one solution that gives me hope for the future of our mill and our employees; that is the creation by this Committee and Congress of a State timber forest like the one endorsed by the Alaska State Timber Task Force. This Alaska Forest would be owned and managed by the State of Alaska under its well-crafted and up to date Alaska State Forest Practices Act. This Act was designed to provide full protection for waters as well as fish and wildlife habitat and provides a public process for planning and operates utilizing best management practices.

This State Forest would utilize only about 12% of the 17-million acre Tongass National Forest, and yet it would provide all the timber our industry and our communities need in perpetuity. The receipts from the State managed Forest would more than pay for the management of the forest, just like the timber programs in Washington and Oregon. The State Forest could provide millions of dollars of revenue to the State and thousands of urgently needed jobs in our region. The remaining 15 million acres would remain as federal land and would still represent the largest national forest in the nation.

Madame Chairman, Ranking member Cantwell and other members of the Committee; I spent more than six years attempting collaboration with many groups from the Nature Conservancy to the Boat Company to the Natural Resources Defense Council and the Wilderness Society through the Tongass Futures Roundtable. No consensus was ever reached and efforts to block our timber supply continued unabated during those collaborative talks. Many of those same groups are now suing the Forest Service and Viking over this most recent timber sale. They do not truly support collaboration and instead want to end all national forest timber sales in Southeast Alaska.

The only way my mill can survive is by the creation of the State Forest which is endorsed by Governor Walker and which I hope this Committee will support.

Thank you for the opportunity to testify

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**UNITED STATES DISTRICT COURT
 DISTRICT OF ALASKA**

IN RE BIG THORNE PROJECT AND)
 2008 TONGASS FOREST PLAN)
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Case No. 1:14-cv-00013-RRB

Consolidated Cases:

Case No. 1:14-cv-00014-RRB

Case No. 1:14-cv-00015-RRB

**DECLARATION OF KIRK
 DAHLSTROM IN SUPPORT
 OF INTERVENORS'
 OPPOSITION TO MOTION
 FOR PRELIMINARY
 INJUNCTION**

I, Kirk Dahlstrom, declare under penalty of perjury that the following is true and correct
 to the best of my personal knowledge and belief:

1. I am the secretary of Viking Lumber Company, Inc. ("Viking"), the last mid-sized sawmill in Southeast Alaska, and a family-owned and operated business, incorporated in the State of Alaska. I have been the general manager of operations at Viking's facilities located between Craig and Klawock on Prince of Wales Island, Alaska since 1994. I am responsible for all of Viking's operations.

2. Viking has been a member of Intervenor, Alaska Forest Association ("AFA"), 1996 and remains a member today. I was also President of AFA for four years and remain on AFA's Board of Directors. I make this declaration both on behalf of Intervenor Viking and in support of Intervenor AFA to provide facts regarding the devastating harm that will befall what little remains of the timber industry in Southeast Alaska if the Big Thorne timber sale were to be enjoined, even for a short time.

3. Viking is a key economic engine in Southeast Alaska as it provides jobs for its own mill workers, as well as related employment for timber fallers, truck drivers, equipment owners, and operators as well as stevedores many of whom are also members of AFA. These well-paying jobs are essential to the families, related businesses, and communities of Southeast Alaska.

4. Viking bid on and, on September 30, 2014, was awarded the Big Thorne Integrated Resources timber sale contract ("Big Thorne") on the Tongass National Forest. The Big Thorne contract has a term of 10 years. As described in greater detail below, because Big Thorne is an Integrated Resources contract, it contains a timber harvesting component combined with a stewardship (*i.e.*, forest restoration) component.

5. Plaintiffs filed this lawsuit with the stated goal of permanently enjoining the Big Thorne timber sale putatively to protect the Alexander Archipelago wolf (albeit indirectly) through preservation Sitka black-tailed deer (albeit indirectly) by preserving winter deer habitat.

6. The Big Thorne timber sale is comprised of 3,080 acres to be harvested on Prince of Wales Island located within the Tongass National Forest in Alaska. Prince of Wales Island contains 1.4 million acres, while the Tongass National Forest consists of nearly 17 million acres.

7. Viking manufactures raw logs into lumber products. With no timberland holdings of its own, Viking is entirely dependent on a steady supply of public timber sales, the majority of which are offered by the Forest Service on the Tongass National Forest. Timber from the Tongass has always been and continues to be a critical source of supply for Viking's operations. Since 1994, we have purchased and successfully operated over 30 Forest Service timber sales.

8. We operated our mill continuously for 15 years, except for maintenance shutdowns, until we had to shut down our mill for the first time on December 17, 2009, because we lacked the necessary volume of Hemlock and Spruce logs to continue mill operations. As a result, we had to lay off 15 employees.

9. Fortunately, the Forest Service awarded the Diesel timber contract to Viking on December 23, 2009. Because of our critical need for the logs from Diesel, we moved forward to promptly complete the necessary paperwork and planned to restart the mill on February 8, 2010, at which time we also planned to re-hire all of our laid off personnel, and keep the mill running continuously that year.

10. However, on January 11, 2010, environmental groups filed a lawsuit seeking, among other things, to enjoin the Diesel timber sale putatively (and much like the instant lawsuit) to

protect the Alexander Archipelago wolf and the Sitka black-tailed deer, which is one source of food for the wolf. *Tongass Conservation Soc'y v. Forest Service*, 10-cv-00006 TMB. In 2010, this Court denied plaintiffs' request for injunctive relief in a ruling that was affirmed on appeal. On remand, this Court granted the Forest Service's Motion for Summary Judgment in a ruling that was also affirmed on appeal. *See Tongass Conservation Soc'y v. Forest Service*, No. 10-35904, Slip Op., Oct. 24, 2011 (Doc. No. 208). Even though the lawsuit against the Diesel timber sale was found to be without merit in four legal opinions, the litigation delayed operations on the sale, consumed Viking's financial resources, and made planning mill operations and the general conduct of business very difficult.

11. Despite Viking's experience with lawsuits of dubious validity in which plaintiffs have, nevertheless, sought to enjoin timber harvest based on stated concerns about the wolf and deer, and against my business interests, in this litigation I agreed not to commence timber harvest before April 1, 2015, and to give plaintiffs the courtesy of 30 days' advance notice as to when Viking intended to begin operations. But for the instant lawsuit and the protracted delay of Viking's harvest of the Big Thorne contract from its award on September 30, 2014 until April 1, 2015, Viking would have commenced harvesting the sale in October, 2014, at which time the market for Viking's products was even stronger than it is currently. Additionally, because of the considerable publicity given to the Big Thorne timber sale, Viking's customers have become concerned our ability to deliver lumber products this summer. Accordingly, this lawsuit has *already* damaged Viking, even though plaintiffs have not (and I understand are unlikely to) prevail on the merits.

12. As agreed, Viking provided plaintiffs with 30 days' advance notice of its intent to commence operations on April 1, 2015. Additionally, and although Viking had no obligation to do so, Viking indicated to plaintiffs that it would further advise them as to how Viking intended to proceed after it met with the Forest Service to finalize that plan on March 10, 2015. Despite this assurance, and with no idea of the actions actually proposed to be taken by Viking, plaintiffs filed a motion for preliminary injunction, on March 5, *more than three weeks* before any operations could begin on Big Thorne. Dct. 78.

13. In addition to the harm already inflicted on Viking by this suit, as set forth in my declaration submitted on November 5, 2014, in case no. 14-cv-00013-RRG, I predicted that without the logs from Big Thorne, Viking would be forced to cease its mill operations for an indefinite period and perhaps permanently. Dct. 59-2, ¶¶ 10, 21. As a result, Viking's continuing viability as a business entity would be threatened, and our employees and well as our subcontractors and their employees would be put out of work. *Id.* These facts have not changed.

14. At the time I made that first declaration, Viking had approximately 1,200 MBF of Hemlock, 150 MBF of Cedar, and 2,000 MBF of Spruce logs in inventory. *Id.* at ¶ 13. After my first declaration was submitted, Viking was very fortunate to be able to bid on and then receive award of a small timber sale offered by the State of Alaska. Although the State sale did not contain timber of the same high quality as that on the Big Thorne sale, at least it allowed us to keep our mill operating into March. We are not aware of any public timber sales to be offered in the foreseeable future.

15. As of March 10, 2015, Viking had approximately 2,500 MBF of logs in inventory at its mill and another roughly 1,500 MBF of timber under contract on the state sale. Because

Viking's mill processes approximately 1,800 MBF per month, this represents an approximately 10-week supply of logs, which is adequate to supply the mill only until mid-May. However, the high quality spruce, which is the most important source of raw material for Viking's product line, will run out by March 18, 2015, at which point Viking's operations will immediately become much less economical than they would be if logs from Big Thorne were available.

16. Of course, logs ready for processing do not instantaneously appear at the mill. Instead, the timber must be accessed, harvested, loaded and then transported from the timber sale to the mill site.

17. In the case of Big Thorne, Viking intends to access a single subdivision ("Subdivision 3") of the timber sale in order to have logs at its mill site by mid-May. To do so, we must begin road reconstruction on April 1. Specifically, Viking intends to begin operations by reconstructing the Thorne River Road, which is an existing, permanent Forest Service road, a significant portion of which was washed-out over the winter. By reconstructing this road, Viking will *reduce environmental harm* by preventing significant soil erosion into adjacent streams and rivers this spring and by replacing culverts so that future water flow will be channeled with minimal environmental impact. If road reconstruction operations on Big Thorne were to be enjoined, the washed-out portion of the road will remain an increased source of sediment into adjoining waterways.

18. Viking will access the timber by constructing short "spur" roads from Thorne River Road into the sale units. These spur roads are all temporary and the longest of them is 3,000 feet, while the others are considerably shorter. After harvest, all of the spur roads will be removed, the entire area will be reseeded and then subjected to Forest Service inspection and approval.

19. Viking will also fall timber starting on April 1, 2015, at the rate of 144 MBF/day so that logs will be available for transport to its mill upon completion of the road work. A large percentage of the logs in Subdivision 3 will be yarded using helicopters, during which the logs are entirely suspended in the air. As such, helicopter logging minimizes ground disturbance during harvest.

20. As noted, because Big Thorne is an Integrated Resources timber sale contract, it has a resources improvement (a/k/a "stewardship") component combined with the timber sale component. Stewardship projects that Viking must complete under the Big Thorne contract include: the Balls Lake Trail Renovation valued at roughly \$60,000; the Boy Scout Trail Renovation valued at approximately \$40,000; wildlife habitat improvement on 1,652 acres through the use of pre-commercial forest thinning (*i.e.*, the removal of relatively young, small diameter trees) valued at approximately \$553,420; Phase I of the restoration of Luck Creek valued at approximately \$400,000; improvement of a fish passage valued at approximately \$950,000; Phase II of the restoration of Luck Creek valued at \$750,000, as well as wildlife habitat improvement through pre-commercial thinning of 2,711 acres valued at \$908,185.

21. As the Forest Service has testified in support of its briefing on the merits, completion of the stewardship component of the Big Thorne contract is dependent upon completion of the timber sale component of the contract. *See* Declaration of Forrest Cole, 14-cv-00013, Dct. 58-2, ¶¶ 3-5. Viking intends to start the following stewardship work in 2015: the Balls Lake Trail Renovation, the Boy Scout Trail Renovation, wildlife habitat improvement through the use of pre-commercial forest thinning and the restoration of Luck Creek.

22. All told, the stewardship component of Big Thorne is valued in excess of \$3.6 million and consists of projects that the Forest Service needs to have completed, but might not be able to perform based on insufficient agency funding. If the Big Thorne timber sale were to be enjoined, this important work will certainly be delayed and may never be completed.

23. If the harvest of Big Thorne is allowed to proceed as planned, however, it will not only provide environmental improvements but will also have a host of beneficial effects for the local economy. That is, we anticipate that all 42 employees of Viking, over 32 Papac Alaska Logging employees, 10 employees of Timber Wolf Cutting, 5 independent truckers and 25 longshoreman (who will load logs) will remain employed for roughly four years by the Big Thorne timber sale.

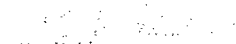
24. Additionally, 5 employees of Durette Construction Co. of Ketchikan will be employed in road construction for a year, 33 employees of Columbia Helicopters will be employed for 14 months and approximately 14 timber thinners will be employed for 4 years. Following the processing of the logs at Viking's facilities, Boyer Towing of Ketchikan will barge lumber and woodchips, while Alaska Marine Lines of Craig and Ketchikan will truck and barge lumber.

25. Viking is currently one of the largest year-round employers on Prince of Wales Island. Most of our annual \$22 million in revenue remains on the Island and has contributed significantly to the Island's economy over the years.

26. Keeping Viking's mill supplied with the reliable source of timber contained in the Big Thorne timber sale is essential to the continued employment of more than 150 people, including not only of Viking's employees but employees of our subcontractors as well. Without logs from Big Thorne, Viking will be forced to cease its mill operations for an indefinite period and perhaps

permanently. As a result, Viking's continuing viability as a business entity would be threatened, and our employees and well as our subcontractors and their employees would be put out of work.

Dated


Kirk Dahlstrom

Mr. BROWN. Thank you. He's the operator of Viking's sawmill. I am prepared to answer questions on his testimony also.

Most of the local communities in our region have declined commensurate with the 90 percent decline in Federal timber sales over the past 20 years. Government jobs and subsidized make work projects have provided the minimal amount of economy for the region but it's a false economy and it's not sustainable, particularly in light of the State of Alaska's difficult budget situation.

For instance, fish populations have doubled in the most heavily harvested watersheds in the region, and all of the waters meet the State and Federal water quality standards. Yet the Forest Service is spending millions of dollars performing stream restoration projects in these areas. These projects might be nice gestures but they will likely not result in additional fish or more clean water.

The projects rely on Federal expenditures, and they are not sustainable without more Federal subsidies because these project investments do not permit any investment in infrastructure. A state forest managed under the State Forest Practice Act, on the other hand, can provide thousands of jobs and millions of dollars in net revenue.

All of this can be accomplished without impacting fish and wildlife populations or subsistence or recreation or any other beneficial uses of the forests. That is why our Governor, Bill Walker, has endorsed the creation of this state forest. He recently confirmed this support in two meetings. He had one in Juneau and one in Ketchikan. He supports the creation of this state forest and strongly supports the idea of value added products such as our timber industry can and will provide if we just get a decent supply of timber.

Attached to my testimony are two documents that I ask to be part of the record. The first is a history of the Alaska timber industry. The second is an Alaska State Forest Concept paper which describes the state forest and which AFA urges this Committee to create through Federal legislation.

The CHAIRMAN. Those will also be included as part of the record.

Mr. BROWN. Thank you.

If a state forest is not established, the surviving timber industry will perish and this region will become another Appalachia doomed to endless poverty and families dependent upon government jobs or welfare.

Thank you for the opportunity to address you.

[The prepared statement of Mr. Brown follows:]

Testimony of Brian Brown

Director, Alcan Forest Products , LP

Before the Senate Energy and Natural Resources Committee

March 24, 2015

Madame Chairman, Ranking Member Cantwell, members of the Committee: Thank you for the opportunity to testify today

My name is Brian Brown. I am a Director of Alcan Forest Products. Alcan is a timber sale operator which does business in Alaska, Washington State, and British Columbia. We purchase timber sales from federal, state, and private land in all 3 areas and harvest these sales for production by mill operators in these and other markets. We have employees in each of these 3 areas.

As a long-time member of the Alaska Forest Association and part owner of Alcan Forest Products, I am here to ask for this Committee's help. Our company's operations support over 200 jobs in Alaska. We purchase our timber from the State, the University of Alaska, the Alaska Mental Health Trust as well as from the US Forest Service. However, the federal government controls nearly 95% of the land in the region and the small amount of private, state and municipal lands are inadequate to sustain our operation in the future.

Much of the timber we harvest on federal lands is sold to local manufacturers. For example over the past couple of years we have supplied virtually 100% of the sawlogs used in the Wrangell sawmill and also to the local Ketchikan mill (which provides pellets to the federal building in Ketchikan owned by the feds as well as a large percentage of Viking's outside purchases. But all of our federal timber sale contracts will be harvested this year and the Forest Service latest 5-year schedule further reduces the already inadequate timber supply in our region. There is a very small amount of young-growth timber that the Forest Service indicates it will sell in the future, but most of that timber is too small and scattered to be economically viable for harvesting operations. In another 30 years, there will be much larger acreages of young-growth potentially available, but until then the young-growth cannot replace the mature timber stands that we need to remain profitable.

Alcan does about \$80 million of business including payroll and expenses in Washington state which includes Washington state resident employees located in Aberdeen and Port Angeles. We also operate a large business segment now in British Columbia. Unfortunately British Columbia is the only location near Southeast Alaska or Washington state that provides a business environment that encourages major investments in the forest products industry. Federal timber policy increasingly forces us to look at BC for our operational and investment future.

At this point, I would like to submit for the record testimony from my fellow AFA board member Kirk Dahlstrom, the operator of Viking Lumber's midsized saw mill. I am prepared to answer questions on this testimony also.

Most of the local communities in our region have declined commensurate with the 90% decline in federal timber sales over the last 20-years. Government jobs and subsidized make work projects have provided a minimal amount of economy for the region. But this is a false economy and is not sustainable particularly in light of the State of Alaska's difficult budget situation. For instance, fish populations have doubled in the most heavily harvested watersheds in the region and all of the waters meet the state and federal water quality standards. Yet the Forest Service is spending millions of dollars performing "stream restoration" projects in these areas. These projects might be nice gestures, but they will likely not result in additional fish or more clean water. The projects rely on federal expenditures and they are not sustainable without more federal subsidies because these projects investments do not permit any investment in infrastructure .

A State Forest managed under the State Forest Practices Act on the other hand, can provide thousands of jobs and millions of dollars of net revenue. All this can be accomplished without impacting fish and wildlife populations or subsistence or recreation or any other beneficial uses of the forest.

That is why our Governor Bill Walker has endorsed the creation of this State Forest. He recently confirmed this support in two meetings he held, one in Juneau and one in Ketchikan. He supports the creation of this State Forest and strongly supports the idea of "value added" products such as our timber industry can and will produce if we can just get a decent timber supply

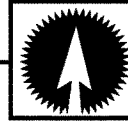
Attached to my testimony are two documents that I ask to be part of the record. The first is a History of the Alaska Timber Industry. The second is an Alaska State Forest Concept Paper which describes the State Forest and which AFA urges this Committee to create through federal legislation.

If a State Forest is not established, the surviving timber industry will perish and this region will become another Appalachia, doomed to endless poverty and families dependent upon government jobs or welfare.

Thank you for the opportunity to address you today.

Brian Brown.

Alaska Forest Association



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Alaska State Forest Concept Paper

The only way to preserve the remaining timber industry in Southeast Alaska and to restore that industry is to create an Alaska State forest owned, managed, and operated by the State of Alaska. The last 35 years of US Forest Service management have been a disaster for the timber industry in the Tongass and have led to a 90% decline in the timber based economy in the region. The following facts support and outline this tragic situation:

1. In 1980, a fully integrated industry with two operating pulp mills, five large sawmills, and many smaller mills operated in Ketchikan, Sitka, Petersburg, Wrangell, Haines, Metlakatla and Klawock operated on a full time basis and provided about 3,000 direct jobs and an estimated 2,000 indirect jobs in the timber harvest, milling, road building, and barge and towing industry (1990 Forest Service Timber Supply and Demand report R10-MB-156). Some of these indirect support businesses have closed and all have been damaged by the decline in timber harvest in the Tongass. The installed manufacturing capacity in the region has declined from about 850 million board feet annually to about 120 million board feet – see 2003 Forest Service “Mill capacity and utilization study” and Forest Service current demand report – http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5447816.pdf Manufacturing integration has been crippled; with the loss of the pulp mills, the region no longer has a facility that can utilize pulp logs or residual chips from the local sawmills.
2. The above fully integrated industry supported about \$200 million in payroll and provided \$26 million in total stumpage receipts for the then flourishing 25% that were dedicated to schools and roads under prior federal revenue sharing under the Twenty-Five Percent Fund Act of 1908, which had previously provided communities with a portion of 25 percent of the proceeds earned by national forests, before states started receiving SRS money. These receipts which cost the federal government nothing far exceeded any recent payments under the Secure Rural Schools Act which Congress has passed over the recent years.
3. In 1980, federal timber harvest average had averaged about 520 million board feet (450 mmbf of saw logs plus 70 mmbf of utility logs) annually, which supported all the jobs described above. The Alaska National Interest Lands Conservation Act statutorily reduced and set the USFS Tongass Forest level at 450 mmbf (net saw log volume) annually. In 1990, Congress replaced the ANILCA timber target with direction to the Forest Service to sell enough timber to satisfy the market demand and took away the automatic timber program funding provided in ANILCA. Over the last 35 years, the Forest Service has reduced the *maximum* allowable timber sale level from the promised 520 mmbf to 267 mmbf, and is now working to reduce the harvest level to less than 50 mmbf.
4. Recently, the USFS has announced that it intends to amend its land management plan to allow harvesting of only “young growth” timber which is loosely defined as previously harvested lands. This ill-advised plan will reduce the federal timber harvest even lower. Also, there is no manufacturing facility in Southeast Alaska which can process this young growth timber which will mean that all timber harvested under this “young growth” plan will have to be exported, further reducing jobs. Further the clear evidence is that there is insufficient “young growth” acreage at this time to sustain a manufacturing industry and if the existing young growth stands are harvested prematurely as currently planned by the agency, the timber yield from the young growth will be reduced by more than half, dooming the future of the industry in Southeast Alaska.
5. In the meantime, the only significant timber sale in the region, Big Thorne, has been litigated even though it is a stewardship contract, requires \$3,265, 420 in stewardship projects by Viking Lumber as part of the contract. See testimony of Kirk Dahlstrom before the Senate Energy Comm. on March 24, 2015 for details of stewardship projects.

Three different lawsuits and two requests for either a temporary restraining order or a preliminary injunction have been filed in federal District Court by environmental group litigants attempting to stop this one remaining federal contract. Clearly the USFS federal timber program in Southeast Alaska is irretrievably broken.

State Forest is the Solution

The only solution to this timber supply shortage is the creation of a self-sustaining timber program on lands owned and managed by the State of Alaska. Unlike Washington State which owns 2.6 million acres on which to operate a viable timber harvest program, the State of Alaska was restricted from selecting any viable, timber base in Southeast Alaska by the 1959 Alaska Statehood Act because the Forest Service insisted it needed to maintain ownership of all the timber in order to supply the existing timber industry. Even so, the State runs a very successful, small timber sale program on the very small land entitlement which is was allowed to select.

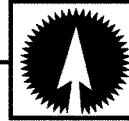
The State has a very well respected State Resource and Forest Practices Act. (Alaska Statutes 41.17). Any state forest would be managed under this well respected act.
http://forestry.alaska.gov/pdfs/PDF_Forest_Resources_and_Practices_Act_text-May_2013_update.pdf

This Act provides for land planning prior to Timber harvest, riparian management, and strong enforcement by the State of Alaska Division of Forestry. The state timber program also returns a sufficient income to support the program and provide receipts which could support the payments made to local government under the now disfunctional Secure Rural Schools program.

In 2012, the State of Alaska convened a blue ribbon panel which produced the Alaska State Timber Jobs Task Force Report. This report specifically advocated the establishment of a State owned forest of 2 million acres in Southeast Alaska consisting of now federally owned lands which the State was prevented from selecting under the Alaska Statehood. See page 5 and Appendix 6.
http://forestry.alaska.gov/pdfs/timber_jobs_task_force_report_final.pdf

Most importantly, if this Congress would authorize a State Forest to be owned, and managed by the State, the timber industry in Southeast Alaska could be revitalized and investment would be encouraged to allow the existing timber industry to survive and new timber facilities to be built.

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Alaska Timber Industry History

Southeast Alaska

Summary

From the 1867 purchase of Alaska until after the 1907 proclamation establishing the Tongass National Forest, only small amounts of the timber resources in Southeast Alaska were harvested for local use. Subsequent to 1907, the newly established Forest Service began offering 25-year timber sale contracts that included a requirement to construct a pulp mill. The intent was to establish a fully integrated manufacturing industry that would utilize all of the commercial timberland in the region. None of those early efforts were successful until the agency increased the term of the contracts to 50-years and added an assurance of an economic timber supply. Only two pulp mills were ultimately constructed, but they operated as intended from the mid-1950s until the mid-1990s. An illegal termination of one long-term contract and the imposition of unilateral contract changes that eliminated the viability of the other long-term contract brought an abrupt end to the pulp mill operations.

The Tongass National Forest currently encompasses about 93% of the timberlands in Southeast Alaska and, consequently, the Forest Service has monopoly power over the timber supply. After 1990, the Forest Service dramatically reduced the volume of timber offered for sale annually and in 1997 the agency imposed harvest constraints that resulted in large increases in the cost of harvesting national forest timber. These two management changes effectively wiped out most of the remaining timber industry. Current industry employment is about 15% of what it was when the pulp mills were operating.

1867-1947 Pre-Tongass Timber Act

From 1867 when Alaska was purchased from Russia until the early 1900s, the primary use of timber in Southeast Alaska was by the mining and fishing industries. Every significant mine in the region logged one or more hillsides to provide lumber and timber for the mine. The fishing industry used the biggest trees for fish traps, while local sawmills also kept busy sawing lumber for canneries and salteries plus crates for shipping salmon. Pole size timber was utilized for pilings. Most of the timberland in Southeast Alaska, then and now, is federal land and it wasn't until 1907 that the federal government established an agency to manage the timberlands.

In a 1982 history of the Forest Service appraisal system, Al Wiener, former Chief of Timber Appraisal, explained, "Foresters in the 1890's and early 1900's envisioned that the United States Forest Reserves, then being created, would provide a continuous supply of timber for the needs of local industry, under Federal control. Their vision has been realized in the National Forests, as the Reserves were renamed in 1907. Under the Forest Service's sustained-yield principles, these Forests today furnish raw materials for one-third of the lumber and one-half of the plywood manufactured in the United States each year."

In 1905, Agriculture Secretary James Wilson created the Forest Service to manage the forests and the agency adopted three guiding principles:

1. Sustained yield
2. Multiple use
3. Protection of local communities

In 1911, the agency adopted the practice "clean cutting", which was later labeled "clear cutting", as the "best and most consistent silvicultural system". A 1972 Forest Service brochure further explains that removing all of the timber in an area allows sunlight to reach the forest floor. The added heat and light enhances the growth of both trees and deer browse. In contrast, partial cutting leaves shade that retards the growth of trees and browse plus, since hemlock is more shade tolerant than spruce, the young-growth in a partial-cut area will be predominantly hemlock. Further, leaving mature and over-mature timber standing will increase the risk of insect and disease problems in the young-growth.

Given this pragmatic attitude, the agency took an aggressive approach in attempting to foster a fully integrated timber manufacturing industry by offering long-term timber contracts that included a requirement to construct a pulp mill.

- In 1910, a Norwegian company proposed constructing a mill in the Thorne Arm area but their proposed terms were not accepted by the agency (e.g. the company wanted a 99-year contract term, which was beyond the authority of the agency at the time).
- In 1912, the agency worked unsuccessfully with the San Francisco Chronicle on a large pulp timber sale.
- In 1913, the Forest Service offered a 300 million board foot timber sale on the Stikine River and a billion board foot timber sale in the Behm Canal area but received no bids.
- In 1920, a 100 million board foot timber sale was purchased by Alaska Pulp and Paper Company which constructed a small pulp mill at Port Snettisham; but, Alaska Pulp and Paper was able to operate for only a couple of years before closing, citing high shipping costs as the cause of the closure.
- In 1922, the Alaska Gastineau Company purchased a 1.8 billion board foot timber sale on Admiralty Island and in 1923 another large timber sale was advertised in Thomas Bay. Both of these timber sales were eventually cancelled due to financial concerns.
- In 1927, two more pulp sales were advertised. One in Juneau was purchased by a pair of newspaper companies and one in Ketchikan was purchased by Crown Zellerbach Corp. Both of these sales ended because bureaucratic delays in processing permits from the Federal Power Commission delayed operations until the onset of the Great Depression.

Although the Forest Service continued to sell timber sales, there were no additional efforts to establish a pulp manufacturing industry in Southeast Alaska until after 1947 when Congress passed the Tongass Timber Act, which was primarily enacted to authorize the Secretary of Agriculture to sell "*timber growing on any vacant, unappropriated, and unpatented lands within the exterior boundaries of the Tongass National Forest in Alaska, notwithstanding any claim of possessory rights*". However, in 1942 the Forest Service did establish the Alaska Spruce Log Program. The agency contracted logging, towing and rafting operations that consisted of several small logging operations and a 250-man camp at Edna Bay where flat rafts were assembled into ocean-going Davis rafts. The plan was to deliver 100 million board feet of high-grade spruce logs annually to Anacortes, Washington where they would be peeled for plywood for use in constructing British bombers. In 1944, the War Production Board announced that future planes would be constructed of metal and the Alaska Spruce Log Program ended after sending only 38.5 million board feet of high-grade spruce to Anacortes and 46 million board feet of lower grade timber to local mills. By the end of that year, all of the related logging camps had closed and the Edna Bay camp was practically a ghost town.

1947--1990 Pre-TTRA

During the long lull in long-term pulp contract offerings, the agency contemplated how best to overcome the financial concerns that were preventing the establishment of a pulp manufacturing industry. The primary economic problems were the economy of scale for an infant industry, an adequate length of time to amortize the immense investment involved in constructing a pulp mill and the uncertain cost of harvesting the timber. These problems were resolved in the following manner:

1. The Forest Service planned to sell five pulp timber contracts. These contracts, along with the normal timber sales, would provide around 800 mmbf of timber harvest annually. This was considered ample for a reasonable economy of scale.
2. The Forest Service increased the term of the timber sale offerings from 25-years to 50-years.

3. The Forest Service added contract clauses that assured the purchaser that the agency would not select timber nor impose conditions that put the purchasers at a competitive disadvantage. The Puget Sound Clause in the prospectus for the Ketchikan long-term sale was the first such clause:

"Insofar as the timber quality on the sale area will permit, the logging units to be designated periodically in the future for then current operations will not be inferior in timber quality to those being then commonly logged for pulpwood on other Alaska sales or on the northern coast of British Columbia, and the loggability of the included timber stands will be of such character that, so far as the delivered log costs are concerned the purchaser's pulp manufacturing operation will not be in a disadvantageous position in comparison with similar enterprises in the Puget Sound region".

In 1947, the Forest Service advertised a revised long-term timber sale near Ketchikan. The timber sale prospectus included a 50-year term, the economic timber clause and the following assurance:

"The chief, Forest Service, having due regard for the interests of the United States and for the protection of the natural resources of Alaska, wishes to facilitate the establishment of such new industry by the purchaser and the operation of the industry on a commercially sound and permanently economical basis."

The 8.25 billion board foot sale received no bids during the first two offerings, but in 1948 the sale was offered a third time and the newly formed Ketchikan Pulp and Paper Company offered the only bid. After numerous delays, the final contract was signed in 1951 and three years later the mill was constructed and had begun operating. The 1954 opening of the Ketchikan Pulp Company (KPC) pulp mill drew optimism and excitement from many sources:

- A.W. Greely, Regional Forester, wrote: "One who is not a forester can hardly appreciate how much difference a local market for hemlock pulp logs makes in the management of the Tongass National Forest. Forests are managed not by being left to themselves, but by the direction and control of some action which man brings on".
- B. Frank Heintzleman, Governor of the Territory, wrote: "Hereafter in Alaska the 14th day of July will be celebrated as the anniversary of one of the most important events in the Territory's history- the dedication of the Ketchikan Pulp Co. This is not only the first plan of its kind in Alaska but also represents the largest single industrial investment ever made here. It is an important milestone on Alaska's road to full industrial development".
- R. E. McArdle, Chief of the Forest Service, wrote: "The Forest Service will continue to foster development of forest product industries in Alaska to the extent needed for full utilization of the sustained yield cutting capacity of the Tongass National Forest. Cutting of this timber will be so conducted both as to rate and manner to maintain permanently a supply of raw material for these plants".

By 1956, just two years after the Ketchikan mill started operations, the mill reported more than a million dollar profit on twenty-five million dollars of sales.

Three more pulp timber sales were subsequently sold on the Tongass:

- A 5.25 billion board foot timber sale near Sitka. This pulp timber contract was signed in 1957 and the requisite mill was operating two years later. This contract had an economic timber clause similar to the Puget Sound Clause that assured the timber provided to the purchaser would be economically comparable to the timber provided to other such timber sales in Alaska.
- A 3 billion board foot timber sale near Wrangell. This timber sale contract required construction of a small pulp mill and a 40 mmbf per year sawmill. The requisite sawmill was constructed and operated, but not the pulp mill. Consequently, in 1967 the contract was downsized to only 1 billion board feet.

- An 8.75 billion board foot timber sale on Admiralty Island near Juneau. This timber sale was turned back to the Forest Service when the purchaser-Georgia Pacific-decided to enlarge an existing mill at Samoa, California instead of constructing a new mill. The Juneau timber sale was offered again in 1965. The second offering was never awarded because the purchaser backed out, citing higher than expected construction costs for the pulp mill. In 1967, the timber sale was offered to the second high bidder from the second offering - US Plywood/Champion Papers - and the sale was awarded in 1968. The Sierra Club challenged the Juneau timber sale and after years of nuisance litigation, the sale was finally terminated by mutual agreement of the purchaser and the Forest Service.

Recognition of the need to control the cost of timber harvest was taken for granted in those early years of the Alaska timber industry. The 50's through most of the 70's were years of learning for both the timber purchasers and the Forest Service. There was a cooperative effort and the contracts operated on a bilateral basis. Disagreements for the most part were settled between the parties. The roads and cutting units for the long-term timber sales were laid out by the purchasers under the supervision of the Forest Service. Issues regarding fish stream management were addressed jointly by the Forest Service, State Fish and Game and the purchaser. Beginning in 1959, the Alaska Loggers Association established a standing committee that met regularly with the Forest Service to discuss appraisals, permitting issues, logging systems, road construction costs, timber sale designs and other items that impact costs. In the mid-1970s, the Forest Service took over the job of designing and marking cutting units for the long-term timber sales. At the same time, the agency adopted a 100-acre cutting unit limit. This limitation greatly reduced the volume of timber that was available to harvest from each mile of road that was constructed; consequently, the road amortization rate increased dramatically and thus limited both the amount of stumpage and the amount of profit that could be generated by harvesting timber.

Also during the late 60' and early 70's, the industry began developing markets for sawn products in order to improve the manufacturing integration and the financial returns to their operations, thus offsetting some of the added cost that resulted from the cutting unit size limitation. Spruce lumber was the primary sawn product prior to this period but hemlock is the dominant species in the region; therefore, the industry effort was focused on selling hemlock sawn products. The effort was successful and a market was developed for hemlock cants and flitches. This satisfied the Forest Service primary manufacture requirements and the Japanese desire to retain their sawmill industry by re-sawing the material from Alaska. Saw logs that were too small or too rough to make cants or flitches were generally chipped for the pulp mills.

Initially, the Forest Service believed that most of the timber would be logged direct to the water with A-Frame cable systems or skidders. Shortly after their startup, the KPC had aerial photographs taken of its sale area and then performed an intensive cruise of the area. The results of the cruise showed that A-Frame logging would not be the primary method of logging as initially expected because most of the timber was too far from the shore. Truck logging with cable yarding to the roadside was the method that would dominate future logging operations. By the mid-70's, A-frame timber sales were phased out. Although there were a few A-frame loggers that had the financial strength and knowledge to transition to the more capital intensive road construction and truck logging operations, most of the small operators were simply bought out. The average A-Frame operation logged between 3-8 million board feet per year while an average truck operation would harvest 3-4 times that amount. The last A-Frame operation was Harbour Log at East Point near Wrangell in the early 80's. Helicopter logging became much more prevalent after the mid-1980s and as harvesting equipment evolves, mechanized logging systems are becoming more common.

In 1971, the Alaska Native Claims Settlement Act (ANCSA) was enacted. This Act established 13 Native regional corporations and 200 Native village corporations throughout the state, transferred \$962.5 million to these new entities and transferred more than 40 million acres of land, including surface and subsurface rights, to the corporations. In Southeast Alaska, the land grants resulted in fee-simple title to extensive timberlands (after a specified selection and conveyance process). Title to the majority of these timberlands was finally conveyed in the late 1970s and harvest on Native land began in earnest in the early 1980s.

Additionally, in 1980, Congress passed the Alaska National Interest Lands Conservation Act (ANILCA). Outgoing President Jimmy Carter signed the bill into law just before he left office in January, 1981. ANILCA established additional Wilderness and National Monuments in Southeast Alaska, further

reducing the area of the Tongass that could contribute timber to the local economy. In order to ensure that these land withdrawals from the available timberland base did not harm the existing timber industry, the Act mandated that the Forest Service would offer 450 million board feet of sawlog timber annually. Since much of the Native and wilderness withdrawals were concentrated in high volume timber stands, the Act also established a fund that the Forest Service could utilize to construct roads and facilities to compensate for the economic impact of the land withdrawals.

Shortly after 1980, the Native corporations began harvest operations on their private timberlands. Most of the sawlog timber from these private timberlands was exported overseas, but there were also a lot of pulp-grade logs that were harvested and the two pulp mills – at Ketchikan and Sitka – were able to purchase most of this fiber. These additional pulp logs helped sustain the pulp mills through a worldwide depression in timber products prices in the early to mid-1980s. During this depression, the Ketchikan Spruce Mill was permanently closed; but by the late 1980s, the markets had rebounded and private pulp logs were still available. This abundance of pulp fiber allowed the two long-term timber sale purchasers to divert even more saw logs to the sawmills, thereby further enhancing the manufacturing integration in the region. KPC added a small-log side to the mill it was leasing at Annette Island and also constructed a new small-log sawmill in Ketchikan.

1990—2008 TLMP

As intended, the Tongass timber sales sustained thousands of year round jobs and a strong economic base in an otherwise economically depressed region. Sadly, in 1990 Congress passed more legislation - the Tongass Timber Reform Act (TTRA) - that established additional Wilderness and roadless areas that were allegedly important for subsistence users but were "missed" in the 1980 package of land withdrawals. The politicians at that time promised that no jobs would be lost as a result of the legislation, despite the elimination of the guaranteed annual timber supply mandate that ANILCA had established as a compromise when the first round of Wilderness, Monument and Roadless Area set-asides were established (the guaranteed timber supply level was 450 million board feet - net scribner -annually).

After 1990, the industry struggled to maintain operations despite the shrinking timber supply and as a result, the volume of timber-under-contract was not replenished with new timber sales and quickly plummeted from over 2,000 million board feet in 1990 to about 100 million board feet in 2007. Most of the initial decline in timber-under-contract was from long-term timber sale volume; but, the industry had been fully integrated and the long-term timber sale saw logs were commonly traded for pulp logs and chips or simply sold to the other sawmills in Southeast Alaska. Consequently, all of the mills were affected by the loss of the long-term timber sale volume.

TTRA also gave the Forest Service authority to make unilateral contract modifications to the two long-term timber sales. The changes that the agency ultimately imposed on these contracts eliminated nearly all potential for profit.

In 1994, the purchaser of the Sitka long-term timber sale closed its pulp mill and announced plans to construct a medium density fiberboard plant in its place. The purchaser was negotiating its contract terms with the Forest Service when the agency abruptly and illegally cancelled its contract.

The market price for dissolving pulp reached an all time high in 1995 and Canadian mills began bidding more aggressively for native pulp logs from Southeast Alaska, thus driving the price of pulp logs from about \$180/MBF to over \$350/MBF. KPC, with the sole remaining pulp mill in Southeast Alaska, had been denied access to its full contract volume in the years leading up to this market event and thus was compelled to chip sawlogs plus pay the unprecedented high pulp log cost in order to keep its pulp mill operating in 1995. The combined cost of diverting sawlogs to its pulp mill and purchasing high-priced pulp logs to replace the shortfall in fiber from its long-term timber sale mooted any benefit from the all-time high market prices. In 1996, after the pulp market had already declined, the Forest Service appraisal system picked up the high pulp prices from 1995; and, based on procedures developed pursuant to the unilateral contract changes that the agency had imposed in 1990, increased the stumpage rate for KPC from \$54/MBF to \$144/MBF. This additional stumpage caused an enormous loss for KPC. The lack of adequate pulp fiber combined with the staggering stumpage increases made it clear that there was no longer any opportunity for KPC to be successful in the future.

In late 1996, Ketchikan Pulp Company completed the last of the pollution control improvements for its pulp mill and then negotiated an early end to its contract. The pulp mill permanently closed in March 1997; but, KPC attempted to facilitate a future for its logging and sawmill employees by installing a veneer

plant that could utilize the small low-grade logs that had previously been converted to pulp mill chips. In the months leading up to this final long-term sale termination, the Department of Agriculture agreed to a three-year continuation of the long-term timber sale in order to provide adequate timber for a seamless transition into a future without the long-term commitments. Unfortunately for the industry and most of the communities in Southeast Alaska, the seamless transition never happened.

In 1997, the Forest Service adopted a new land management plan for the Tongass and the agency announced that it intended to switch to "ecosystem management". Under this new philosophy, timber sales became a by-product of ecosystem management and attention to timber sale economics was abandoned. The new land management plan included extremely costly timber sale design constraints that raised the cost of harvesting timber enormously. These constraints included mandating that 30-50% of the timber be left standing in most previously developed areas. The harvesting costs in these areas should have been very low because the roads were already in place; but, the partial-cutting requirement instead made these some of the highest cost areas to operate. The partial cutting requirement also raised grave concerns about worker safety. Other costly constraints included oversize buffers on non-fish streams, a greatly expanded beach fringe no-cut buffer and a system of old-growth reserves that set-aside over a million acres of the highest value, lowest cost timberlands.

As the pre-1997 timber sales were harvested and the newly designed timber sales were advertised, the economic impact of the 1997 land management plan became apparent and despite good markets for hemlock, spruce and cedar lumber many of the timber sales that were advertised during this period appraised enormously deficit due to the high cost impact of the 1997 land management plan. The region's sawmills initially purchased only the economic timber sales, but as the mills depleted their volume of timber-under-contract, they began worrying about mill closures and losing their customers. In desperation the mills began purchasing marginal and deficit timber sales and by 2001 the bulk of the timber-under-contract was comprised mostly of deficit timber sales and the mills were losing money. About this time, Congress began prohibiting the agency from offering timber sales that did not appraise with a full profit and risk allowance. In 2003 and 2004 many of the deficit timber sales that had been purchased were mutually terminated when the purchasers, the agency and Congress all recognized that those high-cost timber sales could never be economic. This legislation eliminated most of the deficit timber sales, but the agency planners did not have an economic mandate and they continued to prepare NEPA documents (Environmental Impact Statements) for timber sales without regard to economic common sense. Consequently, only a small percentage of the post 1997 NEPA-approved timber sales were actually ever offered. Environmental activists recognized a new opportunity to obstruct timber sales - they began dividing the cost of the Environmental Impact Statements by the small volume of timber that was actually sold and then urged Congress to stop funding timber sales in Alaska arguing fiscal prudence. Others more rationally argued that it made more sense to fix the economic problems than to end the timber sales.

As a result of the changes in management of the national forest, the federal timber sale program has shrunk by about 90%; and, since the Tongass National Forest encompasses about 93% of the timberlands in Southeast Alaska, the timber industry has similarly declined. Manufacturing integration, the economy of scale and a supply of timber adequate for normal sawmill operations were all eliminated as the timber supply declined.

During the preparation of the 2008 TLMP Amendment the industry commented that the agency must revise the costly 1997 timber sale constraints in order to allow the preparation of economic timber sales. In response the Forest Service prepared an economic analysis of the new plan and conceded that the plan could not be implemented, but then the agency adopted the flawed plan anyway. The timber industry appealed the new plan and to resolve the appeal, the agency promised to prepare and offer four 10-year timber sales to provide an assurance of sufficient timber under contract to keep the remaining mills operating. The 10-year timber sales were not completed and the timber sale program continued to decline, then with no prior notice or discussion, the Forest Service announced in 2010 that it had decided to implement the Wilderness Society recommendation to end the harvest of old-growth timber and transition immediately to young-growth harvesting.

PRESENT

There are currently only about 430,000 acres of young-growth on the national forest. Much of the young trees are in areas where timber harvest is not permitted under the 2008 land management plan and the

oldest trees are still about 30 to 40-years from maturity. There is no mill in Southeast Alaska that can profitably manufacture lumber from these small trees and there is not sufficient acreage of young-growth to grow an adequate fiber supply for a modern small-log mill. The agency's short-term solution is to allow the export of the young-growth trees to China. This might work in some cases, but it won't provide any year-around manufacturing jobs and harvesting the trees 30-year prematurely will result in reducing the growth potential of the young-growth stands by more than half.

There is currently no resolution of this timber supply dilemma and the last surviving mid-size sawmill in the region has only a single timber sale under contract. That timber sale is a downsized version of one of the promised 10-year timber sales. It is currently jeopardized by an environmental lawsuit and the Forest Service has no other timber sales ready to offer, because they diverted their timber sale staff to young-growth projects.

The Forest Service has appointed a Tongass Advisory Committee (TAC). The Alaska Forest Association Executive Director was appointed to the TAC. While the final recommendation of the TAC has not yet been forthcoming, the TAC meetings, open to the public, make clear that the issue of premature harvest of young growth is very difficult.

Despite the apparent/announced decisions by the USFS to change federal timber harvest in the Tongass to young growth it cannot do so for the following reasons:

1. There is no facility to harvest this young growth. All would have to be exported overseas, mostly to Asian markets or subject to huge federal subsidy to allow domestic production
2. The key standards and guidelines for harvest in the 2008 TLMP including harvest in old growth reserves (OGR) and prohibition on harvest within 1000 feet of beach fringe and 100-300 feet on salmon streams would have to be changed.

Even with a large federal subsidy, there is insufficient young growth volume to sustain a single mill over time.

References:

- 80th Congress, 1st Session-Chapters 516-518-Aug 8, 1947
- USDA Forest Service, Sale Prospectus, Ketchikan Pulp Timber Unit, June 14, 1948
- Ketchikan Pulp Company, Our First 20 Years, Tom Flanagan, President, 1974
- Preliminary Examination of the Timber Stands in the Ketchikan Pulp Unit, John P. VanOrsdel, Forester, Aug 31, 1946
- Timber Sale Agreement, Ketchikan Pulp and Paper Company, Contract #A10fs-1042, 7/26/51
- 1955 Yearbook of Alaska Timber Industries
- The Forest Service Timber Appraisal System, A Historical Perspective, 1891-1981, USDA Forest Service, Al Wiener, Former Chief of Timber Appraisal, Aug 1982
- Clearcutting in Coastal Alaska, USDA-Alaska Division-Forest Service, 1972
- Ketchikan Pulp Company, Annual Report, 1956
- A History of the US Forest Service in Alaska, Lawrence Rakestraw, June 2002

The CHAIRMAN. Thank you, Mr. Brown.

As I mentioned, all of the reports as well as Mr. Dahlstrom's testimony, will be included in full as part of the record.

Mr. Owen, welcome to the Committee.

STATEMENT OF CARLTON OWEN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, U.S. ENDOWMENT FOR FORESTRY AND COMMUNITIES, INC.

Mr. OWEN. Thank you, Chairman Murkowski and members of the Committee. It's my privilege to be with you today.

I'm a forester and a wildlife biologist that next year will reach 40 years in the profession. Half of that has been in the forest products industry and half working with non-profits in the forest sector. It's been my privilege for the last eight and a half years to head the U.S. Endowment for Forestry and Communities.

We're a little bit of a rare critter. We came out of the trade settlement between U.S. and Canada over softwood lumber in 2006. We were given a one time, \$200 million endowment with two purposes. One to promote healthy working forests in the U.S., and second to promote family wage jobs in forest rich communities.

We go about that in a number of ways but primarily in trying to work with either those in the public or the private sector that are willing to look for systemic transformative and sustainable ways to address the issues of forest health and productivity and jobs.

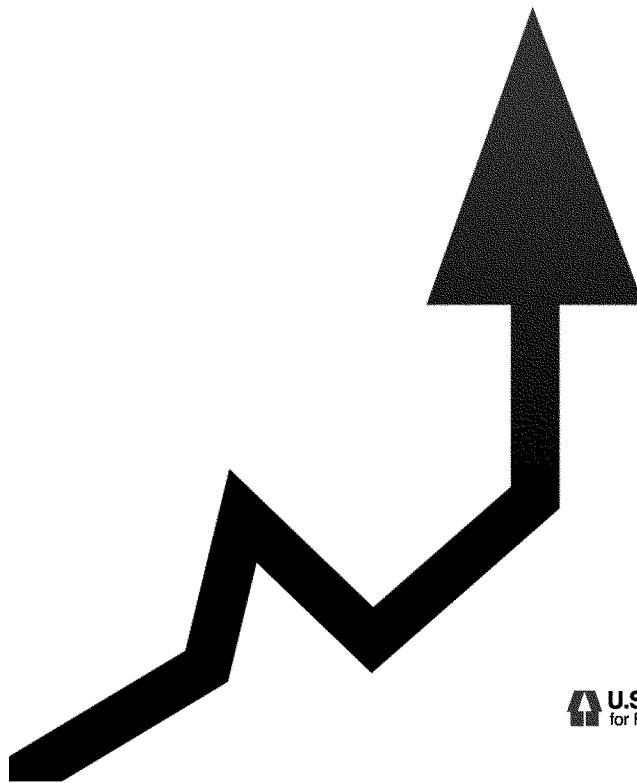
I ask that you accept our annual report that we provided with our testimony as part of the record, Chairman.

The CHAIRMAN. It will be included as part of the record.

[The information referred to follows:]

Annual Report 2014

Investing for Impact



Chairman's Thoughts Credits Retiring Members; Welcomes New Talent



John Weaver
Augusta, GA

Equally important as our investments in programmatic activities are investments in people. I am indebted to the retiring members and those who implement our plans. In 2014 we reached a significant milestone—all integral Board members served in the same capacity for the first time in our service. As I and my first year as Chairman, it is my pleasure to recognize the last two of the original eleven members who chaired the Board. I am grateful for this small but effective organization.

Peggy Clark—Arkansas's first lady of chain and hams—eight years, and ensured that the concerns of America's family forest owners were always on the table. Her acumen, honed in the family business, served us well as she chaired the Audit Committee. Her dry wit, laughter, warm smile, and shy southern savvy will be missed.

Mack Hagan—the dirt forester from L.A. (that's "Lower Alabama") who rose to senior leadership in one of the best-known forestry companies in the world—served for eight years. Mack combined common sense from rural roots with diplomatic skills that would be the envy of the United Nations. He showcased those talents as Chairman for four years, where he showed us that a forester can be a successful businessman, a position of a top officer, and the definition of a Southern.

Retires on investment from our initial Board were stellar. Though it is bittersweet to see rich talent and now close personal friends, we are grateful to have well-qualified additions bring their own strengths.

Jim Hoodham—former mayor of Grand Rapids, MN, long-time member of the Board, and founder of the Bradburn Foundation, and head of a family business that spans three quarters of a century—joined in May.

We welcomed two more talents in November: John Cooper—former CEO of the National Forest Foundation, and as A&M University—bring personal perspective on minority landowner issues and deep understanding of rural development, poverty, and charitable engagement in change. Andrea Tuttle—former CEO of the National Forest Foundation and a professional—shares an understanding of policymaking and global perspectives from years of international work.

The investments made in our Board are matched by those in six full-time staff members who are committed to any task to serve. Expected returns for the future, look great!

President Shares Views Recounts Hits, and One Miss, for 2014



Carlton Owen
Greenville, SC

While the stock market was on a tear, 2014 was a year of stability for the Endowment. As President, I am proud to share the hits and one miss for the Endowment staff. Not so the programmatic side. For our most significant investment to date, we note a referendum.

It is gratifying to point to successes—something we do in the pages ahead. But just as no Wall Street analyst would ignore a stock's volatility, we cannot ignore the challenges we are facing. Our investment in the future of the forest sector is a long-term endeavor. We are not alone in this. The forest sector is a global industry, and we must work together to address the challenges we face.

Four years ago we launched an effort to pilot a community-scale business in what the *New York Times* in October termed "one of the ten hardest places to live in the world." Our goal was to create a new generation of forest products for the 21st century. That work, founded on nature's building blocks at the nano scale—one 100,000th the thickness of a human hair—involves harvesting operations, renewable energy to keep utility dollars at home, and a one-of-a-kind 30-year philanthropic investment in the future of the forest sector. The goal is to create a sustainable, high-value product from low-value wood.

With our partners at the USDA Forest Service, we launched two projects to sustain America's forest-rich communities. With the help of the USDA Forest Service, we are working to create a new generation of forest products for the 21st century. That work, founded on nature's building blocks at the nano scale—one 100,000th the thickness of a human hair—involves harvesting operations, renewable energy to keep utility dollars at home, and a one-of-a-kind 30-year philanthropic investment in the future of the forest sector. The goal is to create a sustainable, high-value product from low-value wood.

On a parallel track, the Endowment is engaging with the Forest Service and Georgia Southern University's Henry Center to generate a new generation of forest products for the 21st century. That work, founded on nature's building blocks at the nano scale—one 100,000th the thickness of a human hair—involves harvesting operations, renewable energy to keep utility dollars at home, and a one-of-a-kind 30-year philanthropic investment in the future of the forest sector. The goal is to create a sustainable, high-value product from low-value wood.

Three other efforts aim to retain America's working forests. In partnership with the American Water Works Association we are piloting forest-based businesses that provide drinking water. We are also working to create a new generation of forest products for the 21st century. That work, founded on nature's building blocks at the nano scale—one 100,000th the thickness of a human hair—involves harvesting operations, renewable energy to keep utility dollars at home, and a one-of-a-kind 30-year philanthropic investment in the future of the forest sector. The goal is to create a sustainable, high-value product from low-value wood.

Finally, we concluded a five-year effort to pilot regional forest-based economic development in our Forest Investment Zone Initiative. Read more about those achievements and findings on Page 14.



Mission

The Endowment works collaboratively with partners in the public and private sectors to advance systemic, transformative, and innovative change in the health and vitality of the nation's working forests and forest-reliant communities.

Vision

America's forests are sustainably managed to meet broad societal objectives such as providing clean water, wildlife habitat, and other ecological services, while ensuring healthy and vibrant forest-reliant communities.

History

The Endowment for Forestry and Communities, Inc. (the Endowment) is a not-for-profit public charity. It was established September 21, 2006, at the request of the governments of the United States and Canada in accordance with the terms of the 2006 Softwood Lumber Agreement between the two countries.

Theory of Change

The Endowment operates under a "theory of change" that focuses on work in three areas: retaining and restoring healthy working forests, promoting and capturing multiple values from forests, and building capacity, collaboration, and leadership.

While many of our programmatic investments don't lend themselves to simple characterization, all are closely aligned and integrate well under this theory of change.

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COLEMAN ALLIUMS
Furman University

1. Ended service, November 2014
2. Began service, November 2014
3. Began service, May 2014

What's News

2006

■ **September: Softwood Lumber Agreement** authorizes \$450 million for "incentivized initiatives" in U.S.

■ **October: "Side Letters"** designate \$200 million for advancing sustainable forestry and family-wage jobs

■ **November: New entity,** U.S. Endowment for Forestry and Communities, establishes framework

2007

■ **April: Canada provides \$200 million** perpetual corpus to support Endowment's programs

■ **June: Endowment Board** adopts vision, mission and values, sets course for work ahead

■ **November: National survey** and workshop results guide theory of change to direct program

Collaborate - Do great things together.

Innovate - Search for a better solution. Then top it!

-The Motley Fool
Excerpted from Core Values

FOZIL
ONE THING

**Ultimately Support
the North American
Forest Industry**

Investors in Nanotechnology Target Outsized Returns

In 2014, P2Nano—a public-private partnership initiated by the USDA Forest Service and the Endowment—has raised more than \$3 million to advance commercialization of cellulosic nanomaterials. The investment is expected to stimulate new industries, develop 21st-century green products, and provide high-wage jobs in rural America.

Uncommonly strong and lightweight, products made from cellulosic nano material could revolutionize the auto, aerospace, electronics, food packaging, and other industries. Projects will investigate using cellulosic nanomaterials to create stronger, lighter, and fire-resistant fiberglass alternatives, replacing fiberglass, developing advanced papers, and more.

International competition, recessionary pressures, and other factors have spurred the U.S. forest products industry to pursue robust R&D programs. According to the most recent data available, from before the 2008 recession, the forest industry devoted only half of 1 percent of total sales to R&D versus an average of 3.4 percent for the U.S. non-high-tech manufacturing sector.

Public funding for R&D is also rapidly declining, even as many foreign competitors are ratcheting up investments. Without targeted investment and collaborative innovation to create high-value products, the forest products sector will weaken.

The P2Nano initiative, the Endowment's effort to back new models for innovation, is leveraging public and private investments and spawning commitment to research and development for the next generation of forest products.

Growing Markets for Forest Products Manufacturers Check "Yes" for Research & Promotion

Through programs developed and adopted with matching funds from the Endowment, producers of a range of forest products have received more than \$40 million annually to growing their markets.

Paper and paper-based packaging and hardwood lumber and millwork producers are following the lead of softwood lumber producers,

who voted overwhelmingly in 2011 to adopt the first Research & Promotion Program (a.k.a. "check-off") for a forest product. Their action was encouraged by a 2009 Endowment report on the feasibility of using commodity check-offs—a U.S. Department of Agriculture-approved way for producers to jointly fund generic marketing campaigns.

The paper check-off is now in place effective July 2014 and a vote by hardwood producers is expected in 2015.

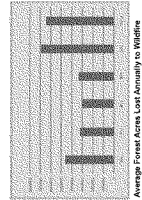
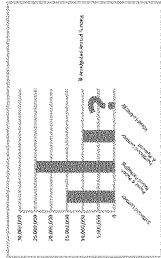
In late 2014 the Endowment and leaders from the wood-to-energy industry began considering a check-off for wood pellet and electricity producers firing with woody biomass. The Endowment is also exploring an additional funding opportunity for research and promotion efforts across the four segments of the forestry sector could exceed \$60 million per year.

Raging Forest Fires Demand Breakthrough Solutions

Wildland fires are burning more than 10 million acres annually in the United States. The U.S. consumes some \$3 billion in federal funds annually in suppression costs and also cause loss of human life. Economic and environmental losses are valued in the tens of billions. The growing intensity and acreage of wildland fires threaten the health of the nation's forests.

Large volumes of wood—decades-diameter trees and noncommercial species in overstocked stands—need to be removed, but without markets for this low-value biomass, forest landowners and land managers have few options.

The Endowment's collaboration with the USDA Forest Service in advancing cellulosic nano products and advanced



Average Forest Acres Lost Annually to Wildfires by Decade

What's News

2008

- **May: Forest Health Initiative** becomes first holding in Endowment's portfolio
- **July: Commodity check-off** report talks benefits for forest products sector
- **August: Working forests** and forest products markets get boost under Endowment initiatives
- **November: Forest Investment Zone Initiative** focuses on regional economic development

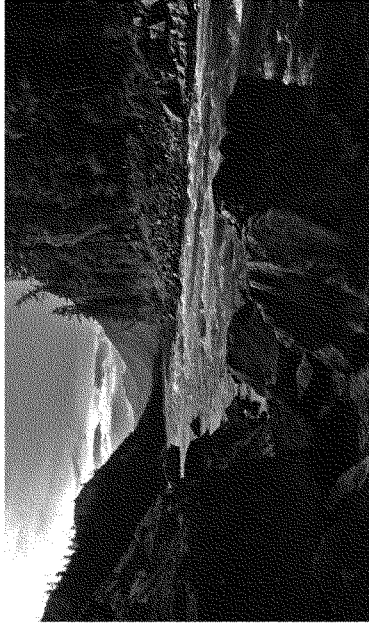
2009

- **May: Online database** begins tracking conservation easements for land trust partners
- **November: Working forests** and green building gain recognition in federal policy
- **December: Nontraditional Markets Initiative** addresses drinking water as forest product

"A couple of thoughts (but not directives): Focus the new funds and your energy on a relatively few activities in which [you] can make an important difference. Concentrate your resources on needs that would not be met without your efforts... Expect to make some mistakes; nothing important will be accomplished if you make only 'safe' decisions."

Warren Buffett
*Revisited: from letter to his children
 at the University of Pennsylvania*

Systemic, Transformative, and Sustainable Change



Drinking Water: Two-Thirds Originates From Forests

Investors look for companies that improve returns by lowering costs and increasing efficiency. Investing in the Endowment's strategies when considering projects. For example, investing in management of forested watersheds to cut water treatment costs yields higher returns for consumers.

"The rational investor buys shares in companies that are cutting costs and improving efficiency," said Peter Stangel, Endowment SVP. "Forested watersheds are a similarly good investment: they cut water treatment costs for utilities, thus yielding high returns for consumers."

Financial support from water utilities and their customers could help transform how the nation manages its forests and watersheds. If both forest owners and water users realize economic benefits, the change will be sustainable.

With the American Water Works Association, the Endowment is funding research to clarify the relationship between raw water quality and treatment costs—a critical point for winning support from water utilities and making forest management integral to the water service business. The Endowment is also hosting symposia and workshops to help forest landowners and water utilities find common ground and is securing funding from the Natural Resources Conservation Service for an analysis of water projects by the World Resources Institute.

The Endowment is funding pilot projects in Arkansas, Georgia, North Carolina, Oregon, and South Carolina to demonstrate how watershed management can lower costs for water utilities and their customers.

Called Healthy Watersheds through Healthy Forests, this program promotes investments in sustainable management of forested watersheds, which are the source for two-thirds of the nation's drinking water. Healthy, well-managed forests produce cleaner water that may be less

What's News

2010

- **March: Wood-to-Energy Initiative** begins seeking markets for low-value wood
- **July: Program-related investments**—essentially low-interest loans—advance Endowment's mission
- **November: Georgia project** pilots economic development to address drivers of persistent poverty

2011

- **June: Canadian and U.S. representatives** address common challenges in first-ever Forest Health Summit
- **July: Softwood lumber producers** adopt check-off program under USDA Research & Promotion authority

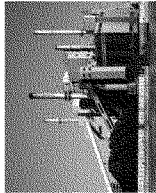


"An investment in knowledge pays the best interest."

-Benjamin Franklin

Grow Markets

Consortium Seeks Enhanced Forest Health and Renewable Energy through Torrefaction



Commercially viable, advanced wood-to-energy products can be made from industrial wood waste, forest residues and mill sludge, but the technology is not widespread. To fill critical knowledge gaps, the Endowment, the USDA Forest Service's Forest Products Laboratory, and Georgia Southern University's Center for Forest Development have launched the Consortium for Advanced Wood-to-Energy Solutions (CAWES).

"Our initial work will center on determining the commercial viability of torrefaction, a process that creates a low-oxygen environment—to create an energy-dense product that can more easily be shipped, stored, and used to produce renewable energy," said Alexander Konkelius, President and CEO of Herty.

The Endowment and the USDA Forest Service, via its State & Private Forestry division, jump-started the consortium with a \$4 million investment.

Bold Plan to Demonstrate Positive Power of Enterprise Falters

With a change in plans by a major donor, the Endowment's strategy to lift the poorest children in Georgia may fail, the Endowment has conceded.

In late 2010 the Endowment created a public-private partnership to develop a community-scale wood-to-energy project. The partnership would provide a market for low-value wood and waste from mills and mills, share up a staffing tax base, and create 25 direct and 50 indirect jobs in recession-stricken Jefferson County, Georgia. It would also generate a guaranteed 20-year stream of income for the community to invest.

CWF then developed the chosen strategy: Children's Savings Accounts (CSAs) for each of the 3,400 K-12 students in the county. In a tiered approach, families below the poverty level would receive \$100 per year, middle-income families up to a total of \$120 per year per child. Families earning up to twice the poverty level would get a dollar-for-dollar match. No one would be left out: higher-income families would get 50 cents for each dollar—an instant 50 percent return.

Studies from around the globe show it isn't the amount of money that goes into a CSA that makes the difference; rather, it's the conversations about the future and the goals parents set for their children. Most CSAs invest in short-term philanthropy that only will pay off in the future. No one did the Endowment find a long-term, universal program tied to a for-profit business.

CWF was forced to take legal action to ensure the program's success, and another party was added. The purchase agreement was extended to 30 years, raising the community's potential return to as much as \$1 million a year. Then in 2014 the second partner sought to withdraw from its commitments, leaving prospects for the effort.

A complete autopsy of the experience will be publicly available before year-end 2015.

Endowment President Carlton Owen called North Star Jefferson "the quintessential triple-bottom-line project. And the social benefit was truly stellar. Most such schemes involve short-term philanthropy for only a few kids. This was a long-term, universal program tied to a stable, for-profit business."

What's News

2012

- January: **Harwood** announces the creation of a new gray markets, Endowment cofunds check-off development
- April: **Asset Creation Initiative** takes forest pathway to economic progress for disadvantaged populations
- May: **Resources for the Future** creates Chair in Forest Economics and Policy with Endowment support
- September: **Endowment** and military's Readiness and Environmental Protection, Integration challenge program

2013

- March: **Second Forest Health Summit**, in Ottawa, advances cross-border forest health collaboration
- May: **State of Forestry and Forest Industry** meeting identifies challenges and opportunities for growth
- May: **Innovation Agenda** for future forest products begins as Forest Investment Zone projects wrap up
- July: **National Conservation Database** with 10,000th participant helps land mass coordinate services

"Good investing is boring."

-George Soros

Advance Forest Health

Working Forests Support National Defense

Investments in businesses that supply the U.S. military often pay off. Here's how the Endowment is increasing the viability of working forests around military bases, helps keep these installations functioning.

Most military bases were established in rural areas, but over the years, development is increasing, training exercises and weapons testing. Working forests buffer operations from residential areas and create dark skies for night air operations. The Endowment has a number of obligations to reserve habitat for imperiled species that would otherwise find refuge on bases.

The Endowment partners with the Department of Defense's Readiness and Environmental Protection Integration (REPI) program to maintain and expand working forests around military bases. In 2011, the Endowment awarded the REPI Challenge Program, which awarded \$5 million to protect buffer lands around Fort Huachuca, Arizona, and Naval Air Station Patuxent River in Maryland and Delaware.

The Endowment also prepared a primer to explain the benefits of working forests for installation personnel and, in partnership with The Nature Conservancy, developed a series of guidelines for buffer programs from the Natural Resources Conservation Service's Regional Conservation Partnership Program.

"Investments in businesses that supply the U.S. military often pay off," said Peter Stangel.

"We saw a good opportunity in investing in working forests around military bases."

Actions Follow Cross-Border Summits Convened by Endowment

In late November the Endowment released the first report (2012/2014 Year End Report) of results of cross-border collaboration to address forest health issues affecting the second-largest forest expanse in the world: the forested forest estate of Canada and the U.S.

"While cooperation among our two countries and especially forest scientists and forest managers in both has a long history," said Endowment President Carlton Owen, "the enhanced collaboration and the positive results showcased in this report point to the importance and benefits to the forests and people of both nations when that cooperation is more strategic. As we've seen with Ebola, it is vitally important that people focus on cooperation in the face of global challenges."

- Markets:** Environmental product declarations for particleboard and medium-density fiberboard will help make wood products a preferred material for green building.
- Fire:** A coordinated approach to sharing wildland firefighting resources portends more effective suppression.
- Pests:** Unhindered collaboration facilitates response to spruce barkworm outbreaks in eastern North America.
- Trade:** The first cross-border map of above-ground forest biomass in North America aids planning.
- Information:** International Coordination of Information for the 2015 Global Forest Resource Assessment report will improve accuracy.

Example Results of Enhanced Canadian-U.S. Collaboration:

December: Loan to Wisconsin's Menominee Tribe will improve sawmill efficiency and enhance air quality.

Invigorate Forest-Rich Communities

Critical to the program is collaboration with USDA and state agencies, particularly the Natural Resources Conservation Service (NRCS), the USDA Forest Service, the Farm Services Administration, and state forestry commissions. A clear measure of success: 75 African American landowners have received or are under consideration for cost-share funding for forestry plans and practices from the NRCS Environmental Quality Incentives Program (EQIP).

Critical to the program is collaboration with USDA and state agencies, particularly the Natural Resources Conservation Service (NRCS), the USDA Forest Service, the Farm Services Administration, and state forestry commissions. A clear measure of success: 75 African American landowners have received or are under consideration for cost-share funding for forestry plans and practices from the NRCS Environmental Quality Incentives Program (EQIP).

Zone Work Concludes; Forest Communities Benefit

A five-year project with three ambitious goals—advancing forest health, growing markets for forest products, and helping communities—has closed out, reporting gains at a regional scale.

In 2009, the Endowment, working as funder, bridge-builder, and risk-taker, challenged three regional nonprofits to collaboratively and holistically address the needs of forest-dependent communities in forest-reliant regions. Despite the recession's drain on philanthropic and government resources, the Endowment's \$6 million investment generating tangible results and identifying opportunities for future investment.

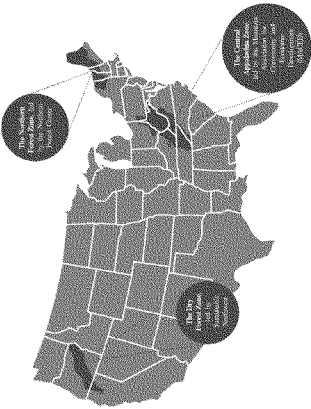
The Forest Investment Zone Initiative focused on three regions—Northern Forest (Maine, New Hampshire, New York, Connecticut, Massachusetts, Vermont, Ohio, Tennessee, Virginia, West Virginia), and Dry Forest (eastern California, Oregon)—each with a distinct forest ecosystem and a distinct forest-dependent community, and each with a distinct forest ecosystem and a distinct forest-dependent community.

In each zone the Endowment partnered with a strong nonprofit intermediary: the Northern Forest Center led the initiative in the Northern Forest, and the Forest Communities Association for Community Economic Development directed the Central Appalachia Zone and the Dry Forest Zone. The three forest communities assembled local partners to supplement their expertise and coverage.

Strategies that gained traction and hold potential include the following:

Opening Public Lands via Community Collaboratives

In the Dry Forest Zone, diverse local stakeholders—logging industry, community, and environmentalists—reached agreement on a 15-year plan to manage public lands. In the Northern Forest, federal forestlands are again producing timber for local mills and planning and activities have been initiated on more than 4,000 acres of National Forests.



Making Certification Feasible for Small Owners and Producers

The Center for Forest Certification at the University of Kentucky could be an enduring legacy of the Central Appalachia Zone. The center has helped small forest owners and producers access to group certification at an affordable price, dismantling the barrier to new markets for forest products. The center has helped 93 wood products companies and 59 loggers secure certification.

Generating Community-Scale Biomass Heat

In the Northern Forest Zone, the Model Neighborhood Project enabled 40 homeowners to switch from oil to state-of-the-art wood pellet heating systems, generating \$400,000 in energy savings and creating 100 jobs. The project is now being replicated in Vermont and Maine and in the Adirondacks.

The Dry Forest Zone's Integrated Biomass project is generating 100 jobs and creating value from forest restoration activities can generate value as firewood sold in large grocery chains, poles for vineyards and orchards, and biomass for heat and power.

Catalyzing Innovation in Wood Products Manufacturing

The Northern Forest Zone's Regional Wood Products Consortium persuaded 28 wood products companies to adopt the Forest Communities Association for Community Economic Development's "Wood Innovation" program, customizing, and online marketing. One example: once near bankruptcy and with no market for its products, the company in Waterville, Vermont, now produces digitally customized picture frames, employs 40 people and uses 2 million board feet of northern hardwoods annually.

Creating Community-Owned Forests

In Maine, New Hampshire, and Vermont, the Forest Communities Association for Community Economic Development has helped more than 11,000 acres now generate income from timber sales for the upcoming manufacturing. Value provided by the forest as a critical asset. The Northern Forest Zone's public understanding of the forest as a critical asset. The Northern Forest Zone's public understanding of the forest as a critical asset. The Northern Forest Zone's public understanding of the forest as a critical asset.

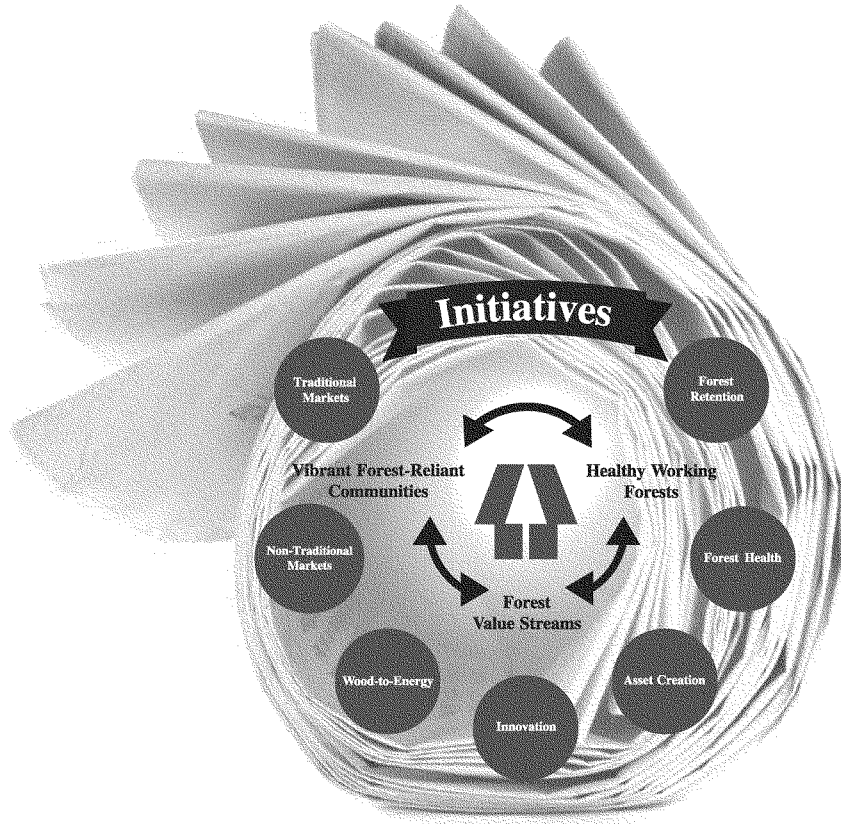
To learn more about the Forest Investment Zone Initiative results, visit www.usendowment.org.

Statements of Financial Activity (For the 12 Months ended December 31)

Program Investment	2014*	2013	2012
Partner Investment (public and private support)	\$2,735,000	\$5,109,000	\$2,222,000
Program Expenditures			
Grants and Contracts	3,146,000	6,455,000	7,592,000
Impact Investments (\$8,650,000 cumulative)	2,750,000	1,551,000	4,240,000 +
Total	\$7,996,000	\$8,086,000	\$11,458,000
Operation Expense			
Personnel, General and Administrative	\$0.00	\$0.00	\$0.00
Investment Activity			
Income, realized and unrealized gains	\$17,804,000	\$19,458,000	\$16,967,000
Total Increase in Net Assets	14,768,000	15,403,000	11,709,000
Net Assets at Beginning of Period	204,475,000	189,072,000	177,905,000
Net Assets at End of Period	\$219,243,000	\$204,475,000	\$189,614,000
Leverage			
Endowment Investments of \$19,458,000 leveraged \$189,614,000 in public and private investments for a total of \$209,072,000			
Endowment Investments			
Partner Investments			
Endowment Investments			
Total			

* 2014 figures are preliminary and subject to audit. The figures are preliminary and subject to audit. The figures are preliminary and subject to audit.

The statements of financial activity are prepared on a cash basis. The statements of financial activity are prepared on a cash basis. The statements of financial activity are prepared on a cash basis.



Mr. OWEN. Thank you.

I work as forest centric where we focus on private forests, the issue that's a number one concern is conversion. Forest Service predicts that land area between the size of West Virginia and Wisconsin will be lost to conversion over the next 40 years. One of the issues that's most important to keep those forests as forests or vibrant markets.

When we talk about the Federal lands we have a very different set of issues. We're not worried about conversion. We're worried about keeping those forests healthy and productive, but again, markets are a critical part of making that so.

As author Eric Rutkow in his book, "American Canopy," notes, "nowhere else has a culture been so intimately associated with wood like that in the U.S."

We like wood. We build our homes from it. We use paper products. Look around this room, wood ordains every wall and the very desk we sit at today.

Remarkably over two centuries later 320,000,000 Americans, we have about 70 percent of the forest estate that we had when we originally colonized this country. One third of our nation is covered in forest. Public forest represents about four of ten of those acres. And they're important not only to future generations for the ecological values they promote, but for also economic opportunity in rural communities and as an example to everyday Americans that we can, through forestry indeed, have our cake and eat it too, with forest management.

The endowment does not advocate a return to timber management as an overriding use of the public forest, but we do believe that timber management has an appropriate role on the public lands. In fact, without management keeping those lands intact it is nearly impossible. As a dear friend of mine, Neil Sampson, former head of American Forest, says, "Our 50-year love affair with the concept of wilderness is running headlong into the reality of climate change and the fact that we can't preserve dynamic ecosystems."

We've talked about the planning processes over the last couple of speakers, and we would agree that planning processes are one of the challenges we have to find ways to bring reason to them and shorten them to the speed of need. Forests are dying much more rapidly than we can move. Collaborative are one of the best efforts that have been put in place to achieve that, and I think one of the reasons has already been mentioned that they involve local communities and local residents in decision-making.

As it relates to NEPA we're encouraged by some of the things that the agency is doing to address NEPA, but the bottom line, again, we have to find ways to shorten the process while still founding it on science to address the needs of those forests.

Stewardship contracting has been one of the bright spots. And if we look for one negative in there it's probably that the limit of 10 years is too short to make the kind of economic investments in the private sector to take those risks. So we would encourage either extending that period of time or at least allowing extensions without having to restart the process.

On watersheds and water, we think it is the most important product that flows from our forests. Two out of three Americans get their drinking water, every day, from a forest. One out of two get it from a public forest.

We can't wait for examples like Denver where a catastrophic wildfire on public lands sends \$150 million bill downstream to the utility and to the citizens of that community. We've got to find new ways to work together to address that.

The endowment is working with the Forest Service on two initiatives to address the challenges that face public lands, and that's primarily around low value, small diameter, dead and dying wood. One is a product of the future. Cellulosic nanotechnology, products that are based on green building materials, products of the 21st century that can use low value wood to make high value products. The second is torrefaction, essentially roasting low value wood as a carbon substitute.

And let me end real quickly by saying we also have to redirect our R and D initiative in the future to have a more collaborative, public/private partnership to address the needs of the forests.

Thank you, Madam Chairman.

[The prepared statement of Mr. Owen follows:]

Testimony of
 CARLTON N. OWEN
 PRESIDENT AND CHIEF EXECUTIVE OFFICER
 U.S. ENDOWMENT FOR FORESTRY AND COMMUNITIES

Before the
 COMMITTEE ON ENERGY AND NATURAL RESOURCES
 UNITED STATES SENATE

“Management reforms to improve forest health
 and socioeconomic opportunities on the nation’s forest system”

March 24, 2015

Chair Murkowski, Ranking Member Cantwell, and Members of the Committee, thank you for the opportunity to testify on this issue of importance to all Americans – forest health and socioeconomic opportunities on the nation’s forest system. In a world where our thoughts are often dominated by wars and rumors of wars, terrorists’ threats and actions, and economic upheaval on the one hand and the daily challenges of just managing the lives of our families on the other, I want to express appreciation that you are addressing the importance of our nation’s forests and especially those held in trust for all our citizens. The one-third of America blanketed by trees are vital to our nation’s and our people’s health, the quality of our environment, the robustness of our rural economies, and in many ways our security as a people and as a country.

Since the U.S. Endowment for Forestry and Communities (the Endowment) was chartered just over eight and one-half years ago, it has been my privilege and honor to serve as the organization’s chief executive. I am a natural resources manager – both a forester and wildlife biologist – with nearly forty years of experience in the private sector, both industry and not-for-profits. My time with the Endowment has been among the most rewarding of my career.

Background about the Endowment

While all organizations are unique, we find few organizations with roots that compare to that of the Endowment. We are a not-for-profit, public charity chartered at the requests of the governments of the U.S. and Canada as a result of the Softwood Lumber Agreement of 2006. That long-running dispute over softwood lumber production and its export/import, in this instance, led to what we believe is the only time in the world when a not-for-profit was created and funded as part of a bi-lateral trade settlement.

The Endowment was granted a one-time \$200 million perpetual endowment with interest and earnings to be dedicated to sustainable management of forests in the U.S. and the economic vibrancy of the rural communities nested within or adjacent to those forests. We summarize our mission as a two-part one of conservation and economic development. We are dedicated to keeping working forests as forests and to advancing family-wage jobs in forest-rich communities. Upon our creation we instantly became the largest not-for-profit in America working at the national level dedicated to “ultimately support the North American forest industry.” While we invest our funds and our work only in the U.S. we take the

“North American charge” very seriously and do all we can to extend our work to the health and integrity of the second largest expanse of forests on the planet – the combined forest estate of the U.S. and Canada.

How We Go about our Work

For us the “forest industry” means far more than just the production of traditional forest products. Thus, our vision is for America’s forests to be sustainably managed to meet broad societal objectives including marketable products but also clean waters, wildlife habitats and other ecological services, all while ensuring healthy and vibrant forest-reliant communities. We have, therefore, set as our mission “Working collaboratively with partners in the public and private sectors to advance systemic, transformative and sustainable change for the health and vitality of the nation’s working forests and forest-reliant communities.”

We seek to advance our objectives by focusing on work in three areas: retention and restoration of healthy working forests; by promoting and capturing multiple value streams from those forests; and by enhancing community capacity, collaboration, and leadership. We often say that we go about our work by “doing what others can’t or won’t” – in short we seek the radical middle ground that advances multiple objectives by taking calculated risks to make significant positive advances.

As we approach our ninth full-year of operation we have only six full-time employees. Four of us are programmatic content experts. This lean staffing model is designed to ensure that we collaborate and cooperate with others in the public and private sectors. Too, our program officers are heavily invested not just in the oversight of our programmatic investments but also just as deeply in the content and advancement of that work. Thus, we are currently targeting our work to directly address four primary challenges: forest loss & fragmentation; forest health challenges; infrastructure, mill & job loss; and diminished investments in innovation.

Our all-volunteer thirteen-member Board of Directors meshes a diversity of skills and experiences in forest & forest industry leadership, rural poverty & economic development, academia, prior government service, and financial management to balance our goals as fiduciaries with missional objectives.

Challenges of Managing the Nation’s Forested Estate

Many of our peers focus exclusively on either public or private forest issues. The Endowment takes a different approach. We focus on working forests – whether publicly or privately owned and managed. We work the great middle between statutory wilderness or private lands that are set aside from management on one hand and short-rotation woody agriculture on the other -- the space where forests, whether naturally regenerated or planted, serve the needs of society by providing a stream of traditional products and the wide range of ecological and societal services from water to wildlife and from recreation to mental health.

I will restrict my comments to two highly interconnected areas: forest health and watershed protection and the role of management in advancing both; and the need for a new research and development model to ensure that forests, forest products and all of the societal benefits of forests are available for future generations.

As author Eric Rutkow in his book *American Canopy* notes “...most of us share a sense that to destroy trees is to destroy part of ourselves. ... No other country was populated because of its trees quite like

the United States. Nowhere else has the culture been so intimately associated with wood.” American is a nation of trees from the white pine forests of New England, to the diverse hardwood forests of Appalachia and from the longleaf pine savannahs of the southeast to the palms of Hawaii and the Douglas firs of the Pacific Northwest.

We are both the largest producer and the largest consumer of wood products. Wood frames the majority of our homes, paper is ever present in our lives in spite of the rise of electronics, and some of the most impressive features of this very chamber are the wood furnishings and paneling that grace the room. Remarkably after more than two centuries of development and more than 320 million people depending upon those forests, we today have about 70% of our original forest cover that still blankets fully one-third of our vast country. That’s about the same amount we had a century ago when first we committed to scientific management of all forests and broader reserves of federal lands.

The public all-too-often believes that the lion’s share of those forests is publicly-owned. We are indeed blessed by the foresight that today sees more than 4 of 10 acres in either direct public ownership or held in trust for Native Americans. Those forests, where they are available for management, provide only a modest share of the raw material for the nation’s commodity needs. Yet, they are still vitally important to many rural communities for their economic impact and their example to everyday Americans that, through forest management, we can indeed have our cake and eat it too. With careful stewardship we can have forest outputs today and healthy forests and forest outputs for future generations.

Forest Service statistics suggest that as much as 16 to 34 million acres – an area the size of West Virginia or Wisconsin -- could be lost by 2060. Fortunately our challenge in public forests is not to avoid conversion; rather, it is to ensure that those forests are healthy and productive for current and future generations.

Whether the threat is unprecedented losses from the endemic mountain pine beetle that has resulted in devastation of tens of millions of acres across the U.S. inland west and western Canada, or the raging wildfires that have seen average annual losses more than triple just since 1980, our forest health challenges are real and growing.

Losses of the trees themselves are concern enough, but even greater losses follow in diminished productivity where excessively hot fires damage the soil and have long-term impacts on water infiltration and retention. Too, due to growing development in forested landscapes especially in the west, the need to protect people and structures is having a dramatic impact on the way we fight fires and the costs of doing so.

With more than 50% of the Forest Service’s budget alone being required for fire prevention and suppression costs, we are not trending in a positive direction. If we are to extend the reach of highly stretched tax-payer dollars and breathe renewed life into many forest-reliant communities, we must find ways to meet forest health needs and the needs of their human neighbors at the same time.

- The Importance of Active Management: We do not advocate nor believe that a return to timber production as the overriding objective of public forests is desired or needed. However, we do believe that the nation’s forests should play an important and appropriate role in providing timber for a range of commodity uses. This belief is founded on the reality that without management those

portions of our public forests allocated to multiple uses suffer unacceptable losses and costs to society both in terms of their economic as well as ecological benefits. Too, as my close friend Neil Sampson formerly of American Forests notes, "America's half-century love affair with the concept of wilderness is running headlong into the reality of climate change and the fact that we cannot preserve dynamic systems."

We do believe that the great re-start found in Stewardship Contracting is sound strategy worthy of permanent support. Stewardship harvests put the needs of the forest first – to ensure its health and productivity – with forest products benefits and the jobs associated as powerful benefits. Traditional timber sales still have a role in the Forest Service but the advantages of Stewardship Contracting including its more private sector philosophy of addressing multiple objectives in one contract improve economics and efficiency and the process itself better engages the communities impacted most by federal lands.

Gains come not just in jobs retained or created, but also are found in healthier, more fire resistant forests that are not as subject to catastrophic fires nor as prone to devastating watershed and wildlife habitat losses. Too, to the extent that Stewardship Contracting can substitute for work currently borne by taxpayers at the cost of from \$500 to \$20,000 per acre, we can extend the reach and benefits of forest restoration work without the need for massive taxpayer inputs while accruing rural economic and ecological benefits.

We believe that Stewardship Contracting has proven its value, but we need to consider the reality of the capital investments necessary to conduct that work. Current contract limits of not-more-than 10 years are good. But, significant capital investments required could be much better amortized with longer terms or at least an approach to simple extension without starting the process over.

- Linking Forest Management to Community Resiliency: For decades local communities were the primary beneficiaries of the jobs that accrued from timber-based harvests and the associated forest products manufacturing opportunities. While the pendulum swung too far in the favor of timber production to the disadvantage of other forest outputs, in recent decades it has likewise swung too far in the other direction to the demise of rural communities and the very ecological benefits that many forest protection advocates sought. Additionally, these decisions have yielded a significant drain on the Treasury in the form of costs associated with fire.

It is time to adapt the labor- and cost-intensive forest planning process designed to ensure that no public resource is at risk, to a risk-adjusted model that acknowledges that we must respond to the needs of forest resources and the rural communities nested within them at the speed of need. The current limitless planning and drawn-out appeals process serves no one other than the legal community and obstructionists. Our public forests, in a world of globalized trade and climate change, are too precious to be the pawns in standoffs that result in massive wildfires that destroy communities, forests, topsoil, wildlife habitat, and watersheds.

Recent moves to use collaborative engagement processes and to look for ways to reasonably truncate the NEPA process are promising, but far more needs to be done. Even with these advances

the time from planning to project implementation is far outside the reasonable scope to address forest health and restoration needs. We must find socially acceptable means to going from planning to action in timeframes that benefit both the forest ecosystems and people.

- Viewing Water as a Forest Product: Among the Endowment's seven primary initiatives is a portfolio of dedicated work to better link water consumers with water producers in mutually-beneficial relationships. Our desire to do this is predicated in the belief that water is perhaps the most precious and important of all forest products. For 2 of 3 Americans a forest is the source of their drinking water every day. And in nearly 1 of 2 cases that source is a public forest.

Again, we are speaking only about those forests designated for management. We cannot wait as the leaders and citizens of Denver were forced to do until a wildfire heavily damages the public forests and sends a \$150 million bill downstream to the water utility and consumers as a result. We must be proactive in making that linkage and in seeing that citizens, especially those who are most dependent and benefit directly from those watersheds are direct contributors to their management and protection. We do not place nearly enough value on water. We must do more to draw the link to the role forests play in producing our clean and safe water supply.

Going forward we must better understand, link, and manage our forests for the life-giving water that ensures community need and stability.

- Finding New Ways to Enhance Forest Health while Generating Renewable Energy: There is much in the press about the emergence of a new generation of wood-to-energy products from forests. Most of the attention is focused on the southeastern U.S. where entrepreneurs are responding to a European Union policy to move significant portions of its fossil fuel-generated power to renewable sources. While much of the EU policy has been focused on solar and wind, it has a component designed to either replace or extend the life of base load coal-fired facilities while substantially reducing their environmental footprint.

The Endowment is not an advocate for the development of industrial scale wood pellet production facilities that target the EU market. However, we do not share the concerns of many that these facilities are driving the loss and conversion of forests. Markets for sustainable forest products, regardless of the type of product, are incredibly important to retaining private forests as forests and could in some cases help offset the costs of necessary restoration work of public forests.

One can find a few localized markets where wood prices have increased for pulp, paper or oriented strand board users who are the traditional consumers of small diameter or low-value wood that comprises a significant component of any forest stand. That said, we believe that this market competition actually serves a greater overall purpose as a near-term market incentive primarily for family forest owners who, but for those markets, would not have tools nor be willing to invest funds from their checkbooks to upgrade the quality of their forests or even to keep their forests as forests.

We do not discount legitimate debates about carbon policy or the need to protect waterways, special conservation sites, or other ecological values. However, we do believe that the tenor of the

debate and the broad brush attack on uses of wood to produce energy and energy-products, misses the point on the bulk of the nation's forests where such markets will likely serve to keep private forests as forests and could significantly supplant the taxpayer need to subsidize or support the entire cost of forest restoration on public lands.

In short, we believe that community-scale markets for low-value wood, whether those come in the form of conversion of residential or commercial heated facilities to wood, could have a significant benefit to forest health on one hand, and great economic benefit to the community on the other through job creation and the retention of energy dollars within a community. In rural communities where every dollar is precious, use of locally-produced energy sees more than 75% of energy dollars stay and revolve within the community; whereas, 75% of dollars spent on non-local energy flow out of the community.

In the public lands setting we anticipate and are investing in research and development to evaluate our belief that the most compatible markets that would enhance forest health, job retention and overall environmental quality will likely come in the form of dispersed facilities near or within the forest. We think one of the best options may be to produce torrefied wood for co-fueling in coal-fired utilities or perhaps the production of biochar as a soil amendment and/or water filtration material.

We strongly urge support for collaborative efforts like the Consortium for Advanced Wood-to-Energy Solutions being led by the Endowment with our partners at the Forest Service. Such market-based initiatives offer great hope to concurrently address a wide range of societal needs – job creation, domestic green energy production, forest restoration and protection of watersheds and wildlife habitat.

Now let me turn attention to the need for a new model to support and advance research and development for forest management and forest products of the future.

- The Need for a New Public/Private R&D Partnership: The U.S. has a long and exemplary history in public/private partnerships to advance sectors of importance to our society both in terms of job creation and protection of public resources. In decades past the linkage between the USDA Forest Service and even the Department of Energy and the forest industry were strong and two-way. Today, as a result of thinning margins in the industry sector, disintegration that has seen fully integrated companies reform along product lines, and perhaps a belief that the forest sector is a mature and/or sunset industry, have all conspired to undermine cooperation and collaboration and investments in innovation. That demise is further driven by the decline of public forests as a meaningful contributor of timber for industrial uses at the national level.

At the same time, our neighbors in Canada and our competitors in Scandinavia and Japan have found ways to deepen public/private collaboration to generate more value from both public and private forests and to invest in the next generation of green products. In fact, those countries that like the U.S. were built on wood and wood products are taking a “back-to-the-future” approach to investment in forest products to ensure that the magnificent factory that is the tree will be building blocks for the future. We see it already in the EU where a new generation of wood-based buildings

are using cross-laminated timbers – what you might think of as plywood on steroids – yielding a more carbon- and energy-efficient structure that can be built more cheaply while exhibiting the best that forests have to offer – natural beauty that we keep trying to mimic with laminates and faux designs.

At the same time the Canadians, Scandinavians, and the Japanese are investing heavily in woody cellulosic nanotechnology. Canada has done what might be unthinkable in the U.S. via the creation of FPInnovations. There three private research institutes for forests, solid wood products, and pulp and paper have been merged with a significant part of the federal and provincial forest research capacity to create a global powerhouse for innovation.

Sadly in the U.S. combined public and private investment in forest and forest products R&D is at an all-time low of about 1/3 of 1% of sales. Our nearest competitors in Canada are investing similar amounts on solid wood products as are we, but six fold as much for paper and advanced products. Too, our federal R&D workhorse at the Forest Service is slowly but surely reducing funding for forest products research such as that carried out by the Forest Products Laboratory in Madison, Wisconsin and that of regional research stations. While there have been important investments in the vital Forest Inventory and Analysis program which are a foundational component of the national R&D program, and we thank the Congress for those investments, the rest of R&D is in serious decline.

The Endowment is considering the creation of a nation-wide forest and forest products Blue Ribbon Panel to examine these trends and propose new models that are appropriate for the U.S. and that can be sustained going forward. In the meantime, we are strong supporters of the current USFS R&D and Forest Products Laboratory budgets with the caveat that they must be reviewed and reconfigured to meet current and future needs. Too, we believe the proposal to create a National Network Manufacturing Initiative that would focus on nanotechnology, with what we would hope would be a significant component dedicated to woody cellulosic materials, would be a sound investment in the nation's future.

Final Thoughts

Let me conclude by noting that all of the issues we highlighted above are predicated on the belief that America will need to migrate to a rational carbon policy that if not to address climate change directly, should be based on the importance of local job creation that uses widely available, renewable and sustainable products like those that come from forests. To move “back to that future” we must ensure that our public forests are healthy and that they are managed to meet the full range of societal needs – water, wildlife habitat, recreation & re-creation, and carbon-friendly products of the future. We believe that the best and most resilient models to support such are those founded on true public/private partnerships and where the benefits accrue as America's first forester, Gifford Pinchot, said “for the greatest good of the greatest number for the longest time.”

A Sampling of the Endowment's Programmatic Investments to Date

The Endowment currently targets our work through investments and activities in seven initiatives. The following shares at least one example of the types of work and some of the successes in each.

Traditional Markets: Sawmills and pulp and paper manufacturing facilities are foundational to the forest products industry that accounts for approximately 4 percent of the total U.S. manufacturing GDP, manufactures approximately \$210 billion in products annually, and employs nearly 900,000 men and women. The industry meets a payroll of approximately \$50 billion annually and is among the top 10 manufacturing sector employers in 47 states.

Yet, it is an industry undergoing great change. Just since 1990, more than 40% of the pulp and paper mills – typically the highest wage manufacturing jobs in their rural communities-- have been shuttered. To ensure that this sector that is so vital to our economy, and that the green products that it produces to meet societal needs, remain a robust part of our economy going forward, the Endowment made a significant investment in studying and promoting the use of USDA Research and Promotion Programs for the greater forest products sector.

The Endowment's investments and collaboration with several segments of the forest products industry have led to the first-ever commodity check-off programs for forest products at the national and international level.

- In 2011 the global softwood lumber industry that either manufacturers within or export to the U.S. voted overwhelmingly to adopt a commodity check-off. Through 2014 that program has generated \$36 million to grow the market pie for sustainably produced softwood lumber products.
- In late 2013 the paper and paper-based packaging segment of the industry followed suit with its own check-off also with Endowment support. In 2014 that program generated \$20 million and expects to collect \$25 million in 2015 to promote the benefits and uses of paper and paper-based packaging.
- The Endowment is now collaborating with two others – Hardwood Lumber & Hardwood Plywood and Wood-to-Energy – for possible check-offs to aid their segments of the sector.

The importance of these advances cannot be overstated. But for the Endowment's leadership and investments in these programs, this vital sector that is so critical to our economy, our society and the environment would likely continue to contract.

Non-Traditional Markets: As vitally important as lumber and paper products are to our modern society, perhaps the most important forest product is water. The Endowment is working with the USDA Forest Service and Natural Resources Conservation Service (NRCS) and with communities, utilities, and conservation organizations across the country to make the vital link between healthy forests and water quality and quantity. In fact, 2 of 3 Americans get their drinking water from a forest every day. Without forests to help regulate flows and to enhance water quality through natural filtration, we are left only with prohibitively expensive gray infrastructure as an option. Studies show that when we combine gray and green infrastructure we get the best of both but at costs far less than a gray-only approach.

To date our best example of success has been an investment that we and NRCS made with the City of Raleigh whereby the City adopted a base rate increase for all water customers to address protection of the forested watershed that yields the city's water. That modest program that costs an average

homeowner 40 cents/month generates between \$1.5-2 million/year to ensure that the private forestland owners who comprise the watershed are incented to keep their forests as forests. In a world with a growing population and where climate change is altering historic weather patterns, many predict that water will be “the” world’s greatest natural resource challenge of the 21st Century. To the extent that we can link water producers (forest landowners and managers) with downstream water consumers in a mutually-beneficial relationship, we have great hope that we can address this challenge.

Wood-to-Energy: Among the greatest challenges facing private as well as public landowners and managers is what to do with burgeoning quantities of small-diameter, or low-value dead or dying wood. The plethora of mega fires that we’ve seen in the West in recent years driven by a combination of unnaturally dense stands, a massive mountain pine beetle kill, historic droughts, and climate change, serve as exhibit A. Even in areas that had traditionally robust markets, the loss of more than 40% of the nation’s pulp and paper mills just since 1990, are now feeling the effects of diminishing markets.

While far from the full answer to America’s energy problems, advanced uses for wood-to-energy hold hope not only for outlets for this material but also offer the added benefit of community-scale economic development to offset the general decline all-too-common in many of the nation’s rural forest-rich communities. For most of our years as an organization we have partnered with and extended the reach of the USDA Forest Service to target market-based solutions to these challenges.

The Great Recession and the more recent emergence of cheap natural gas and the near-collapse of oil prices have combined to make this work even more difficult. That said, we believe that going forward local, regional and national markets perhaps in the form of torrefied (roasted) wood that is densified can be an option to extend the life of the nation’s investment in coal-fired electricity generation while dramatically lessening the environmental downsides of coal all while enhancing the health and vitality of the nation’s forests.

Through the creation of the Consortium for Advanced Wood-to-Energy Solutions, we have doubled-down to prove and open commercial markets for torrefied wood or to prove once and for all that this outlet does not hold the promise we need. Over the next 24 months, the Endowment and our partners at the Forest Service and a number of private companies and universities, expect to see great advances that -- if successful -- could serve as an economic pull for restoration forestry that is now being conducted almost exclusively at a direct cost to the American taxpayer.

Innovation: Traditional forest products from the wood we use to build our homes to the packaging used to ship our latest treasure from Amazon.com have been with us for many decades. Yet, they remain among the greenest of products available for society. Those products come from a renewable forest that provides a multitude of other societal benefits beyond the tangible products we buy or use daily. In a world that likely will be increasingly driven by the specter of climate change and the need to better account for the carbon impacts of our actions, those same products hold great promise as the products of the 21st Century and beyond. But, if that is to be so we must invest more in Research and Development (R&D) both of the forests that provides the raw materials and in the products that can meet societal needs going forward.

A traditional bastion of innovation, the broader forest sector has clearly lagged in recent years in R&D investments. In a nation founded on innovation and where even the most basic of manufacturing sectors invests an average of 3.4% in R&D, the broader forestry and forest products sector is falling

behind. Pre-recession the sector invested an average of $\frac{1}{2}$ of 1 percent of sales in R&D while our neighbors to the North consider forest and forest products R&D a national priority.

If we are to claim even a portion of the “green” potential of forest products in the future and at the same time keep our public forests healthy and our private forests as forests, we must change course. The Endowment is hoping to stimulate a new model where the public and private sectors collaborate to create a brighter future. Our flagship investment can be found in another partnership with the USDA Forest Service through our Public/Private Partnership for Advanced Woody Biomaterials and Nanotechnology – what we call P³Nano.

Our objective is to rapidly advance commercialization of green products at the nano-cellulosic scale – whether that comes in new materials for the automotive or aerospace sectors or more sustainable building products – all while ensuring the environmental health and safety of those products and growing the next wave of family-wage jobs from abundant low-value wood.

Asset Creation: With an overall target to keep forests as forests and advance family-wage jobs in rural forest-rich communities, we are sensitive to the need to pay particular attention to disadvantage populations, especially people of color. With NRCS and the Forest Service our foundational program in this space seeks to ensure that African American forest landowners are able to retain their forests and use that asset to create and expand family wealth and opportunity. We are working in three southern states to find new ways to link those landowners to the programs and services that will ensure inclusivity and access to programs that have traditionally benefited Caucasian landowners. We are completing the first two years of pilot work that offers significant evidence that this important work will help landowners clear title and turn an otherwise non-productive asset into a benefit for current and future generations. Too, as broader society becomes increasingly pluralistic, we believe that this work will help bring the voice and needs of people of color to the forest conservation and community-scale economic agenda.

Forest Health: We live in a world where global trade and travel are givens. Unfortunately that very openness that serves to shrink the world is also all-too-often accompanied by unintended consequences. The challenge of exotic pests and diseases often exacerbated by climate change has moved from an occasional threat to one that appears almost weekly.

The Endowment has chosen to address these complex challenges on two fronts: first, by plumbing the potential of modern biotechnology as a response mechanism to address forest health challenges in a much more rapid and cost-effective manner. Again, with the USDA Forest Service as a primary partner, we created the Forest Health Initiative that with the direct input of several university and conservation group partners – The Nature Conservancy and Environmental Defense Fund among them – amassed some \$7 million in public and private funds to use the American chestnut as a test organism. These funds, which represent a minimum of a dollar-for-dollar match of private to public funds, have come over a period of five years and have yielded extraordinary results.

Our work differs greatly from most such work in that the critical science-based lab and field work is done openly where federal regulators (EPA, FDA, and USDA APHIS) and nearly three-dozen conservation and corporate interests are engaged concurrently. In short, we seek to determine if, when and how, genetic tools could and might be used to address forest health challenges. The work has already succeeded on a number of scientific fronts as our collaborators have pioneered technologies to dramatically shorten

timeframes from decades to as few as three years to generate disease resistant seedlings that can be tested against a range of economic, ecological and societal hurdles. Perhaps even more importantly the initiative serves as an open forum where people and organizations bound by a love of forests can connect to discuss advanced tools to keep trees and forests healthy.

We've augmented our targeted work through the Forest Health Initiative to encourage others to take a more holistic look at forest health at the continental level. Harkening to our roots in the Softwood Lumber Agreement between Canada and the U.S., we have been the convener of two bi-lateral Forest Health Summits where government, researchers, and industry from both sides of the border are taking cross-border looks to be more strategic in collaboration for the health of the forests that span both sides of the border that unites us. From cooperative ventures to better coordinated response to mega fires and targeted research to avoid duplication and more rapidly advance responses to common forest health challenges, this work is identifying new ways to use limited financial and human resources to address growing numbers of forest health challenges common to the people and forests of both nations.

Forest Retention: The Endowment is "forest-centric." Everything we do starts with the view of how we can retain forests as an important land use that also provides economic and environmental benefits to their owners, managers and communities. We do not use our limited financial resources to buy lands or conservation easements; rather, we have developed collaborative efforts to more strategically direct the resources of others to have greater benefit or to catalyze new sustained revenue streams that can and will support work well into the future.

Two projects under our Forest Retention Initiative showcase our work in this space: creation of the National Conservation Easement Database (NCED) and our work with the Department of Defense.

The Endowment created NCED through grants that brought together five major conservation partners – Trust for Public Land; Defenders of Wildlife; NatureServe; Conservation Biology Institute; and Ducks Unlimited – to create a cost-effective, user friendly way to track not only working forest conservation easements but land conservation easements of all types. Today, NCED is the most complete source of conservation easements held by public agencies and private land trusts, boasting more than 20 million acres and 100,000+ easements. As it has grown, we have attracted the support and engagement of key federal and state partners as well as the greater land trust community all with an objective to democratize and make more readily available critical information about non-fee areas for land conservation and compatible economic uses.

With the Department of Defense we are working to protect the vast number of military bases that were established in rural areas, but where encroaching development is threatening training exercises and weapons testing. Working forests buffer operations from residential areas and create dark skies for night air maneuvers. Forests also provide a refuge for wildlife, relieving commanders of obligations to reserve habitat for imperiled species that would otherwise find refuge on bases.

For a more detailed listing of the Endowment's programmatic work to date, visit our website at www.usendowment.org

The CHAIRMAN. Thank you, Mr. Owen.
Mr. Peck, good morning.

**STATEMENT OF MARK PECK, COMMISSIONER, DISTRICT NO.
ONE, LIBBY, MONTANA**

Mr. PECK. Madam Chair Murkowski and Ranking Member Cantwell, I want to thank you for the honor and opportunity to testify here today.

The 2.2 million acre Kootenai National Forest constitutes 78 percent of Lincoln County's land base and has served as a cornerstone of our rich cultural and economic history and holds the key to our future prosperity. The forest is the most productive in the state growing an estimated 400,000,000 board feet of timber annually and is home to the 96,000 acre Cabinet Mountain Wilderness Area.

Raised in Lincoln County I lived an ideal childhood raised in a proud logging family, hiking and fishing the lakes of the Cabinet Wilderness Area. I learned to love them both. After a 20-year career in the Air Force I returned home to a community dramatically different from the one of my childhood.

Lincoln County is in artificial and unnecessary war between economic and environmental philosophies. The conflict has wreaked havoc on a once vibrant community and a once vibrant forest landscape.

When I graduated in 1977 Libby High School had more than 700 students. We now have approximately 300, and we've lost over 1,000 students from all grades since 1998.

We used to be one of the wealthiest counties in the state. We're now one of the poorest. We lead the state in unemployment. There are no longer major mills in Lincoln County, and the logging industry has dwindled to just a handful of small operators. The number of Forest Service personnel has dropped from over 500 to just over 300. Our county and school income from forestry seats has fallen from \$4.5 million in 1994 to just over \$300,000 in 2013.

We have severe forest health issues, increased threat of severe wildfire, marginal, if any, progress recovering threatened and endangered species and a devastated local economy. We do have a new motto in the county. It's poverty with a view.

Gifford Pinchot stated, "The planned and orderly development and conservation of our natural resources is the first duty of the United States." Orderly development and conservation, not development or conservation. We must move past the tired old arguments of timber verses wilderness. The two are not mutually exclusive. They are both essential tools in maintaining the social, economic and ecological balance we all seek.

It is agreed that the grizzly bear needs an extensive open space with limited influence from man, but the interagency grizzly bear guidelines also tell us that through proper timber harvest and I quote, "Grizzly habitat can probably be increased or enhanced by creating openings producing high quality grizzly food, facilitating greater grizzly use in forest habitat where normal grizzly use appears light." We must begin to manage the forest for the forest, habitat for the habitat and the social, economic and ecological balance we all desire will be more achievable.

Agencies, State, and local governments in concert with local collaborative groups are creating local balanced solutions. Hours and years of collaboration have created on the ground solutions but have no avenues of implementation. We must empower local collaborative management.

Special recommendations for consideration to be immediate priority full funding of PILT and funding of Secure and Rural Schools until harvest levels increase to meet established forest plan allowable sale quantity levels.

Establish a professional tiger team to develop a revolutionary plan for managing Federal lands into the next century. Solve the fire funding drain on Forest Service operational budgets. Authorize and fund innovative pilot projects. Modify the Equal Access to Justice Act to balance between an individual's right to due process and protection against frivolous or excessive use in Federal land management cases. Staff local Forest Service units to meet established Forest Service plan objectives. Modify the Endangered Species Act to be more inclusive. Move away from single species management and provide more emphasis on socioeconomic concerns.

Once again, I thank you for the opportunity to share my testimony and look forward to your questions.

[The prepared statement of Mr. Peck follows:]

TESTIMONY BEFORE THE SENATE ENERGY AND NATURAL
RESOURCE COMMITTEE

Hearing on

"Management Reforms to Improve Forest Health and Socioeconomic Opportunities on
the Nation's Forest System"

24 March 2015

Statement of Mark L. Peck
County Commissioner
Lincoln County Montana

My name is Mark Peck. I am a newly-elected County Commissioner from Lincoln County, Montana. On behalf of the citizens of Lincoln County, the City of Libby and my fellow commissioners, I would like to thank you, Madam Chairman, the ranking member, Senator Cantwell, and the Senator from the great state of Montana, Senator Daines, along with the rest of the panel for allowing me the honor of testifying before you today.

Prior to taking office in the county commission, I spent five years as the Libby Unit Manager for the Montana Department of Natural Resources and Conservation, overseeing 32,000 acres of school trust timber lands and 400,000 acres of wildland fire coverage. Before that I served as the Director of Emergency Services for our neighboring county, Flathead, working extensively in forest management and wildland fire issues. I have seven years of experience on the command and general staff of one of just 16 Type 1 National Wildfire Incident Management teams, working on highly complex fire incidents in California, Colorado, Arizona, Oregon, Idaho and my home state of Montana.

I lived an envious childhood, growing up in the shadows of the Cabinet Mountains and the Kootenai National Forest in Lincoln County. The county comprises more than 3,600 square miles of the most remote and beautiful terrain in the lower forty-eight states. Nestled in the northwest corner of Montana, bordering Idaho and Canada, the county is blessed with several rugged and unique mountain ranges, a multitude of alpine lakes, the Cabinet Mountain Wilderness Area and four pristine rivers, with the Kootenai River dissecting the county from Canada to Idaho.

The county seat of Libby, along with neighboring cities of Troy and Eureka, serve as the key population centers for the county's 19,600 residents.

The 2.2 million acre Kootenai National Forest constitutes 78 percent of the total land within Lincoln County and has not only served as the cornerstone of our rich cultural and economic history, but also holds the key to future prosperity.

The Kootenai enjoys a semi-coastal climate and is the most productive forest in the state, growing an estimated 400 million board feet of timber annually. The Cabinet Mountain Wilderness Area is a 35 mile long, 94,272 acre treasure, with its northern boundary within a few miles of Libby. The Forest and the Wilderness Area provide an abundance of recreational opportunities, hiking, biking, fishing, skiing, hunting and other forms of both motorized and non-motorized recreation.

I left Lincoln County in 1980, when I joined the United States Air Force. After a 20-year career, I worked my way back home to find a community dramatically different from the one of my childhood.

My community is caught in the midst of an artificial and unnecessary war between economic and environmental philosophies. I come before you today to speak on behalf of neither of these groups. As one of our local advocates, Bruce Vincent, so eloquently stated, "Not being part of the industry panel or part of the environmental panel, we represent the impacted other."

This unnecessary conflict between industry and ecology has wreaked havoc on a once-vibrant community and a once-vibrant forest landscape. When I graduated from Libby High School in 1977, we had more than 700 students. We now have a high school with a population of approximately 300 and we have lost over 1000 students from all grades since 1998.

Lincoln County used to be one of the wealthiest counties in the state of Montana. It is now one of the poorest, with the state's highest level of unemployment. There are no longer any major mills in Lincoln County, and the logging industry has dwindled to just a handful of small operators. The timber that is harvested in Lincoln County is shipped elsewhere for processing.

The United States Forest Service presence in the county has shrunk from six ranger districts to four, with a drop in personnel from more than 500 to less than 300.

The harmony and vitality of my community have given way to decades of conflict built upon the false premise that management, conservation, wildlife and sustainable community economics are diametrically opposed to one another.

During the past thirty years, we have taken the lead in trying to overcome unnecessary conflict by building and supporting a plethora of collaborative processes. Over and over a broad and previously dissonant array of stakeholders have been able to find common ground built upon a vision of achieving and maintaining the health of our forest ecosystems. We were the first forest area to convene a series of meetings for the Seventh American Forest Congress. We have a long-standing Forest Stakeholders group that pounds out local resolution

to assist in difficult forest management decisions. We have formed numerous sustainability task forces and were incredibly successful in utilizing the Resource Advisory Committee approach afforded the forest under the SRS mandate. We have embraced the Fire Wise Community concept to assist ourselves in surviving the fires we know are in our future.

Decades in, however, solutions still elude us and the issues remain unchanged. We have severe forest health issues, increased threat of severe and uncharacteristic wildland fire, marginal – if any – progress in recovering threatened and endangered species and a devastated local economy. We have no new wilderness. No one is winning in Lincoln County.

A local teacher and historian, Jeff Gruber, once wrote, “It’s time for a new conversation, one that does not allow for and continue the death throes of my hometown, but instead offers solutions and optimism for a community long overdue for change. It is our deep desire that the citizens of Lincoln County, the Kootenai National Forest and the state of Montana be at the forefront of that optimism and change. Locally, statewide and nationally.”

We are tired of hearing that if we just sit down and collaborate with each other we will resolve our forest’s issues. We have collaborated. Successfully. It is the system of implementation of our hard-sought conclusions that is broken – not our local resolve or ability to find common ground.

The process is fundamentally broken and we must fundamentally change how we look at resource management in this nation and that can only happen with a complete overhaul of our current structure of laws, rules and attitudes. In his book *The Governance of Western Lands*, Martin Nie states, “problematic statutory language is a ubiquitous driver of public land conflict. The ambiguity, contradiction and overextended commitments in some of these laws are the major reasons administrative rule making, planning processes, the courts and other venues have become the dominant ways of dealing with such conflicts”. The U.S. Forest Service Manual, *Selected Laws Affecting Forest Service Activities*, contains language for 90 congressional acts on 828 pages...what could possibly go wrong?

Our path forward must be dedicated to a few guiding principles:

- We must recognize that the status quo is unacceptable.
- We must manage the forest for the forest, watershed and habitat, not special interests, and the socioeconomic and conservation needs will be met.
- We must manage for healthy ecosystems that coexist with healthy socioeconomic systems in federal land dominated counties and local communities.

- We must identify and make adjustments in the governmental process to prevent repetition of circumstances which lead to gridlock.
- Legislative efforts must be comprehensive, systemic, and innovative.
- New legislation must take a large-landscape approach that creates jobs and benefits fish and wildlife habitat through active management, scientifically sound forest restoration and upholds conservation priorities.
- Decision processes must be interactive, democratic and ensure increased empowerment of local stakeholders, local elected officials and ensure the implementation capabilities of resource managers.
- We must address practical, broadly supported opportunities to: 1) Solve the ongoing fire-funding problem and the resulting drain on Forest Service budgets; 2) Reduce delays associated with excessive litigation and other forms of conflict; 3) Increase Forest Service and partner capacity; 4) Include language (more sophisticated than simple acreage targets) to ensure Forest Service accountability and implementation; 5) Increase the pace and scale of active management and forest restoration; 6) Prioritize and expedite mechanical treatment in the front country while protecting backcountry roadless areas and restoring, through management, high-quality wildlife habitat and watersheds.
- We must fund and staff local forest service units to meet forest plan identified management objectives.

Specific recommendations for consideration:

- **Immediate Priority:** Full funding of PILT and funding of SRS until harvest levels increase to meet the allowable sale quantity levels within the approved forest plans.
- Establish a professional tiger team to review current laws, rules and administrative structures and develop recommendations for a revolutionary implementation plan for managing federal lands into the next century. There must be a very clear mandate, timeline, budget, authority and accountability to innovate and develop a new approach. Professional facilitation is paramount to success. The group must be represented by wilderness, industry, conservation, recreation, local government, state government, wildlife, sportsmen and federal agencies... a national stakeholders group. Team members must have established records of major project achievement and team leadership dynamics. Membership should lean towards field experienced members who have a record of collaborative successes and philosophy versus long term, administrative staffers. The committee should report to congress with significant input and consultation from the executive agencies.
- Authorize and fund specific restoration projects established and vetted through local agency, local government and established stakeholder collaborative groups.

- Modify the Equal Access to Justice Act (EAJA). This is the most complex issue in the debate but possibly the most important. We must find the balance in the law to protect its intent and yet protect against perceived frivolous or excessive use of the law in federal land management cases. I believe that modernization of current laws and rules that better meet the overall needs of land management needs will solve much of the problem. I believe, as Professor Nie stated, that: "The ambiguity, contradiction and overextended commitments in some of these laws are the major reasons administrative rule making, planning processes, the courts and other venues have become the dominant ways of dealing with such conflicts". Put more simply, if the Forest Service is managing the forest to assure they will win in court, who is managing the forest for the forest?
- Reassess our management and disposition of designated Inventoried Roadless Areas (IRAs) for three simple reasons. One, a large percentage of these designated areas are not roadless and by naming them as such it is confusing and interpreted differently by different constituents. Two, the only disposition of these categorized lands is into wilderness and there is major dissention between focus groups as to whether or not many of these areas meet wilderness criteria. Three, and the bottom line for our forest's health, 36 CFR Part 294 needs significant work to ensure proper management is happening while these lands sit as de-facto wilderness.
- Modify management of threatened and endangered species to manage beyond the single species concept. Failure to adequately assess and mitigate socioeconomic impacts has led to extremely negative public attitudes and has pitted human against bear, unnecessarily contributing to a degraded economic level in Lincoln County. The myopic approach to long term management and failure to recognize human interaction beyond security issues is troubling and ineffective. A more proactive, integrated, and interagency approach to management is required and greater encouragement and involvement of local government and local communities in the process. I'm impressed with the energy and support behind the Rocky Mountain Elk Foundation, Trout Unlimited and many other species driven conservation groups and their success in perpetuating their target animals and the overall habitat. I can't help believing that a similar model in threatened and endangered species recovery would enhance our success rates.

The Kootenai Forest Stakeholder Coalition is our local collaborative group, formed in 2006 and through no lack of blood sweat and tears, achieved tremendous progress. A diverse group of local conservation groups, recreation, industry, elected officials, and wilderness advocates have come together under a "common ground" concept and have become a model for "on the ground" local management.

In conclusion, it is not the will or the ability of those who depend upon a forested landscape that needs addressed in order to achieve long-lasting solutions that ensure healthy ecosystems co-existing with healthy socio-economic systems. Rather, it is the processes confounding the implementation of these solutions that need addressed and we stand ready to work with you in fixing these processes. Thank you once again for the honor and opportunity to share our story.

The CHAIRMAN. Thank you, Mr. Peck.
Mr. Vaagen, welcome.

**STATEMENT OF DUANE VAAGEN, PRESIDENT, VAAGEN
BROTHERS LUMBER COMPANY**

Mr. VAAGEN. Good morning, Madam Chairwoman, Ranking Member Cantwell, members of the Committee.

I'm Duane Vaagen, President of Vaagen Brothers Lumber, a 60-year old, family-owned company based in Colville, Washington. I'm here today to discuss the urgent need to restore responsible, sustainable management to our Federal forests. We have survived over the years by focusing on technology, good forest management and a commitment to healthy forests and communities. Our company has also invested into collaborative process long before Federal programs were established to encourage it.

We own and operate two small log mills in North East Washington, one at Colville, one at Usk. The Usk is down right now for the last 4 weeks because of lack of logs, and we only have enough logs to run it at 50 percent per year.

We employ over 225 people and contribute \$125 million to the local economy. Until last fall we operated a small log mill in Eager, Arizona when a lack of timber from the Forest Service forced us to shut it down.

This Committee is well aware of the crisis facing the health of our Federal forests. The Carlton Complex in Washington last summer gave us a glimpse of this, burning 236,000 acres, the largest fire in our state's history. Washington State's Commissioner of Public Lands, Dr. Peter Goldmark, recently summed up the situation in our state when he said, "Millions of acres of Federal forest land have become an all you can eat buffet for forest killing insects."

Nationwide the Forest Service says between 60,000,000 and 80,000,000 acres are at particular risk. Federal forests across the country, including Colville, are overstocked and in need of management. There is great agreement on the need to expand management to more acres. Unfortunately current policies in place will not allow that expansion to happen.

Our experience on the Colville is unique. Due to collaboration we haven't seen litigation on our forests and have had only one appeal in the last decade. There's broad support to increase acres treated and timber outputs.

Our industry infrastructure makes it possible to treat the forest and to generate significant revenue in doing so. Despite this the Colville National Forest cannot meet the treatment levels supported by the collaborative. I'm often asked, how could this be?

While we haven't seen lawsuits on the Colville, our forest still operates under a significant NEPA compliance burden imposed by Congress and made excessively complicated by the courts which sap resources needed to maintain healthy, vibrant forests including forests like mine where collaboration is alive and well and litigation is not. Collaborative efforts are often still litigated by those who refuse to participate. They tie up and delay forest management projects and suffer no consequences while those who work in good faith see their time and energy squandered.

The Forest Service has several tools they can use to address this problem including further experiments with third party NEPA and using retained receipts to fund further project work. We're close to implementing the first of its kind A to Z project to demonstrate substantial savings in complying with NEPA, but this approach will not work everywhere and it is up to Congress to take action to reform this broken system.

Congress must address this complex NEPA process and seek innovative solutions including streamlining NEPA analysis and ESA consultation for projects on some productive timber land and for projects proposed by local collaboratives.

Next, use retained receipts through stewardship and timber sale contracts to fund NEPA analysis and planning for future projects.

Congress must put reasonable limits on destructive litigation including requiring those who sue to post a bond to discourage frivolous litigation. Use baseball style binding arbitration as an alternative to litigation.

Congress can help clarify where management can and can't take place on National Forests focusing on the small portion of the system which is supposed to be available for timber harvest.

The industry is poised to help address the significant challenges facing the National Forest System and to ramp up the number of acres treated to the point where we would be making progress in reducing the threats of future fires and insect infestations. By rapidly restoring burned acres aggressively, the need to protect watersheds and offering valuable timber where it can be done we can both help our forests and our rural communities. But the forest needs Congress to provide the road map and the direction to use it.

We stand ready to work with you to define the future.

Thank you.

[The prepared statement of Mr. Vaagen follows:]

**Statement of
Duane Vaagen, President/Chairman
American Forest Resource Council
Federal Forest Resource Coalition, and
Vaagen Brothers Lumber Company
Colville, Washington**

**Before the
Committee Energy & Natural Resources
United States Senate
March 24, 2015**

Improving Forest Health & Socioeconomic Opportunities on the Nation's Forest System

Good morning Madame Chairwoman, Ranking Member Cantwell and members of the Committee. I am Duane Vaagen, President of Vaagen Brothers Lumber, a family-owned forest products company located in Colville, Washington. On behalf of my company and hundreds of others around the country, I am here today to discuss the urgent need to restore responsible, sustainable management to our federal forests for the sake of our forests and rural communities.

Vaagen Brothers Lumber was founded by my father and uncle in the early 1950s and has survived over the years by focusing on technological advancements, ecologically-minded forest management, and a commitment to healthy forests and rural communities. We currently own and operate two sawmills in northeast Washington, employ over 225 people and contribute \$125 million to the local economy. We once employed 500 people and operated another two sawmills here in northeast Washington, and, until last fall, we operated a small sawmill in Eager, Arizona, until unreliable supplies of timber from the Forest Service forced us to close that mill.

Today our mills predominantly rely on small diameter timber, which comes as a result of forest thinning operations. The biomass component of forest management activities is also fully utilized through a biomass co-generation plant. Unfortunately, for the past 15 years we have struggled to secure an adequate timber supply to ensure our continued operation. The primary reason for this shortage of raw materials is a lack of management and timber coming from the 1.1 million acre Colville National Forest (Colville NF).

I'm also here today representing the American Forest Resource Council and the Federal Forest Resource Coalition. Together with partners in 32 States, these two organizations speak for the more than 650 companies and more than 390,000 workers who rely, at least in part, on reliable supplies of timber from the National Forest System. FFRC testified before this committee on the subject of National Forest Reform in June of 2013, and I refer you back to that statement for further insights into our recommendations, and further discussion of the forest management challenges we see across the National Forest System.

Declining Forest and Community Health: The health of our nation's forests continues to decline and federal forests are most at risk due to overstocking, disease, drought, insect

infestations and catastrophic wildfires resulting from a lack of sound management. In fact, the Forest Service classifies 60-80 million acres of National Forest land as being overstocked and at particular risk. While recent pine beetle outbreaks seem to be waning in some areas (in part because there are fewer pine trees left), just last month the Forest Service reported that spruce beetle outbreaks in Colorado expanded to 395 new square miles in 2014, as compared with 338 previously unaffected square miles in 2013. Statewide, the total area affected by the beetle since 1996 has increased to about 2,200 square miles, or roughly twice the land area of Delaware. In Eastern Washington, we have seen a marked increase in beetle activity, particularly on National Forest land. Last year we also witnessed the largest wildfire in our state's history, the Carlton Complex, burn over 250,000 acres.

Meanwhile, over the past 30 years we have gone from over 700 lumber mills in the West to a current level of approximately 120. Many areas of the country, including Arizona, Utah, New Mexico and Colorado, are largely devoid of the forest products industry infrastructure (mills, loggers, etc) needed to restore and maintain the health of our forests and provide employment opportunities in rural communities. In northeast Washington where I'm from, we still have the integrated sawmill, logging, biomass, and paper mill industries that defray the costs of forest management and generate economic benefits for rural communities. Unfortunately, if something isn't done to increase the level of management on the Colville NF we too will lose mills, jobs and our ability to treat the threats facing this forest.

In much of the National Forest System, the story is the same. Litigation-driven declines in timber outputs have forced mills to drop shifts, laying off hard working lumber mill employees even while lumber markets have largely recovered from the 2009 – 2011 recession. Declining timber outputs have translated into reduced forest health, increased rural poverty and unemployment, and increased dependency on guaranteed payments under the Secure Rural Schools program. While we haven't seen lawsuits challenging projects on the Colville NF, our forest still operates under the analysis paralysis that decades of litigation and court-imposed NEPA requirements has created. This saps resources needed to plan the projects needed to maintain healthy, diverse forests. Many eastern National Forests are well behind on their early successional management goals, limiting opportunities for sportsmen, birdwatchers, and other forest users. Forests in West Virginia, Tennessee, and Louisiana are either substantially behind on creation of early successional habitat, or have not posted forest plan monitoring reports in several years.

The reality is that activist litigators only directly challenge timber sales in a few portions of the National Forest System. Unfortunately, because of their aggressive tactics in areas like Montana, Oregon, Alaska, and parts of California, the agency has been forced to adapt to court-imposed analytic standards which drain resources, staff, and time from other forests which do not suffer frequent challenges. All current efforts to use collaboration as the "solution" leave this court-imposed framework in place, and those who vehemently oppose all forest management can tie up and delay timber sales without having to participate in collaborative processes. They suffer no consequences, while those who work in good faith see their time and energy squandered. This does not encourage wider adoption of collaborative models of management.

As you know, the health of our rural communities also continues to decline. Unemployment in our local tri-county area currently sits at nearly 11 percent, more than 2.5 times higher than King County's (Seattle) current unemployment rate. Each of our counties has a poverty rate of above 16 percent, well above the State average. Nearly one in four residents of Ferry County live in poverty, compared with one in ten King County residents. It is not a coincidence that many of the counties with the highest unemployment and poverty rates in the country also happen to be those surrounded by federal forests. Many of these rural communities have lost their forest management heritage; the skills necessary to work in the woods and help protect the communities themselves. I believe it will require decisive action by Congress if we want to restore the health of our rural communities and our federal forests.

Collaboration: Over the past decade my company has invested significant time, energy and money into collaboration. Much like other forest products companies around the country, we were leaders in helping to create collaborative groups; In fact, we helped form the Northeast Washington Forestry Coalition (NEWFC), which is comprised of the forest products industry, conservationists, local businesses and other stakeholders. The NEWFC has been a success – we haven't had a timber sale or stewardship project litigated on the Colville NF in nearly 10 years. We've had only one appeal. The Coalition has helped bring once warring sides together to find forest management solutions on the Colville NF built around a blueprint that identifies areas most appropriate for active forest management, restoration treatments and meeting conservation objectives.

Despite agreement from all interested parties we have not seen adequate progress from the Forest Service to restore the health of the forest or meet the needs of local industries and communities by offering an adequate supply of timber. The pattern is the same throughout much of the National Forest System; with very few exceptions, projects selected to participate in the Collaborative Forest Landscape Restoration Program (CFLRP) have struggled to efficiently complete basic NEPA documents, primarily because in spite of broad agreement on objectives, the Forest Service is still in the habit of analyzing projects extensively, and must still await approval for even minor projects from other Federal agencies.

We continue to support collaboration as an important component of federal forest management, but collaboration alone does not address many of the current barriers to implementing a sustainable and predictable timber management program.

Meanwhile, efforts to address poor forest health are moving slower than the wildfires and insect outbreaks, which are damaging watersheds, creating conditions for large fires, and threatening to release massive amounts of carbon into the atmosphere.

Fuel Treatment Types	Acres Completed in FY 2013
All Mechanical Treatments; Biomass Removal, Chipping, Crushing, Lop and Scatter, Machine Pile, Mastication/Mowing, Thinning. (Total includes Commercial Timber Harvest acres)	466,285
<i>Mechanically Treated via Commercial Timber Harvest only (subset of 466,285 number above)</i>	118,442
Prescribed Fire Treatments such as Broadcast Burns, Jackpot Burns, or Machine Pile Burns.	1,277,761
Wildfire acres that met resource objectives	465,956
Fuels reduced by other tools such as Chemicals, Grazing, or Biological Methods.	16,585
Total Acres of Treatment Completed in FY 2013	2,226,587

The Forest Service provided these figures in response to questions from this committee, and they paint a grim picture. The agency largely relies on fire – both prescribed and wildfires allowed to burn within prescription – to achieve most of their “acres treated.” The Forest Service allowed nearly the same number of acres to burn during wildfires in 2013 as they conducted mechanical treatments on. They used timber harvest as the primary hazardous fuels reduction methods on only 118,000 acres, down from 195,000 acres in 2011. They used prescribed fire to treat some 1.2 million acres. About two thirds of these prescribed fires in the Southeastern U.S., where most national forests are relatively flat, managed pine forests which have been extensively thinned and are burned regularly.

These numbers are consistent with results the agency provided for Fiscal Year 2011:

Acres Restored by:	Acres:	Percent of Total:
Prescribed Fire:	1,081,318	29%
Lake, water & soil, noxious weed:	2,563,595	69%
Mechanically Treated:	1,136,405	30%
Pre-Commercial Thin:	145,928	3.90%
Commercial Treatments:	195,477	5.20%
Total:	3,700,000	

As far as we know, Congress never asked the Forest Service for their 2012 figures, but we have no reason to suspect that they are much different. The Forest Service focuses on the “easy”

acres because the analytical requirements and high likelihood of litigation on the truly hazardous, overstocked and fire prone forests in the West drive up costs and discourage efforts to thin or otherwise manage these forests.

Meanwhile, extensive NEPA costs combined with large (and growing) wildfire suppression costs prevent the Forest Service from managing their lands outside of the fire prone west. Given the constrained fiscal environment we find ourselves in, there is no hope of extending management unless fire funding is addressed, and unless the Congress provides the agency with the clarity it needs to implement needed forest management across the National Forest System.

Secure Rural Schools/County Payments Program: The Federal Government has been making payments directly from the treasury to counties to make up for lost 25-percent timber receipts since the early 1990's. Begun in Oregon, Washington, and California following the listing of the Northern Spotted Owl, the payments were expanded to all National Forest Counties through the Secure Rural Schools program in 2000. Although it was extended several times, it expired at the end of the last Congress.

As you know, the program had provided billions of dollars to counties and schools over its lifetime. The industry supported the SRS program because it supported the communities where we live and work, and because we believed that one of the primary goals of the program was to transition back to the sustainable management of our federal forests. With the programs expiration in 2014, for the first time in a decade and a half, counties received payments based on gross timber revenues instead of the guaranteed payments provided by SRS. As a result, county payments dropped 80%, from \$260 million to just \$50 million for 2014.

Unfortunately, it is now clear that SRS primarily succeeded at treating just one symptom of the illness afflicting our NFS counties: a lack of funding for local government services and schools due to the paralysis affecting federal land management. While we all support efforts to meet these critically important needs, I believe Congress can no longer avoid confronting the fundamental problem by treating just one symptom.

As a resident of a rural community I certainly understand the dependency of many local governments on this funding to provide public sector jobs and services. Unfortunately, the overall health of many rural, forested communities has further declined over the past two decades due to our inability to rebuild private sector employment. In many forested communities the forest products industry is one of the few industries capable of providing meaningful employment opportunities and the tax base needed to provide long term economic and social stability.

Congress must seek a comprehensive solution to the illness and not just one symptom of it. We are running out of time to restore the health of our forests and maintain the industries important to the economies of rural communities. Reform that ties responsible land management and the fortunes of rural communities together remains the best prospect for success.

Snapshot of the Colville National Forest: The Colville NF provides a perfect example of how we can balance sustainable forest management, revenue generation and rural economic development with other objectives, including conservation.

As I mentioned the Colville National Forest is comprised of 1.1 million acres. There is a strong consensus within our coalition for managing 500,000-600,000 acres for a mix of active management (timber, etc.) and restoration objectives. There is even consensus about possible new Wilderness areas. Meanwhile, there is an urgent need to accelerate commercial treatments on at least 250,000 acres of overstocked and beetle infested forest at risk to catastrophic wildfire. In recent years approximately 4,000 acres have been mechanically treated despite the support of the Coalition to treat between 15,000-20,000 acres annually. Progress is being made to increase treatment levels, but we should be restoring the health of the forest even more aggressively in the short term.

My testimony includes charts that compare estimated outcomes of the Forest Service's current management with the treatment levels supported by the Coalition and the potential results in terms of the pace of forest restoration, timber value generated, and jobs created. These are estimates and can vary year to year based on market conditions, the use of stewardship contracting and other factors, but they provide a good snapshot of the opportunity that exists.

The key to success is the existence of an integrated forest products industry, which allows treatments to actually generate revenue (approx \$750 per acre) to be used for county receipts, on-the-ground restoration activities, project planning costs, or the Treasury by removing enough merchantable material in the form of sawlogs.

This model of forest management and restoration is well established and proven within the Forest Service itself: many National Forest units in the Southern pine region depend on commercial harvest programs to restore historic vegetation and fire regimes; the Red Cockaded Woodpecker depends upon open, pine savannahs in both Shortleaf and Longleaf pine forests. Timber management on the DeSoto National Forest in Mississippi, the Kisatchie National Forest in Louisiana, and the Ouachita National Forest in Arkansas provide a great example of how active forest management can support both a listed species and a critical local industry.

Legislative Recommendations: As your committee considers legislation to restore sustainable management to our federal forests, I would like to provide the following suggestions. These suggestions are based on the following assumptions: 1) securing significant increases in appropriations to fund current forest management approaches is unlikely under current and future budget realities; 2) Congress has a responsibility to the rural communities surrounded by our federal forests; and 3) we must significantly increase the pace of treatments if we are serious about getting ahead of the forest health crisis.

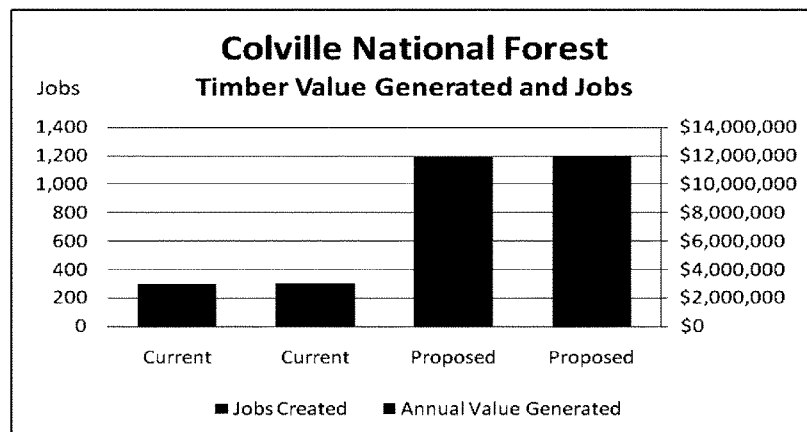
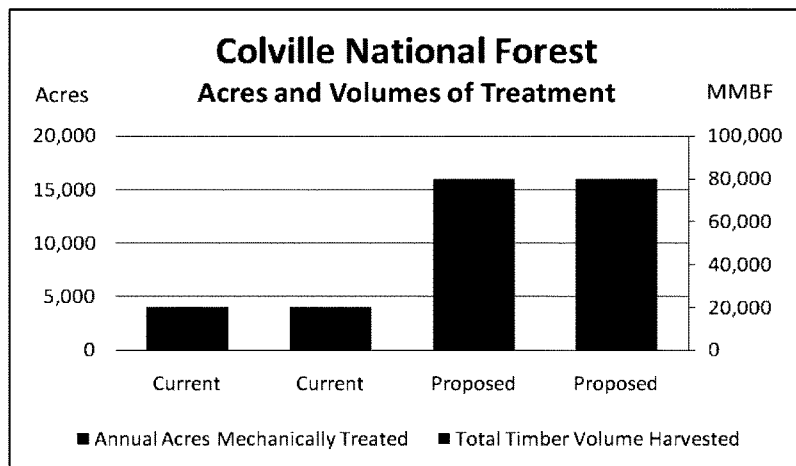
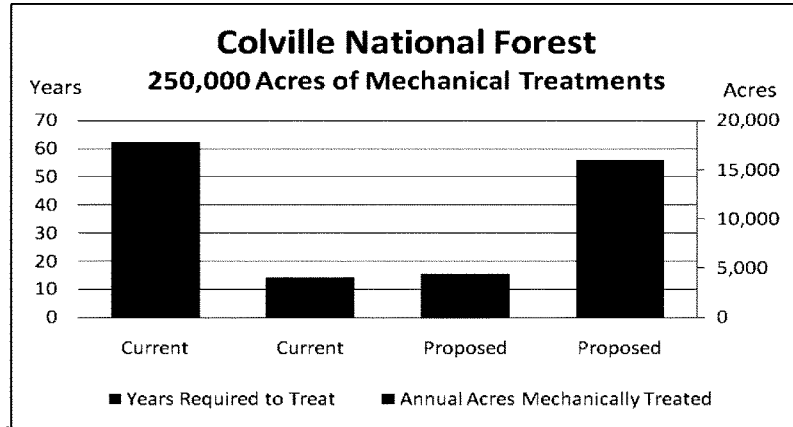
Reform Recommendations:

- A trust approach, focusing on the 23% of National Forest acres identified as suited for timber production in current forest plans, can provide stable funding on a trust-trustee basis, while restoring and strengthening the overall multiple use framework on Federal forests.

- Clarify that timber management is the primary objective on this relatively small portion of the National Forest System, not one use among many.
- Streamline NEPA analysis, ESA consultation, and judicial review for projects conducted on lands designated for timber production and/or for projects proposed by or designed in consultation with local collaboratives;
- Provide binding, baseball-style arbitration as the sole dispute resolution mechanism for projects proposed by or designed in consultation with local collaboratives.
- Payments to forest counties should be linked to these fundamental reforms to streamline the process of proposing, analyzing, executing, and resolving conflicts over forest management projects on Federal forest lands.
- Transition counties to revenues produced by viable economic activity on Federal forests, including substantial, sustainable increases in timber outputs.
- All forestry revenues generated on Federal forests, including a portion of revenues from stewardship contracts, should be used to develop additional sustainable forest management projects as well as to provide revenue sharing to counties.

If the Forest Service is unable to deliver these relatively modest economic returns to local communities and improvements to forest health then states or counties should be given the authority to plan and implement forest management projects on federal forests.

I appreciate the opportunity to appear before the Committee today. I would be happy to answer any questions you may have.



5,000 bf/acre. * avg. value: \$150/bf * 15 direct and indirect jobs per million board feet.

The CHAIRMAN. Thank you, Mr. Vaagen.

Thank you all, gentlemen, for your comments this morning as we discuss the future of our forests around the country, an amazing renewable resource that, I think, we would all agree requires a level of management. How we do that appropriately and effectively with good stewardship, not only of the forest, but of taxpayer dollars as we address that, is a challenge.

We have heard in this Committee and in other committees from Chief Tidwell the comment that what we really have to get our arms around is the fire borrowing issue so that we change the way that we budget for fire. I absolutely concur, but I also recognize that there are other issues out there that are at play. If we were to fix the fire borrowing issue today, it still leaves us with some of the policies that are locking us in and that is what I want to talk to you about this morning.

First, Mr. Bonnie, when we talk about the Tongass transition going from old growth to young growth, that has always been part of the plan for the Tongass. But the disagreement has really been on the timeframe. The Secretary's memorandum from 2013 calls for transition to take place between 10 and 15 years, and most within the industry, certainly all within the industry in Alaska, say it is going to take much longer than that.

Regardless of arguing over the time period, what you have in play with this transition is management is still subject to the existing laws, the existing regs, that are generally applicable with respect to our timber harvest. The Secretary's memorandum, so far as I know, does not propose making any changes that currently apply.

There is no departure from the National Forest Management Plan that requires that the timber be harvested on sustained yield. There is no modification from the existing Tongass Land Management Plans, the beached setback rule, no departure from the stream buffer rules that are set out in the Tongass Timber Reform Act. So how do we do this?

Unless there is some willingness to perhaps look to departing from some of these statutes or regulations, how do we get to what you are discussing, Mr. Bonnie, which is this transition to second growth? Because my assessment and that of many who have been studying this for a long time is that you cannot get to where you are seeking to with the volume of second growth given these statutory and regulatory requirements.

Mr. BONNIE. So, thank you, Madam Chairman.

I think, you know, we've got some flexibility in the Sealaska legislation for culmination to meet annual increment that will allow us to get into stands earlier. We're obviously looking right now at a plan amendment on the Tongass Land Management Plan working closely with the Tongass Advisory Committee there. We think, we hope, there will be good recommendations that come out of there that will look at the land base where we can get to second growth timber.

So I think we're confident that both looking at the land management plan, working through—looking at lower rotation ages so we can get into younger timber earlier will be important elements.

In addition to that we want to look at ways that we can provide assistance to the local industries. So are there grants, programs or other things? We've already had an initial conversation I think with your staff and need to followup about ways that we can provide assistance there for the transition.

I think the, you know, old growth timber continues to be controversial there. The promise of a transition is both to hold on to the industry and to get to a place where, not only we can provide a sustainable timber base, but perhaps we can actually put more on the market as—because those sales will be easier to move.

The CHAIRMAN. Well, you are using the same buzzwords that we have heard from the Chief about flexibility and about assistance, but you have also heard my criticism that we have not seen that assistance. We have not seen the retooling that has been promised. The flexibility has been in word only. You mention the CMAI waiver, and I am very, very familiar with that, of course, because we worked with Forest Service on that in the Sealaska legislation.

What we have got with the Tongass, and I am not telling you anything that you do not know, but we harvested there in the early 60's and the harvest was along the beach and along the streams. Harvest of the oldest of the young growth timber cannot be permitted because of the restrictions under the Tongass Timber Reform Act and the amended restrictions. So the oldest of the young growth is not going to be available for harvest, notwithstanding the departure from CMAI.

So my time is over on this, but I want to come back and have a further discussion because I think sometimes it is real easy to throw some terminology around, make it sound like help is on the way. But for people like Mr. Brown, for people like Kirk Dahlstrom and his testimony is really quite compelling when he says, look, I've got no other available sources of timber supply. We need to make sure that it is more than just words that give assurance, that is there is flexibility and that there is some workability because right now I do not have it and I do not think that the operators on the ground have it.

I will go to our Ranking Member.

Senator CANTWELL. Thank you, Madam Chair.

I have a bunch of questions, but I am going to start with you, Mr. Vaagen, about well, maybe I will just throw it all out there, and people can answer it. What about predictability because obviously you do a lot restoration work. What else does the Forest Service need to give you so that you can have more predictability? Obviously you had some attempts in Arizona and then the Forest Service did not bid, so you could not do that work. So what do we have to do about predictability?

Mr. Owen, you mentioned the issues of new materials and pellets. What else do we need to do to help that value chain grow? Is that something we need to do or what? How do we help that?

Mr. Bonnie, Mr. Brown mentioned something about fish and water saying we did not get results, but I am pretty sure that we have had pretty good results in the Northwest from our forest plan on improving water quality. That has been pretty critical. So if you could comment on that?

Mr. VAAGEN. Okay. Thank you, Senator.

The predictability is always important because you have an asset and you have your employees and the economic of all that to put into play.

We did go to Arizona, very good learning curve, very expensive learning curve. We were enticed to go down there and visit a White Mountain stewardship which is the largest stewardship at its time ended August 10th last year. When that timber dried up, the mill dried up. The good news, somewhat on wheels, they were moving it to Snowflake. We'd get another run at it, another chance.

I can tell you 10 years is not enough to move a mill or build a mill. So without mills there's no markets, and it's hard to build new mills.

I think what's needed is that predictability for all the current mills because there's somewhere we have got to connect the dots that we have these tools. We have the forests that need this 60,000,000–80,000,000 acres of treatment. We're counting other things of treatment when we really need to process it to its highest and best value for the economical gain, and we hate to see it all burn up.

So, predictability is very important. I like the idea of a 21st Century Plan that would include that. I am an advocate of collaboration, but it has to be adequate collaboration, you know, you've got to have some side boards on it so it works. And it can be very successful. So predictability is what's important, and we don't even have that on our current mills. We would like to help others do more.

Our trees are dying in the Colville National Forest at an alarming rate. I didn't think they'd come. Colorado and Wyoming and Montana had the brunt of it, but BC taught us a lesson but we didn't get the lesson.

Senator CANTWELL. Thank you.

Thank you, Mr. Owen.

Mr. OWEN. Senator Cantwell, on the issue of new products and markets there's sort of a two-phased approach.

Number one, we've got to rebuild our R and D infrastructure in this country. We're the country that invented innovation. In the forest products sector we're spending about one half of one percent of sales, and most data says that if you're not spending one to two percent in R and D you're going backward. And that's across the entire sector. That's public and private investment together. We need a new model. Our neighbors to the north are spending six times as much on products of the future than we are.

The Forest Service R and D budget has continued to shrink. It also needs to be retargeted in a way that is more oriented toward products and the tools to get the wood out as we've seen the declines across the agency.

They've been, intended to be, not targeted to take out the fat or to reorient to a new way. We think there has to be a new public/private partnership, and that means the private sector has to put in and then has to help oversee and direct that research to make sure it meets their needs and objectives. That's point one.

Point two is we have to have new markets that currently are not available. We've lost over 500,000 jobs in the forest sector since 1990. Those aren't going to come back. Collaboratives aren't going

to produce those kinds of jobs. We need new products. We think nanotechnology which is predicted to yield a \$200 billion market in wood alone, \$2 trillion market worldwide, but if we use that low value wood as an opportunity. One of the things we're doing is working with the Forest Service and saying R and D in its traditional format or just research for research purposes isn't enough.

At the endowment we come with a real sense of urgency. And so we put together a collaborative with the agency and said in 2 years we're going to either push this over the curb and say there is a viable market there using woody cellulose or there's not.

At the same time that's looking at high value products and high wage jobs of the future. We're looking at the mass amount of wood and the low value of opportunities, and we believe one of the best options is to create a domestic green energy that would use torrefaction which is roasted wood. You do it in the forest, and then you can ship it out. You can't ship green wood long distances due to the 50 percent water.

Those types of things need to have an urgency and a directive, and right now we're putting in about \$6 million collectively. That's pennies compared to the opportunity.

Senator CANTWELL. Thank you.

I see my time has expired. I will just have to get a yes or no out of you on the forest plan and watershed.

Yes, it's been effective?

Mr. BONNIE. Absolutely, absolutely critical. And yes, we've been effective in a number of areas.

Senator CANTWELL. Thank you.

The CHAIRMAN. Thank you, Senator Cantwell.

Senator Daines?

Senator DAINES. Thank you, Madam Chair.

I ask unanimous consent to submit a letter for the record from the National Association of Home Builders indicating their support for an increase in the supply of Federal timber products.

The CHAIRMAN. It will be accepted.

Senator DAINES. Thank you.

[The information referred to follows:]



National Association of Home Builders

1201 15th Street NW
Washington, DC 20005

T 800 368 5242
F 202 266 8400

www.nahb.org

March 23, 2015

The Honorable Steve Daines
United States Senate
1 Senate Russell Courtyard
Washington, DC 20510

Dear Senator Daines:

On behalf of the more than 140,000 members of the National Association of Home Builders (NAHB), I am writing to express NAHB's appreciation to the U.S. Senate Committee on Energy and Natural Resources for continuing this important discussion on forest management and socioeconomic opportunities within the nation's forest system. Better forest management practices that are also mindful of environmental considerations will help strengthen the housing supply chain and promote affordable housing opportunities for all Americans.

NAHB research shows lumber and wood products account for 15% of the cost of construction for a single family house. Lumber prices are generally volatile, and it is common for builders to encounter a large price swing in a short period of time.

Global demand for lumber has also grown, especially in China, and U.S. exports have doubled in the last five years. Canadian lumber, which supplies approximately 25 percent of the softwood lumber in the U.S. market, is also becoming more attractive to the Asian markets. Consequently, there will be additional upward pressure on prices as the housing industry recovers unless additional supply can be brought into the market.

Any effort to ease escalating price pressures, help rebuild the supply chain, and support a continuing housing recovery is effective economic policy. For these reasons, NAHB fully supports multi-use forest management practices for national forests, free trade in Canadian lumber, as well as an increase in the supply of federal timber products.

NAHB stands ready to work with the U.S. Senate Committee on Energy and Natural Resources as it continues a deliberate approach to forest management reform. Thank you for considering our views.

Sincerely,

A handwritten signature in black ink, appearing to read "James W. Tobin III".

James W. Tobin III

Government Affairs

James W. Tobin III
Senior Vice President & Chief Lobbyist

Senator DAINES. Commissioner Peck, it is great to have you here from Montana. Thanks for making the trip out here.

I was struck by your testimony as we look at the sharp drop in timber harvests in Montana. Your testimony powerfully captures the unacceptable situation we have in Montana and other parts of our country. As you mentioned your home in Libby, home of the Libby Loggers, I understand we have some students just behind you today from Libby. Welcome to all of you as well.

In many ways this hearing is about their future we are talking about so that they can raise their families and stay in Lincoln County if they want to.

I heard a very troubling statement in one of our roundtables recently up near Lincoln County when somebody said perhaps the Libby Loggers should be renamed the Libby Lawyers because there no longer is a large active sawmill in Libby. The economy there, your unemployment rate, is completely unacceptable.

Commissioner Peck, like you I believe it is important to incentivize and protect collaborative driven projects, but it seems clear to me that current laws and policies do not adequately do this. Do you agree the Forest Service needs better direction and latitude to ensure that timber projects in Montana and elsewhere are implemented more quickly?

Mr. PECK. I would agree with that.

Senator DAINES. How would you characterize the level of timber harvest today compared to what is both sustainable and healthy for Montana's National Forest?

Mr. PECK. If I look back historically as a young man growing up, the cut volumes on the Kootenai were averaging over 100,000,000 board feet a year. The past few years we've been averaging between 30,000,000 to 50,000,000 feet depending on different circumstances. As I stated in my opening testimony, the Kootenai on the average grows an estimated 400,000,000 board feet a year. It's a very productive forest. You can't keep trees from growing there.

Having said that, there's no question that the cuts that we've been seeing are, in my opinion, not only as a County Commissioner but as a former Montana Department of Natural Resources timber manager, far below what we need to see from a forest health standpoint and definitely from an economic standpoint.

Senator DAINES. Just a few months ago a notice of intent to sue was filed against the East Reservoir Project in the Kootenai. It was a collaborative driven project that took years to go through the NEPA process and yet now faces an uncertain future. We have got to stop these obstructions, certainly, in the process.

You mentioned that for several years you worked alongside the Montana Department of Natural Resource and Conservation. As you know the Montana State law requires that DNRC meet an annual timber sale requirement which now exceeds 57,000,000 board feet.

There is an old saying in business, if you aim at nothing, you'll hit it. I think we see that increasingly right now how the forests are being managed.

What, in your view, is the value of having a clear timber target in statute that must be met?

Mr. PECK. You know from our standpoint on the state lands it was absolutely critical. It provides not only motivation, but predictability and accountability, not only from a sustained yield and health of the forest and habitat standpoint, but it brings predictability to industry as well.

So to me, without it, it would be like playing football without keeping score. Eventually you get tired of getting beat up so I think it's critical. It was very effective in our operations at the state level.

Senator DAINES. Alright. Thank you, Commissioner Peck.

Secretary Bonnie, the Forest Service Chief Tom Tidwell was recently here on the Hill and acknowledged before Congress the negative impacts associated with litigation. He also stated that the goal of nearly tripling harvests in Montana's National Forest is very reasonable. We used to be at 600,000,000 board feet on our national forests across Montana. Last year we were at 113,000,000.

I appreciate the work of the Forest Service and what they do in Montana, and I want to work with you in finding solutions that will bring about this outcome in the near future. In your testimony you highlight the steps the Forest Service has taken to increase and accelerate forest restoration. While these might be positive steps, Montanans can tell you with certainty that they are really not nearly enough.

I would like to quickly run through some possible reforms and ask that you provide just a quick yes or no as to whether USDA supports them or would consider supporting them as we look to move forward here with some reforms.

First, a simplifying environmental review for all timber sales that are the result of a collaborative process?

Mr. BONNIE. I think we'd welcome a conversation on that.

Senator DAINES. Is that a yes or a no?

Mr. BONNIE. Well, it obviously depends on what it is, but that's been part of the type of approach we've used. We think collaborative approaches are good. We would welcome the conversation.

Senator DAINES. You support collaboratives?

Mr. BONNIE. Absolutely.

Senator DAINES. Alright. Establishing a categorical exclusion for all collaborative and timber sales that is comparable over the size of the new 3,000-acre CE projects combating insect infestation?

Mr. BONNIE. So I think we're very interested in ramping up the insect and disease CEs significantly, and if there are comparable approaches we're interested.

Senator DAINES. So, the 3,000-acre CE is something that we could do?

Mr. BONNIE. Absolutely. That's what's in the Farm Bill, and we're looking forward to putting that on the ground.

Senator DAINES. Simplify—

The CHAIRMAN. The Senator's time has expired.

Senator DAINES. Okay, I will come back. We will talk some more.

Mr. BONNIE. Please.

Senator DAINES. Thank you.

The CHAIRMAN. Senator Franken?

Senator FRANKEN. Thank you, Madam Chair.

The forest product industry is the fifth largest manufacturing sector in Minnesota. It employs about 30,000 people statewide, and it is particularly vulnerable to the effects of climate change.

For example, Aspen, Birch and Balsam Fir trees are all economically important timber species and all are expected to decline significantly due to rising temperatures. In order for the forest products industry to continue to thrive in Minnesota and elsewhere we have to ensure that appropriate strategies are in place to mitigate the loss of valuable tree species.

This question is either for Mr. Owen or Mr. Bonnie. Can you talk about what the Forest Service is doing to better understand and to adapt to the effects of climate change, specifically the loss of economically important tree species?

Mr. BONNIE. So on the research side this is an area that our research staff are looking at not only the loss but the type of management activities that we can do to retain forest resiliency including those species. We're also trying to build this into the work we're doing on the ground. Whether it's forest restoration to deal with insect and diseases, whether it's forest restoration dealing with catastrophic wildfire, there's a climate overlay on a lot of that work and so increasing the Forest Service's understanding of that, but then also being able to monitor the work as it's being done is going to be critically important going forward.

Mr. OWEN. Senator, the U.S. Endowment and the Forest Service have been working for a little over five years on what we call the Forest Health Initiative, and it's looking at modern sites to deal with 21st Century problems.

Trees can't move at the speed of climate change so we need to address some of the challenges that are occurring almost monthly. We lost the American Chestnut and we lost the American Elm due to blights, but that was over a period of lifetimes. We're now losing species literally as we watch it happen.

We believe that that collaborative work we're doing and it involves some of the major environmental groups in the country of saying, can we not use modern scientific tools to help address the changes that are occurring in the forest genetics and genetic modification? We have shown that instead of taking 30 years to deal with a forest health challenge we can do it in 3 years using modern science.

We're at the place now of having proven the scientific aspects and we're dealing with the regulatory and the social aspects of that which are probably far more challenging than the science challenges are.

So again, targeting that work at the speed of need I think is one of the greatest things. Scientists, and I'm a scientist with a little s, I don't practice science in the lab all day long. But often there's not that sense of urgency to address a specific problem. We want to keep studying and peeling back the onion. We need to look at what's good enough rather than looking for the perfect.

One of the things we're going to have to see is some recognition and flexibility in APHIS, FDA and EPA that if we're going to address forest health challenges we have to do them in ways that we'd never anticipated before under legislation.

Senator FRANKEN. I got it. Thank you.

Let me talk about the climate change and wildfires. We cannot any longer deny the devastating impacts that the climate change is having on the intensity and length of the season and the size. Fighting wildfires is costing a lot of money, about half of the Forest Service's total budget. All that spending means that preventive measures such as removing hazardous fuels is receiving less funding.

So I am very interested in finding new markets for forest waste in order to help pay for the removal of hazardous fuels and simultaneously bring economic benefit to plants that can burn the waste.

Mr. Bonnie, what are your recommendations to Congress for improving the viability of woody biomass markets, particularly in addressing this kind of dual use of removing hazardous waste which is to make the wildfire less likely and to use this for distributive energy and that sort of thing?

Mr. BONNIE. So I think it's vital. If we're going to restore our forests, it's vital that we have a vibrant industry. And it's vital that we have markets, not only for solid wood products but also for smaller diameter trees and so biomass becomes really, really important.

On the research side there are things we can do. Carlton has talked about some of the things we can do whether it's nanotech or other technologies that are important. Forest products lab is involved in many of those, so I think that would be a critical piece of this. I think also how we look at treating biomass in terms of missions, those types of policy issues are going to be important as well.

Senator FRANKEN. Thank you.

Thank you, Madam Chair.

The CHAIRMAN. Thank you, Senator Franken.

Senator Barrasso?

Senator BARRASSO. Thank you very much, Madam Chairman. I want to thank you for holding this hearing today. The condition of forest health, of rural economies and wildlife habitat are some of the issues that I plan to continue addressing as Chairman of the Public Lands Subcommittee.

Under Secretary Bonnie, I want to welcome you to the Committee. Thank you for being here. I think it is important for you to personally understand my views relating to the Forest Service.

For over a dozen years Congress has steadily provided the Forest Service with new authorities that allow but do not require the agency to actively manage our forests. The Forest Service has become a bureaucratic agency emphasizing internal process over real results and improvements on the ground. The Forest Service, I believe, has lost its direction, has lost its purpose and Congress can no longer trust the Forest Service to use the tools that it has been given to improve forest health because the agency itself has failed to make any meaningful improvements.

While I am encouraged by your written testimony today, I have concerns with the Forest Service's draft Good Neighbor agreements. In comments to the Forest Service the State of Wyoming submitted the following, "As presented Wyoming State Forestry Division sees limited utility in the agreements and does not currently foresee pursuing projects under the Good Neighbor Authority."

You know how hard Congress has worked to try to get the Forest Service another useful tool to get more work done. It is simply unacceptable for the Forest Service to turn what is a very useful tool into something that a state has no desire to use.

Also in your testimony you noted the agency has designated over 46,000,000 acres or approximately 25 percent of the national forest system as areas experiencing or at risk of experiencing insect and disease infestation. This figure does not include insect and disease infested acres in wilderness areas, so there is obviously more than that.

So when it comes to forest health I believe that the agency is guilty of malpractice. If we are going to save our forests Congress must direct and mandate results and outcomes, and for this reason I plan to reintroduce an updated version of my National Forest Jobs in Management Act later this spring.

I view this hearing as an important step in gaining additional insight into what Congress must do to improve forest health, to increase wildlife habitat, to grow rural economies and to protect top soil and watersheds from wildfires.

Under Secretary Bonnie, the Forest Service reports there is up to 82,000,000 acres in need of treatment. The report that you provided today for Fiscal Year 2013 says the agency treated fewer than 3,000,000 acres, and for Fiscal Year 2014, again, fewer than 3,000,000 acres and over half of that relied on fire treatments. So it means roughly only 3 percent of the acres in need of treatment actually receive it. I am curious what grade would we give a doctor at a health maintenance organization who annually treated only 3 percent of the patients who needed attention?

Mr. BONNIE. So we've increased the amount of acres we've treated since 2009. We're selling more timber on average than over the last six years. You're right though, we need to get more work done. There's no question, we agree with that.

There are two ways to think about that problem. One is to drive more efficiency into the system. You mentioned Good Neighbor Authority. I think we'll get to a good place on that.

Insect and disease, ability to get more work done with fewer people, at the end of the day we still have a capacity challenge. We've got over a third fewer people than we used to have in the National Forest system. We're doing more with less. We have to both deal on the efficiency side as well as the budget side and the fire budget is going to be critical to that.

Senator BARRASSO. Thank you.

Mr. Vaagen, your written testimony states one of the primary challenges for your family business is the lack of forest management and the subsequent shortage of raw materials. I hear the same concern from the owners in Wyoming. We know there is excess material needing to be harvested to prevent fires, to improve habitat, to create jobs. Yet the Forest Service, I believe, is unable to make that happen. In your view does Congress need to mandate active management targets to achieve ecological and economic benefits?

Mr. VAAGEN. I think that is one of the key answers.

Senator BARRASSO. Mr. Brown, both Alaska and Wyoming have filed lawsuits opposing the roadless rule. How has the roadless rule

impacted the State of Alaska, and in your view, what actions should Congress take to address these impacts?

Mr. BROWN. Alaska, of course, has sued and initially we were exempt from the roadless rule up there, but now we have it.

For me it's just another impediment. I don't want to kick the Forest Service around too much because Congress has set up a lot of road blocks these guys have to navigate through, and the roadless rule is just another one. They're making it a very difficult thing. Doesn't really have any, I don't know, concrete boundaries or anything in Alaska. So it's just another impediment.

Senator BARRASSO. My final question is to you, Mr. Vaagen. In your testimony you describe a decisionmaking process weighed down by litigation and top heavy environmental analysis. Consequently actual results to address poor forest health, wildfires, insect and the like never happened. One of your reform recommendations is arbitration. How would binding arbitration to dispute resolution foster real results to improve forest health?

Mr. VAAGEN. Binding arbitration takes both parties closer to the center and comes out with the potential of a good decision.

Senator BARRASSO. Thank you.

Thank you, Madam Chairman.

The CHAIRMAN. Thank you, Senator Barrasso.

Senator Wyden, a leader on forestry issues in the Northwest.

Senator WYDEN. Thank you, Madam Chair.

This is an important hearing, and all of you have been very good because it is very obvious that all over the country citizens are saying that the Federal Government has got to do a better job in managing the forests. That is what I hear when I have town meetings and John Day in Medford and Brookings. I am sure all my colleagues are going to say the same thing.

So here is what my concern has been, and it has really evolved. I was, not very long ago, the Chairman of this Committee and reached that judgment then and my sense is that it is just going to grow and grow with the concern.

It seems that this debate is really presented as a choice that legislators have the option of either supporting a safety net for communities which is what we have done in this Committee through the Secure Rural Schools bill or getting the harvest up. In effect it is presented as either/or. I want to make it clear that I think our policy has got to be do both, and we have got to do both in a sustainable fashion.

I have tried to do that in my state through what is called the O and C bill. The agencies, as you know, Mr. Bonnie, have indicated that it would double the harvest on average each year for half a century. Some dispute the agency's analyses, but clearly we are trying to get the harvest up.

The same is true with the safety net. In the Budget Committee we linked Secure Rural Schools with PILT and the Land and Water Conservation Fund and 18 out of 22 members said that they wanted to do that as well. So there is strong support for a vision that ensures that we get the harvest up and in a sustainable way and we have a safety net.

So on that point, Mr. Bonnie, just one question. How high would the national and Oregon timber harvest have to go in order to no

longer need the safety net? You have heard me say we have got to do both—get the harvest up and we need a safety net. Some people do not agree with that. How high would the harvest have to go nationally and in my state in order to no longer need a safety net?

Mr. BONNIE. So assuming a level of Secure Rural Schools in Fiscal Year 1914, I think nationally it has to go north of 16,000,000,000 board feet annually, and I think in the State of Oregon it would have to go more than 3,000,000,000 board feet.

Senator WYDEN. So that is what a three or four fold increase? I mean, make sure people walk away with this because there is this, sort of, myth out there that somehow we can get the harvest up high enough so you no longer need a safety net. I want people to see, and I spend a significant amount of time at every town meeting walking through this, that the numbers do not work. We are going to have to do both. So you just gave us the numbers in terms of the harvest. At what fold increase would that be?

Mr. BONNIE. So in Fiscal Year '14 the Forest Service harvested nationwide 2.8 billion board feet. This year we plan to hit 2.9 billion board feet. In Oregon I believe the figure was below 500,000,000 last year, maybe 480,000,000, something like that last year.

Senator WYDEN. So we are talking about a fivefold increase at least?

Mr. BONNIE. Yes.

Senator WYDEN. Okay. I only am excusing you other four because I have to run off and take care of some Finance Committee business. You all have been very good.

I want to tell our Washington guest, I am very interested in all of the issues with respect to expediting litigation, and what we have done in all our bills is tried to create a fast track kind of process for people like yourself who want to be sensitive to environmental values. So I know a number of you have touched on that and we will want to followup.

I would ask more questions if not for the fact that I have to get out the door.

Thank you, Madam Chair.

The CHAIRMAN. Thank you, Senator Wyden.

Let's go to Senator Risch.

Senator RISCH. Thank you very much.

Mr. Bonnie, you have heard all the discussion here about trying to get the harvest up, and I think everybody is in agreement that it needs to go up. I am not convinced that we have hit the sweet spot yet in finding the answer.

A couple of things obviously are the provisions were in the Farm bill to treat certain lands. The Governors were to identify them and our Governor, I think it was about 1.8 million acres that he identified as insect and disease infested that needed treatment. What came out of that is we have got two projects, 3,500 acres, which is 0.19 percent which is really diminimus in the overall scheme of things. So I do not know how that gets ratcheted up. I know that dollars are involved in that.

The other, of course, is to me, a better route and that is the collaborative process. Now you and I were involved in a collaborative process that, I think, everybody should probably take heart in. By

the way, you have never been to this Committee testifying when I have been here, and so I want to publicly acknowledge your help on that and your agreement to stick with us through that. I have told that story over and over again that we worked on that collaborative when I was Governor. As you know, the states were asked to come up with a rule. We did for our roadless areas.

We had over 9,000,000 acres, I have argued but actually I think outside of Alaska the biggest block of any state. We also had arguably the most diverse, and my argument has been if it can be done in Idaho it can be done anywhere. We were just like every other state. We had experienced 40 years of lawsuits that went absolutely nowhere, and we got a rule together that was only the result of the collaborative process. Without that that would have been absolutely impossible.

We brought together, as you know, both the environmental community, the industry, the motorized, non-motorized users, and came up with a rule. Your part in that, of course, was the Administration changed right as we completed it and were in the process of litigation in the first round. And then you stuck with us, the ninth circuit.

Idahoans will be forever in your debt and grateful for the decision you made to stick with us and not abandon ship, because there were a couple of groups that wanted to come to the table late, after they had been invited would be the kindest way to put it, to come to the table and try to do something, and they would not do it.

So I am optimistic if the people will sit down and use the collaborative method. As you know, there are some secrets to it and some tricks to it, but that can be used to make it work. If they will do that, I think that is the best hope we have, really, of getting the numbers up.

We have got some going on in Idaho right now. Some are doing okay, some not so much. I do not know whether you have a team within the Forest Service that can go out and coach these people when things are bogging down about how they can do better. I think that you guys really ought to focus on that because I think that is one of the ways that on a forest-by-forest basis you can get the numbers up.

So I would like to see you focus on that and get a team together that can actually go out and do some rah rah with these people, particularly when it starts to bog down to get them going again.

Mr. BONNIE. Well, thank you on Idaho roadless. I appreciate the kudos. But, you know, you deserve the lion share for that.

If we're going to support collaboratives we need to support collaboratives and that's the position the Administration took on that.

With respect to the insect and disease language we've moved quickly to designate those acres. Our challenge is that you've got Forest Service staff working on other projects. This year you'll see some move out.

I was in Idaho a couple weeks ago. I know there was an insect and disease project that was able to move from start to finish in four months. As we move forward we're going to see a lot more of those projects, so I'm very confident that we'll see more of those.

And I think, you know, Idaho has been real leader in collaboration. As I said in my opening remarks it's not to say it's a silver bullet, but I do think it will advance the ball substantially. Not only get more work done, but also in ultimately winning in court.

The other thing I would say about your point about, sort of, making sure that we're spreading the gospel, as it were, within the agency. We are trying to learn from whether it's how to do NEPA better or other process improvements that we can spread across the agency because we have to. We've got fewer people to get the work done.

Senator RISC. Thank you, my time is up. Thank you, Mr. Bonnie, I appreciate it.

The CHAIRMAN. Thank you, Senator Risch.

Senator HIRONO?

Senator HIRONO. Thank you, Madam Chair.

Mr. Bonnie, as you know, despite Hawaii being one of only ten states that does not have a national forest, the Forest Service does have a significant presence in our state. Hawaii, as probably a lot of people are unaware, has a large and increasing wildfire problem. As a percentage of acreage burnt, Hawaii is actually on a par with Western States and there has been a dramatic increase in the number of fires burning over 100 acres.

Your testimony noted that the agency spends nearly half of its budget in fire management activities these days with that demand only expected to increase in coming years, and I appreciate the fact that Madam Chair has recognized that we should fix the fire borrowing situation.

So I wanted to ask you do we need to tackle wildfire funding before any other management concerns can be adequately addressed? Secondly, can you expand on the strain that this lack of funding places on the Forest Service's other programmatic obligations?

Mr. BONNIE. So what I said in my opening remarks I think is true. Not to suggest that there aren't other things to look at.

Senator HIRONO. Yes, I understand.

Mr. BONNIE. But if there's one thing we can do to increase the pace and scale of restoration most quickly is to deal with the fire budget problem is having substantial impacts on the agency and on everything we do, forest management, restoration, recreation, research, all those things. And so the fire budget is critical.

Senator HIRONO. I know that we have some members from the private sector. Would you agree that we need to get a better handle on part of the Department's resources that goes for one thing, fire-fighting, and how can they adequately address some of the other issues that the rest of you have brought up without us making these changes?

Anybody want to comment?

Mr. VAAGEN. Our state, the State of Washington, had a massive wildfire in the central part of the state and it got away from them and a lot of homes burned. I think one person died, so it's unfortunate, but the state recognized that we have to allow other people to participate.

I think some good is going to come out of that that it can't be just rock solid we've got to wait for the Forest Service to show up because they might be a long ways away when you can have

trained volunteer fire fighters that know the area. We're going to see that blossom so that takes place. We can't burn up 9,000,000 acres and say it's okay.

Senator HIRONO. So you are talking about ways that we can work collaboratively prevent these fires?

Mr. VAAGEN. This state.

Senator HIRONO. But it takes up half the Administration's budget, so——

Mr. VAAGEN. Yes.

Senator HIRONO. I would say that that is a priority.

Regarding invasive species role in wildfires. Hawaii is fighting an endless battle in controlling invasive species, and it is estimated that 24 percent of Hawaii State land cover is non-native grass and shrub lands that contribute to wildfire ignitions. Our native forests are not fire adapted, and we are seeing conversion of our forested areas to fire adapted invasive species such as wildfire adapted grasses.

For example if you go to the Big Island you will see everywhere on the Big Island these kinds of grasses that are very prone to go up in flames. So additionally we are battling Albizia, a non-native tree that is known to persist in fire-disturbed environments. We had a tropical storm on the Big Island that brought down a lot of these Albizia trees, and they just come right back up.

My question to our Under Secretary is can you discuss a little bit more in detail the Forest Service's research and development priorities, specifically whether there is any priority given to controlling invasive species that either contribute to the growing threat of wildfire or thrive in areas damaged by wildfire?

Mr. BONNIE. So this is a critical issue, and obviously it's not just a critical issue in Hawaii. It's a critical issue across the United States whether it's Cogongrass in the South or Cheatgrass in the West. This is a huge issue for us, so Forest Service researchers are continuing to work on this.

But it also has to be considered on the mainland as we deal with forest management plans, particularly post-fire restoration. This is a critical issue, and so both the research and knowledge about how to deal with that and then the ability to, kind of, adapt as we put management on the ground is going to be critically important for the agency.

Senator HIRONO. Thank you.

Thank you, Madam Chair.

The CHAIRMAN. Thank you, Senator Hirono.

Senator Flake?

Senator FLAKE. Thank you.

Senator Heinrich and I toured the forest in Arizona, the White Mountains, and in New Mexico in April of last year to look at the private industry that have come up really as a result in Arizona of the stewardship contracting.

Mr. Vaagen, can you talk about that? Talk about some of the private industry that really came out as a result of the changes to the law, stewardship contracting, that came in after the Rodeo-Chediski Fire and talk about your operation a little?

I apologize I was not here for your testimony at the beginning. You can just recap in terms of the importance of private industry in that area.

Mr. VAAGEN. Yes, it's interesting. We're glad to be in Arizona. I've been going there for 30 plus years to industry association meetings and didn't realize it had the largest contingent pine forest in the United States.

We've learned that the small logs do have value. There are markets. There is need. The Rodeo Fire was nearly 500,000 acres that brought about the White Mountain Stewardship.

We were asked to come down. We put a portable mill in operation which cost a couple million dollars. It does about 20 truckloads of logs a day which means about 20 acres will be thinned. A far cry from what's necessary, but we also thought there would be at least a 5-year supply.

On August 10th of 2014 the White Mountain Stewardship was done. We wrapped up within the month and sat there. Now we're moving it to Snowflake because there is some timber up there available on some contracts.

All the eggs were put into the 4FRI basket which is a good project. I commend the Forest Service on large landscape projects in Arizona or anywhere else, but you've got to make sure the collaborative process has the right people on board.

The economics are important. That wasn't looked at so it's not even possible that's why we didn't bid. We had a mill that would treat 10,000 acres a year, and we thought that we could get up to 40,000 acres a year. But if it's a losing proposition, it can't be done. So the concept is right. Collaboration just threw so much into the biomass equation which is the lowest value in what we call the value tree, so I still have hope for that.

But I wanted to answer the other lessons learned. The product is good. We ship a lot of it to Mexico. Byproducts are not, not a lot of value there. You've got to go to pellets or power plants, but you can't just build new power plants everywhere, so you've got to take these steps.

Ten years is not long enough on a stewardship project if you're going to set up an operation. It's going to take 20 years and you need affordable, valuable timber which they have, but where are you going to get the money? And without assurance of 20 years I don't know who is going to take that leap of faith, our leap was big enough.

Senator FLAKE. That leads to my next question. How difficult will it be to convince private industry to come back if we can't get these acres prepped for treatment now? I mean, having been burned once, so to speak, is it likely that we can get that kind of investment again?

Mr. VAAGEN. We haven't given up on Arizona. We're going to try once more. We're going to work with a few of the locals there to lease the mill out and get it to run for the next 2 years and see how this develops with 4FRI. We think that's a good concept, but bringing anybody else in with less than 20 year contract and some kind of funding, I don't see where it's going to come from because just an assurance alone is not going to work. Your state is not unique but it is in need because of the fire situation. The Wallow

Fire was over a half million acres, so it's one fire away from losing over a third of the big forest.

Senator FLAKE. Right.

Mr. VAAGEN. So that's another concern.

Senator FLAKE. Between the Wallow Fire and Rodeo-Chediski we lost about 20 percent of that Ponderosa Pine forest. Part of the problem is, you mentioned with the Wallow Fire, we had about 50,000 acres prepped to go and that burned up, so the Forest Service has gotten, kind of, behind the eight ball after that and it has been tough to catch up.

I appreciate your testimony and the efforts here and we are trying to save the rest of the forest. We know that unless we get in and treat and manage on a large scale then 4FRI, I mean, that is the biggie, that is the big one, and if that does not work, then future stewardship contracting really is out the window. So we have got to make it work. I appreciate it.

Thank you, Madam Chair.

The CHAIRMAN. Thank you, Senator Flake.

Senator Heinrich?

Senator HEINRICH. Thank you, Madam Chair.

Mr. Vaagen, I will start and just say thank you for your comments, specifically on the timeframe issue in stewardship contracting.

Senator Flake mentioned he and I have worked on stewardship contracting issues for a while now. We have toured some of these forests and some of the mills together, and the timeframe issue is something that I am sure we will be happy to look at as we continue this road toward more reform in terms of how we structure those contracts.

I want to switch gears for a minute and ask a question of Under Secretary Bonnie. As we have heard, a lot of people have suggested doubling or even tripling timber sales in the next few years. My primary concern with that is that I do not want to see new funding and resources for the timber program come at the expense of existing programs that we are using in New Mexico to cut small diameter and fire prone trees.

Unfortunately in this tight budget environment I think it is pretty safe to assume that the Forest Service will not be receiving extra appropriations to do this work so it is a bit of a zero sum game. So I wanted to ask you if the Forest Service budget is kept level what would the impact of those proposals be on programs that currently help us reduce catastrophic forest fires in places like New Mexico where we simply do not have a large timber program?

Mr. BONNIE. Yes, so the challenge is, as I mentioned in my testimony, we're, the agency, in some respects is maxed out. We see challenges on the recreation side, servicing people in recreation or doing watershed enhancement and conservation. We're always making decisions about where best to put resources.

And if there's, you know, a requirement to have us move/shift resources toward one area and as you say, it's a zero sum game, that could create challenges for us in other parts of the organization. And even things like, you know, we heard about 4FRI.

We did have to sink substantial resources into 4FRI just as we did in the Rim Fire in California, and those forced us to not pro-

vide as much resources as we would for other projects. So it creates a real challenge for the Agency.

Senator HEINRICH. Well that, kind of, comes back to the whole fire borrowing issue. I think if we can come up with some proposals that actually seek to grow the pie as opposed to just take away from Peter, you know, rob Peter to pay Paul. I think we will see a lot more support for some of these changes on the Committee.

I want to thank you, Mr. Owen, for your comments both on stewardship contracting which has been a really important tool for us in New Mexico but also water production. I say that because water is by far the most valuable forest product in New Mexico. 45 percent of New Mexico surface water starts in our National Forest, and without those watersheds our farm fields would be bare and biggest cities would be ghost towns.

Next to water the most significant economic impact is what you just mentioned, Mr. Bonnie, that is recreational opportunities. Statewide 68,000 New Mexicans work in the outdoor recreation industry. Hunters and anglers alone spend \$613 million a year in New Mexico, and outdoor recreation as a whole accounts for over \$6 billion in spending in our state. When you compare that to current commercial timber contracts, we only sold \$23,000 worth of timber contracts in New Mexico last year.

So back to you, Mr. Bonnie. If Congress mandates minimum acreages of timber sales without increasing the overall budget and meeting those other needs, what would the impact be on watershed restoration projects and also recreational facilities and permit programs that jobs in New Mexico rely on?

Mr. BONNIE. It would be no question they'll be a negative impact. If you read the Forest Service clips, which I do every day, you'll see there are places where we have law enforcement investigation positions open. There are places where we're closing campgrounds.

Those are an indication of the stress that the agency is under just as we've shifted resources slowly over time from our broad mandate more and more into fire, and we're having to make optimum choices all the time.

Senator HEINRICH. So would you say it is fair to characterize the situation that unless we fix the fire borrowing program or the fire borrowing problem that we are going to be playing the zero sum game of chasing one program or another as opposed to bringing the necessary resources to manage forests overall?

Mr. BONNIE. I think that's largely the case. I do think there are areas where we can continue to improve efficiency, but ultimately we can only wring so much efficiency out of the machine. We've got to fix the fire budget.

Senator HEINRICH. Thank you.

The CHAIRMAN. Thank you, Senator Heinrich.

I think that that is one area that we all are in agreement. We have got to deal with this reoccurring problem with the fire budget. Know that we are focused on that.

Let me pick up where I left off.

You had mentioned the CMAI waiver and what flexibility that might provide to you. I noted that given the rotation age in the Tongass of 92 to 100 years and given where the harvest has been historically since the early 60's along the beaches and along the

streams that we are not there, even with the waiver of CMAI because the oldest of the young growth just is not ready. Given that and just from a practical perspective, how does this departure from CMAI actually increase the volume of economic second growth timber that is available for harvest out of the Tongass?

Mr. BONNIE. So we've got a timber sale right now, Dargon Point, that you may be familiar with. It's a 70-year old stand that there's been a lot of interest in. We put it out for bid and there were a lot of folks that came forward.

All of that to say that not every stand is a Dargon Point, but that there is interest if we can put good, young growth stands up that they will be younger than 90 years old or 100.

One of the things we've asked the Tongass Advisory Committee to do is really to delve into the numbers here, to look at the available second growth, where it is, how fast it comes on board and the types of things that we can look at to potentially expand the land base where we can get second growth. I think that analysis of the Tongass Advisory Committee is important, and I think that's going to be a critical part of the work we do around the Tongass Land Management Plan Amendment as well.

The CHAIRMAN. Let me ask you a question, Mr. Brown. In your view what would the timber industry in the Southeast need to make a successful transition to harvest to second growth and how long is it going to take?

Mr. BROWN. To answer that question I think I would focus less on the volume. I don't really agree with the CMAI making more volume available. But the bigger thing for me is there's only, we only have one sawmill left of any size, and it's an old growth mill. So basically what you're talking about when you transition to second growth is you have to retool.

The CHAIRMAN. Right.

Mr. BROWN. That's going to take significant investment, and in my opinion nobody is going to make any significant investment of the size we're talking about and rely on the U.S. Forest Service to supply that timber based on their track record.

The CHAIRMAN. I have had exactly those conversations with Kirk Dahlstrom about the investment that it would take. You simply cannot utilize what he has in place there at Viking with a younger than second growth timber. It does take retooling. The investment is considerable. There is this tradeoff here between, well it is a financial tradeoff, absolutely. The question is whether or not you can rely on them.

You mentioned that you would be speaking to Mr. Dahlstrom's testimony. As I read through it, it is a pretty sad story. The owner of the only remaining midsized sawmill operating in the state has no other reliable sources of timber supply. He is supporting over 150 jobs within the state but our mill in Alaska is almost out of logs now. We currently have only about two months supply in the log yard.

Then in the plating that was filed in the U.S. District Court he speaks to the issue of litigation and delay and says, "Even though the lawsuit was found to be without merit in four legal opinions, the litigation delayed operations on this sale, consumed Viking's financial resources and made planning mill operations and general

conduct with business very difficult.” That was as it related to the diesel sale. But it just speaks to what we see time and time again where it seems to be that delay caused by litigation goes on and on and on and the very lifeblood of these smaller operators is just being sucked dry.

Let me ask very quickly a question of you, Mr. Brown. So many have come to the conclusion that the existing management structure does not work. The only solution is to remove some of the existing timber lands from Federal control. There have been a lot of different variations on this idea, but the Alaska Forest Association has a state forest concept. The Governor’s Timber Task Force has recommendations, but you are looking to that alternative management model within the state of an Alaska State Forest. Can you speak very quickly to the benefits of that, the merits of that rather than hoping and praying you are going to get a source from the Federal side?

Mr. BROWN. Right. Well, real quickly, I would point to the State of Washington which has, I think, about a two and a half million acres under state control. And it’s got to be the most successful state timber sale program in the whole nation. And when the Timber Task Force was a part of an AFA looked at that, that was kind of a model we looked at was the way the DNR in Washington manages our forest. It provides certainty for operations. All the timber is competitively bid, but it’s a very good program and I would encourage anybody to look at that program as a model. There’s good protection for fish and wildlife and everything, you know, that you would hope for, but it also provides sustainable timber for the timber operators in that state.

The CHAIRMAN. I appreciate that.

Mr. Bonnie, is the Administration willing to work with us on some alternative management models?

Mr. BONNIE. Well, I think we work with a number of Governors in a number of states. Obviously, we are happy to followup and have conversations. Chris Maise, she’s been a great partner of ours up there and we are happy to have conversations.

The CHAIRMAN. We look forward to having that conversation.

Senator Cantwell?

Senator CANTWELL. Thank you, Madam Chair.

I know while I was gone a couple of people mentioned pellets again, including Mr. Vaagen, so thank you. I am proud that Colville is the home to one of these premier wood stove companies that has changed the way pellets can be burned. One of the things that we want to do is increase, as you were saying earlier, more 21st Century uses. Mr. Owen was also talking about that.

But one of the things I wanted to ask about is the small business set aside. Because if the small mills are doing the restoration and that kind of restoration can lead to some of these projects that are the value add for the lower end value timber, then don’t we need to make sure that the people have the set aside so that they can actually keep producing if they are playing that key role in the product stream?

Mr. VAAGEN. It’s a delicate question to answer because I’m the chair of FFRC and AFRC, but I can tell you historically small business knew what that was about and that’s how they projected their

growth and their predictability and their stability of supply. So, yes, we think that still has to be recognized on the stewardship component. As a small business we really think that's equitable. I would add that what I'm hearing here, all the byproducts are important and we are looking at pellets. We just started bailing shavings and they all go to Colorado for some reason. And it's a very good product and high value. So markets are markets.

But as an industry our groups agree that we don't need to be at \$16 billion or \$12 billion where we were in the 80's but somewhere in the neighborhood of \$6.2 billion. As I look at this in a zero sum game I'm seeing a new way of doing business. In other words, if we burn 7,000,000 acres a year or more, we're not even going to salvage, restore, 10 percent of that.

If you did 300,000 acres that would be 1.5 billion feet, if you aggressively went out in front of the fires and projected where you wanted to thin and treat that would be 1.5 billion on 300,000 acres. That doesn't even keep us current with growth and mortality. So there's other ways to skin a cat is what I'm saying. So, thank you.

Senator CANTWELL. Yes, I appreciate that. I do think there are different ways to look at this in calculation and certainly on keeping the forest healthy in general is a very good idea.

I appreciate Mr. Owen's testimony about these products and where they can go and what their use is. We have members of this Committee who have huge wood stove installations and are paying through the nose for home heating oil, so solutions like this would be winning solutions for them.

I have to ask you, Mr. Bonnie, is the YWCA going to get a permit by the end of this year to be able to take people out on recreation land?

Mr. BONNIE. So we've met with the folks from the YMCA. I know their frustration on this issue. I think we've also met with other folks on the Recreation Committee. This is an issue we want to resolve. I don't know whether it takes a change in our handbook or whatever, but I think we very much want to work with you and your staff to solve this problem.

Senator CANTWELL. Is that something you think we can solve by the end of this year?

Mr. BONNIE. Depends on, sort of, what it requires us to do, but what I will say is we will try and move as quickly as we can.

Senator CANTWELL. Thank you. We are definitely going to stay on this.

So, thank you.

The CHAIRMAN. Thank you.

Senator Daines, I know that we cut you off in mid-question, so have at it.

Senator DAINES. There is so much to talk about, Madam Chair, and I thank you for your comments too, about Alaska. What you share there sounds a lot like what is going on in Montana. There is a sense of urgency needed to change this process.

When I was back home a couple weeks ago mills were telling me that they are running at two-thirds capacity. We only have 11 left, we used to have 30, and they are running at two-thirds capacity. I asked them what are the constraints, and they said, "logs." We cannot get enough logs to keep running these mills. There is plenty

of demand, so this nonsense that is out there that says the reason the mills are not running at full capacity is because of lower demand is absolutely false. The demand is there, but we do not have logs.

We are importing logs in Montana from Canada right now to meet some of our mills requirements. And these students from Libby High School, there is a reason they are called the "Libby Loggers." We had four or five mills in Lincoln County once upon a time, and now there is not a major mill in Lincoln County and we are surrounded by, what is it, 78 percent of Federal lands there and we cannot access the logs to keep our mills going across the state. So we cannot accept the status quo. We have got to drive change here.

Back to Secretary Bonnie and that line of questioning around reforms I think we need. I too, echo, I think, the support we have on both sides to reform the way we fund wildfires. That just seems to be common sense. I do not know how you can effectively manage your budget with the uncertainty with the wildfires, and I hope we can move something forward there that will help everybody involved.

Back in terms of some of these ideas on reforms, Secretary Bonnie, simplifying the environmental review for timber sales in suitable timber lands that the National Forest has in their plans which have already gone through extensive public review, explicitly establishing harvest as the primary objective, is that something we can work on?

Mr. BONNIE. So, I think we're very interested in looking at ways that we can streamline. Obviously the Farm Bill language will help us do that. I think we want to continue to work with these collaboratives and look at, you know, larger landscapes that both provide a suitable or a timber supply to local mills as well as satisfying other stewardship objectives.

Senator DAINES. I know when Chief Tidwell was up here he talked about the impact litigation is having on the Department. In fact he said that the litigation diverts staff. There is a lot of time and money being spent right now in fighting litigation. What about replacing litigation with a binding arbitration process?

Mr. BONNIE. So I think we've tried to be as creative as we can on NEPA. We've used alternative arrangements in place, and I think we're interested in discussing pilots, those types of things, on NEPA and would appreciate a conversation around that.

Senator DAINES. We have had hearing after hearing when I was on the House side, and now in the Senate, that we keep circling the airport here, and that airport that we need to land the plane on is the issue of litigation seems to be core, the obstruction that is going on here, stopping our mills from having access to having a responsible harvest in the forests. How about requiring litigants to post a bond to pay for the Federal Governments legal expenses in the event the litigant loses in court?

Mr. BONNIE. So, you know, there's a broader issue for the Administration. I think we've made a lot of progress in litigation. Your State of Montana has had real challenges. You're right with respect to impacts on Forest Service staff or just having to do more work to ensure that timber projects move forward.

Senator DAINES. But what is wrong with requiring the litigant to post a bond?

Mr. BONNIE. So I don't want to—you know, the Administration doesn't have an opinion on that. I don't want to get out of in front of myself here. Just to say that I think we recognize there's a challenge here and think that the collaboratives are an important way to move forward on this issue. We're winning more cases now, but we've still got a ways to go.

Senator DAINES. Yes, well, we are going to keep working these forums. I would like to see us look at some of these changes because again, we are going to have the same outcomes. We will be in these same hearings five years from now probably looking at the same numbers unless we fundamentally change up the way the process is working or, should I say, is not working today.

You mentioned the Farm Bill. What about billing on the 2014 Farm Bill to give states a greater role, giving the states a greater role in determining timber projects on National Forests that should be given priority?

Mr. BONNIE. So we're working with Governor Bullock in your state. We're working—

Senator DAINES. And we are tied up in court now by the way in the first—when we tried to put out of place we are now—it is now been objections filed on it.

Mr. BONNIE. Yes—

Senator DAINES. In fact the litigation issue the bonding, the arbitration, if we do not change that, I am just pessimistic we will ever solve this problem.

Mr. BONNIE. I do think, to your point about working with Governors, I think we're very interested in that. There are opportunities, not just through Good Neighbor Authority, but in other things as well.

Senator DAINES. Right, good and I appreciate it. I think that is definitely a step.

Mr. BONNIE. Critical.

Senator DAINES. Forward we have here.

How about also if given the flexibility in resource to do your job would you support establishing timber sale requirements that are based on National Forest plans similar to the concept Commissioner Peck said has proven valuable in Montana?

Mr. BONNIE. So here's my caution here. What I think is working now are these large scale collaboratives. I worry if we start to impose top/down requirements on those. To me what's working is bottoms up.

We need to think bigger and clearly get more work done. There's—absolutely acknowledge the need to do more work. And so that's my caution.

Senator DAINES. Yes, and our concern of course, is I think Commissioner Peck mentioned it. It is like having a football game without a scoreboard. We have got to keep score here and quantify this at the end of the day.

Mr. BONNIE. You're right, and nationally we have said we've been very clear about wanting to north of 3,000,000,000 board feet nationally and to treat more acres nationally. We think the fire fix

as it's laid out, and we appreciate your leadership on that, will get us above that. But you're right we need to get more work done.

Senator DAINES. Thanks, Secretary Bonnie, thank you for your thoughtful comments. I look forward to continuing to work on this problem and solve it.

Thanks.

The CHAIRMAN. Thank you, Senator Daines.

We have got a lot in common between your state and the State of Alaska and the state of the timber industry which is really struggling, really struggling to the point where some wonder if it can hang on at all.

Mr. Bonnie, I appreciate the very brief comments that you made at the end there about a willingness to work with us on an alternative management model based on national Forest System lands, maybe some demonstration pilots. But my perspective at this point is we have got to give the state and our forest professionals the ability to take the lead to see if we can responsibly get the timber harvest up in the Tongass. We have to figure out a way forward to address the concerns that Mr. Dahlstrom has made in his written testimony to address the concerns that Mr. Brown has presented here today.

So I want to have further discussions with you specific to this point, and I appreciate the leadership that our new Governor is making with the proposals on the support that we have coming out of the state as well.

A lot has been raised here today, but clearly I think we have agreed that we have got to deal with the fire borrowing problem. We must address that.

I think we also recognize that we are dealing with a maze of laws and regulations that while perhaps taken individually might be workable, collectively it is very difficult in implementation. You have these layered effects. You have the environmental laws along with expansion of statutory requirements by regulation, by judicial decisions and the term that I used in my opening statement was "analysis paralysis." It seems that so much of what we see happening here where there's a lot of talk.

We are talking about collaboratives. We are talking about planning and assessment. But at the end of the day it seems that we still have just, kind of, a failure to be able to move. Again, it is not just about a process. It has to be about some results. This is where, I think, so much of the frustration is.

I would like to also continue some discussions with you on the retooling and the assistance. I would just as soon that we do not need that assistance. I would prefer that we get to the point where we have the available timber so that our small operators can be working. But that is not where we are right now, and there have been a lot of promises made that, again, we really have not seen the backing behind that. So know that that also is an area that we need to be working with the Administration on.

Senator Cantwell, any further comments?

Senator CANTWELL. I will just say thank you again to the witnesses for being here, and I look forward to working with them and you and our Committee on this legislation and the opportunities as we move forward.

The CHAIRMAN. Good. Thank you.
With that, gentlemen, thank you for coming before the Committee and safe travels back home.
[Whereupon, at 11:58 a.m. the hearing was adjourned.]

APPENDIX MATERIAL SUBMITTED

**U.S. Senate Committee on Energy and Natural Resources
March 24, 2015 Hearing: The Health of the Nation's Forest System**

**Questions for the Record Submitted to Mr. Robert Bonnie
from Chairman Lisa Murkowski**

Question 1: It has been reported that at least 82 laws govern the Forest Service's management decisions. These laws, and the regulations, directives etc. that must be followed to implement them are not fully integrated and instead what we have is a layering effect of environmental laws along with an expansion of statutory requirements by regulation and judicial decisions.

- a. How many laws govern management decisions on the national forest system? Please provide a list of these laws

Answer: The compendium of Selected Laws Affecting the Forest Service, as described in its preface, contains 90 major laws that apply to Forest Service activities in its most recent edition stated April 2004. In the intervening 11 years, Congress has enacted a significant number of other laws that apply to the forest Service. The compendium may be accessed on the web at: <http://www.fs.fed.us/publications/laws/selected-laws.pdf>. The number of laws that apply to any specific activity depends on the nature of the decision being made.

- b. How much of the direct work at the national forest level is planning and assessment to include the preparation of environmental review documents under NEPA? Can you give the Committee a percentage? What does that represent as expenditure per year in terms of Congressional appropriations?

Answer: It is difficult to separate timelines for planning, assessment, and preparation of NEPA documents for proposed projects. However, we are able to track the average length of time it takes to complete an Environmental Impact Statement (EIS), Environmental Assessment (EA), or Decision Memo (DM) for a proposed project. The time it takes to complete an EIS, EA, or DM is recorded from initiation of scoping to the date that the decision is signed. (In the table below, the timing for a Categorical Exclusion (CE) is for a CE that requires a DM.) The average time does not represent actual time spent on each document. For many projects, although early public notification increases the time and affects the average, it provides benefits over the long-term such as avoiding project delays.

	Average Time (Days) – FY14	Average Time (Months) – FY14
EIS	1,115	37.2
EA	573	19.1
CE	186	6.2

The expenditures per year go beyond compliance with NEPA. Expenditures are best described as the “planning or environmental review costs” for meeting the requirements of all applicable laws.

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A 2007 Forest Service NEPA feasibility study determined that the best estimated average for environmental review costs is approximately \$365 million per year. This amount includes costs for complying with NEPA as well as the National Forest Management Act, Clean Water Act, Clean Air Act, Endangered Species Act, the National Historic Preservation Act, the Migratory Bird Treaty Act, the General Mining Law of 1872, the Weeks Act (specifically related to mineral resources), the Mineral Leasing Act, the Geothermal Steam Act, the Noxious Weed Act, the Public Rangelands Improvement Act, the Wetlands Conservation Act, and Executive Orders related to Environmental Justice, Flood Plains, Tribal Consultation, Sacred Sites, and other laws.

The Forest Service has also invested in collaboration and public engagement beyond the requirements of NEPA and NFMA to head off issues and concerns before they disrupt project development. For example, in addition to public comments, the agency's 2012 Planning Rule rulemaking process was enhanced by a science forum, regional and national roundtables, Tribal consultation meetings, national and regional public forums, forest Service employee feedback, and comments posted to the Planning Rule blog. A diverse FACA Committee is now advising the Secretary on rule implementation. In addition, Forest Service is also undertaking some projects across larger landscapes. This may increase the length of time it takes to analyze the projects, but it also can provide much longer term supply of timber and more extensive restoration and other activities. In some cases these approaches can increase short-term costs, but they reduce the risk of litigation over the long term and produces better outcomes on the landscape.

- c. What steps can be taken to scale back and simplify the many self-imposed, administrative burdens that exist in regulation so that more of the Forest Service's limited budget gets spent on the ground?

Answer: The Forest Service continually strives to reduce administrative workload to maximize the amount of funding that gets to the ground. For example, as a result of consolidating budget and finance (B&F) functions in the Albuquerque Service Center, the Forest Service went from spending \$10 million a year in financial statement audit fees in 2005 to less than \$500,000 a year in 2015. The agency also reduced the number of employees involved in supporting the audit over that period of time so that audits are less disruptive. The Forest Service is currently undertaking a "Lean Six Sigma" review of the business processes for awarding grants and agreements. We think this investment in reviewing the process will yield long-term efficiencies and make it easier to partner with and do business with the agency.

Question 2: In response to a question from Senator Wyden, Undersecretary Bonnie stated that in order to generate the county receipt revenues received under the Secure Rural Schools Act timber harvests on National Forests would need to be increased to over 16 billion board feet nationally and over 3 billion board feet in Oregon.

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- a. Please provide the Committee with the Agency's analysis showing that harvests would have to increase to 16 billion board feet (bbf) nationally to generate recent SRS funding levels of approximately \$260 million factoring in all revenue sources that are subject to receipt sharing with counties, such as recreational use fees, ski area leases, etc. Please provide a similar analysis showing that harvests would have to increase to 3 bbf in Oregon.

Answer: In FY 2014 the Forest Service made SRS payments to the states totaling \$300 million. Of this amount, nearly \$77 million was funded from receipts. The difference of \$223 million was paid from amounts in the Treasury. To generate receipts sufficient to make 25-percent payments in the same amount as payments made under the SRS Act (assuming the SRS Act were not reauthorized), the Forest Service would have to sell, and the industry would have to harvest, an additional 15.5 BBF. This estimation assumes that the amount of receipts from other uses that are deposited in the National Forest Fund (NFF) will remain constant.

\$300,000,000	Total commitment to Payments to States
-\$76,512,000	FY 2013 NFF Available for Payments to States
\$223,488,000	Remainder to be derived from timber sales (assuming other receipts stay the same.)
×	
4	Reciprocal of .25 ¹
\$893,952,000	Total timber receipt increase needed to cover Payments to States @25% of sale value
÷\$57.51	FY 2013 average national harvest value/MBF (excludes fuelwood, personal use)
15.5	BBF additional volume to generate \$223 million in new Payments to States
+2.4	BBF regular program already contributing to the \$77 million available
17.9	BBF total timber program

\$67,900,000	Total commitment Oregon
-10,792,300	FY 2013 NFF Payments to Oregon Available
\$57,108,700	Remainder to be derived from timber sales
×	
4	Reciprocal of .25 ²
\$228,434,800	Total timber receipt increase needed to cover Payments to States

¹ Four times the "Remainder to be derived from timber sales" would have to be generated through timber receipts to fully fund the 25% payments authorized under the Act of 1908 in an amount to equal \$300 million.

² See footnote 1.

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	@ 25% of sale value
÷\$76.70	FY 2013 Oregon harvest value/MBF (excludes fuelwood, personal use)
3.0	BBF additional volume to generate \$228 million in new Payments to Oregon
+ .48	BBF regular program already contributing to the \$11million available
3.48	BBF total timber program for Oregon

b. About 33 percent of the timber being sold by the Forest Service is sold using stewardship contracts rather than traditional timber sale contracts. What is the total value of the timber being sold under stewardship contracts? Does the 16 bbf national estimate and 3 bbf Oregon estimate include the volume sold through stewardship contracts but not the revenue since these aren't considered receipts?

Answer: The total value of timber sold under stewardship contracts is approximately \$60.1 million annually. The national estimate of 16 BBF and the Oregon estimate of 3 BBF do not include volume offered under stewardship contracts because receipts received under a stewardship contract are not taken into account in calculating a State's 25% payment or used as a source of funding for SRS payments.

c. If 25 percent of the value generated from stewardship contracts were required to be distributed to the Counties as receipts, the same as traditional timber sale contracts are, would this change the 16/3 bbf estimates?

Answer: Under a stewardship contract, the agency applies the value of timber or other forest products removed from national forests as an offset against the cost of services received under the contract, i.e., goods for services. The stewardship contracting authority provides that the value of services provided by the contractor (in lieu of a payment for timber or forest products) and any cash payment to equalize values received by the agency may not be taken into account in calculating of 25-percent payments to states. If the value of the services and any cash equalization payment were required to be taken into account when calculating 25-percent payments, the estimate of 15.5 BBF would change. The timber volume that would need to be offered would decrease from the national 15.5 BBF to approximately 14.7 BBF and in Oregon to 2.8 BBF. This reduction in the amounts is based upon the current national estimate that 33% of the timber volume is offered under stewardship contracts and assumes that estimate also applies to stewardship contracts in Oregon.

d. About 20 percent of the volume the Forest Service sells is through firewood and other small sales that are all sold at minimum rates or through personal use permits. Does the agency's 16/3 bbf estimates exclude this volume or include this volume? If this volume was sold as traditional timbers sales, which receive far greater revenues, how would this change the 16/3 bbf?

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Answer: The 15.5/3.5 BBF is based upon generating the total receipts to necessary to make 25-percent payments in the amount of the SRS payment made for FY 2013 (made in FY 2014). Firewood and other small sales are sold for minimum rates, and the receipts from the sales are deposited in the National Forest Fund (though the contributed amount is minimal). They are used to pay SRS payments, and if the SRS Act is not reauthorized, used to make 25-percent payments. The minimum rates are periodically reviewed and adjusted to ensure fair market value.

Question 3: It is the my understanding that nationwide, when the Forest Service sells timber, it commonly receives 25%-50% less revenue per thousand board feet than timber sold from State or private owned land in the same vicinity. In some areas like the Pacific Northwest, State and private timber is now being sold for 200% to 400% more than what the Forest Service is receiving. In fact, rates for State and private timber is averaging about \$400 per mmbf and Forest Service stumpage rates are rarely above \$100 per mmbf.

a. What factors contribute to this discrepancy in the price received for timber sales?

Answer: There are many factors affecting the advertised price and bids received for NFS timber. The States and the Forest Service are governed by very different laws and policies. By law, National Forest System (NFS) lands are managed for multiple uses. Design criteria prescribed to meet multiple uses, environmental protection law requirements, and hazardous fuels reduction treatments may reduce revenue. For example, outside of Alaska, the Forest Service does not undertake large scale clearcutting. Clearcutting significantly reduces harvesting costs which, in turn, boosts stumpage prices offered. In addition, stumpage prices received by the Forest Service are also influenced about the proximity of lands to mills. Many Forest Service lands are remote, particularly compared to private lands.

b. What measures could the Forest Service take to increase the value of its timber offerings which would thereby increase the amount distributed to counties?

Answer: The value of timber is a function of market demand and competition. More competition in a market yields higher prices for timber in that market. The Forest Service is taking full advantage of the authorities of the Agricultural Act of 2014, such as designation by description and designation by prescription, Good Neighbor Authority, and the categorical exclusion for insect and disease treatments through commercial timber sales. All of these actions will help reduce sale preparation cost. The Forest Service is also taking significant steps to bolster markets for small diameter timber, biomass, and wood as a greenbuilding material through grants, research and policy. These efforts can boost demand and, therefore, stumpage prices for timber.

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Question 4: It has been reported by outside groups to the press that the Big Thorne stewardship contract cost the Forest Service as much as \$57 million to prepare and administer.

- a. Is this correct? How much did the Forest Service spend in preparing and administering the Big Thorne stewardship contract that it awarded in November 2014 in the Tongass National Forest? Please provide a breakdown/explanation of the costs.

Answer: The following are the costs related to the Big Thorne project:

Big Thorne Project Costs		
Resource Inventory	\$500,000	Inventory of timber and other resources was completed prior to initiating the NEPA process.
NEPA	\$2,500,000	Includes contract NEPA preparation and Forest Service oversight of alternative development and analysis, DEIS, response to comments, FEIS, and ROD. Resulted in 150 MMBF available for harvest, of which Big Thorne is approximately two-thirds.
Timber Sale Preparation	\$1,500,000	Includes sale boundary marking, area determination, mapping, volume estimation, timber appraisal, and contract preparation.
Supplemental Information Report & Sale Offer	\$250,000	Convene Wolf Task Force and analyze appeal information; solicit and evaluate bids; award the stewardship contract.
Total Cost	\$4,750,000	

Additional costs will be incurred for contract administration when ground operations begin. Timber volume approved in the ROD remains to be sold using small- to medium-sized sales. These projects will incur sale preparation and administration costs.

Factors contributing to costs of Big Thorne sale include:

- Large planning area to inventory and analyze (approximately 232,000 acres);
- Large number of potential units and alternatives to analyze for NEPA;
- Additional cost to prepare a Supplemental Information Report (SIR);
- Sale preparation costs include multiple crews, remote housing, per diem, and air transportation for site access over a large area.

- b. How much does the Forest Service expect that the contract would generate in receipts? How would those receipts be allocated?

Answer:

Bid Rate for Big Thorne Stewardship Contract: \$7,667,625

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Mandatory Stewardship projects total:	-\$2,003,420
Subtotal Excess Receipts	\$5,664,205
 Optional Stewardship items not yet awarded	 -\$1,658,185
 Potential Excess Receipts available for additional Stewardship projects across the Tongass.	 \$ 4,006,020

Receipts from future sales within the Big Thorne EIS area are unknown at this time.

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**Questions for the Record Submitted to Mr. Robert Bonnie
from Senator Maria Cantwell**

Question 1: What types of legislation could the Administration support that would make it easier for the Forest Service to address its watersheds?

For example, I was thinking about establishing a program similar to your \$40M Collaborative Forest Landscape Restoration Program, but specifically focused on water instead of hazardous fuels. Would the Administration support establishing such a program?

Answer: The Collaborative Forest Landscape Restoration Program (CFLRP) is one of many tools that the Forest Service utilizes to restore watershed health. Other restoration tools and programs the Forest Service uses include the Watershed Condition Framework, Stewardship Contracting, Participating Agreements (Forestry Protection Agreements), Secure Rural Schools Act, Watershed Restoration and Enhancement Agreement (Wyden) Authority, Good Neighbor Authority, and other 2014 Farm Bill provisions; USDA's Chief's Joint Landscape Restoration Partnership; and the Integrated Resource Restoration Program. The Administration is committed to using its current restoration tools and programs in a thoughtful, focused manner to improve watershed health. Taken together, these efforts helped the Agency sustain or restore watershed function and resilience on over 2.9 million acres in FY 2014.

The FY 2016 President's Budget proposal to expand CFLRP to \$60 million dollars per year would expand our capacity to do watershed restoration work. The Forest Service recognizes that fire risk reduction focus of CFLRP means that less fire-prone landscapes have not competed as well for CFLRP funds to date. The Administration welcomes the opportunity to work with Congress to expand CFLRP and explore any improvements in the authority that would help us further improve our watershed restoration work.

Question 2: The Forest Service has completed most of its plans to determine how many roads should be on each National Forest.

How many miles of roads should the Forest Service remove each year to get the system to where the Plans say the system should be?

If funding is your only limiting factor, are you open to doing things differently with the money you have? Using new technologies or structuring your program differently could enable you to decommission significantly more miles than what you are currently accomplishing.

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Answer:

The travel analysis process (TAP) that units are currently completing will identify opportunities for the forest transportation system to meet current or future management objectives based on ecological, social, cultural, and economic concerns. The TAP is a science-based process that will inform future travel-management decisions. Forests will use the TAP reports to inform future travel management decision making, including which National Forest System roads should be decommissioned.

The Forest Service is always open to new technologies and methods for accomplishing work. Our Integrated Resource Restoration program has been implemented in three Regions since 2012, and has contributed to increasing the pace of watershed restoration. This program emphasizes collaboration with stakeholders and interdisciplinary planning in an effort to continuously improve restoration projects, including road decommissioning, and increase community support for restoration work. As a result, the agency expects to accomplish more on-the-ground work, create or maintain jobs, and enhance the stability of rural communities and the safety of their drinking water.

Question 3: Please provide the Committee data from the three most recent available fiscal years that shows the number of Forest Service full-time equivalents by national forest and by State in the following States. Also, please provide the associated personnel costs associated with those full-time equivalents and contracting costs incurred by the Forest Service in managing the national forests. The States we'd like data on follow:

Alaska
 Arizona
 California
 Colorado
 Idaho
 Montana
 Nevada
 New Mexico
 Oregon
 Utah
 Washington
 Wyoming

Answer: The following table provides the requested information regarding full-time equivalents by national forest and by specified States for FY 2013, FY 2014, and for the first half of FY2015. It also includes the associated personnel costs and contracting costs for the same time periods. Personnel costs include seasonal employees and permanents. First half FY 2015 personnel numbers are reduced because seasonal employees are generally hired during late spring and summer. Likewise, the 2015 contracts display does not reflect field and fire season contracts. Contract expenditures and contract terms vary greatly from year to year.

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Personnel Costs & Contract Costs for FY13 - FY15 (through 03/27/2015) for R01 - R06 & R10													
ST Cod	Region/Unit Name	FTE			Personnel Costs			Contract Costs					
		2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
AK	R10 REGIONAL OFFICE	107.8	121.5	108.6	\$12,929,828	\$14,201,432	\$6,609,514	\$399,808	\$550,147	\$285,178			
	R10 CHUGACH NF	123.8	121.5	83.3	\$10,564,459	\$10,486,766	\$4,031,100	\$1,778,627	\$996,191	\$272,043			
	R10 TONGASS NF	334.4	332.9	258.5	\$28,871,871	\$29,797,837	\$12,462,559	\$24,063,843	\$26,562,146	\$10,796,737			
AK Total		565.9	575.9	450.4	\$52,366,158	\$54,486,035	\$23,103,174	\$26,242,278	\$28,108,484	\$11,353,958			
AZ	APACHE-SITGREAVES NF	223.8	223.7	161.1	\$15,164,940	\$15,374,236	\$6,354,998	\$6,845,628	\$6,879,469	\$2,842,743			
	COCONINO NF	270.1	341.6	170.5	\$16,787,047	\$20,361,632	\$6,653,842	\$3,197,225	\$7,685,595	\$1,805,863			
	CORONADO NF	194.5	235.1	146.3	\$12,873,921	\$15,158,293	\$5,871,193	\$2,887,071	\$6,004,359	\$2,378,096			
CA	KAIBAB NF	143.6	178.1	116.8	\$9,257,489	\$10,992,631	\$4,397,311	\$1,100,135	\$1,357,625	\$1,175,828			
	PRESCOTT NF	166.4	139.3	92.0	\$10,454,175	\$9,791,881	\$3,727,406	\$4,523,964	\$970,229	\$812,370			
	TONTO NF	265.4	288.5	161.0	\$17,868,814	\$19,371,536	\$6,510,858	\$3,144,302	\$4,750,829	\$2,368,304			
AZ Total		1,263.9	1,406.3	847.8	\$82,406,386	\$91,050,210	\$33,515,607	\$21,698,325	\$27,648,106	\$11,383,204			
CA	ANGELES NF	542.5	477.7	369.4	\$32,331,992	\$31,659,890	\$13,193,346	\$11,697,532	\$6,407,390	\$1,641,139			
	CLEVELAND NF	286.7	349.1	271.3	\$19,221,740	\$22,842,108	\$9,862,661	\$2,614,806	\$5,913,896	\$3,714,407			
	ELDORADO NF	276.0	340.8	408.1	\$18,447,879	\$20,489,727	\$12,138,379	\$4,113,314	\$5,629,920	\$28,801,994			
CA	INYO NF	154.9	175.1	114.2	\$10,008,484	\$10,974,547	\$4,131,705	\$1,570,668	\$1,800,377	\$1,090,254			
	LASSEN NF	288.4	392.7	224.0	\$18,622,993	\$23,083,567	\$7,877,218	\$3,007,449	\$10,242,528	\$1,328,693			
	LOS PADRES NF	373.0	370.0	278.7	\$23,736,560	\$24,779,123	\$10,325,958	\$9,332,452	\$3,477,769	\$15,233,095			
CA	MENDOCINO NF	189.9	178.6	139.4	\$12,050,130	\$11,732,007	\$4,978,093	\$4,251,653	\$2,409,846	\$411,922			
	MODOC NF	175.6	223.9	126.8	\$10,840,674	\$13,332,235	\$4,573,793	\$2,312,149	\$3,795,914	\$194,267			
	SIX RIVERS NF	595.0	235.0	178.4	\$29,780,878	\$15,068,248	\$6,370,361	\$31,519,701	\$5,059,284	\$532,598			
CA	PLUMAS NF	316.4	329.0	226.0	\$20,253,708	\$20,645,669	\$7,887,539	\$5,922,787	\$4,371,999	\$1,771,682			
	SAN BERNARDINO NF	465.3	399.9	326.1	\$28,465,398	\$27,045,115	\$11,874,409	\$11,089,307	\$5,741,100	\$3,115,984			
	SEQUOIA NF	328.2	468.1	244.3	\$19,364,035	\$25,476,440	\$8,118,052	\$5,267,796	\$12,824,028	\$1,806,416			
CA	SHASTA TRINITY NF	390.5	457.9	317.0	\$25,059,299	\$27,689,276	\$11,007,039	\$5,622,187	\$8,920,481	\$2,400,997			
	SIERRA NF	567.6	448.8	241.9	\$29,067,225	\$24,718,431	\$8,107,064	\$16,303,636	\$9,796,220	\$1,146,801			
	STANISLAUS NF	640.7	410.6	268.2	\$34,087,163	\$25,725,786	\$9,142,953	\$27,272,265	\$18,168,439	\$466,982			
CA	TAHOE NF	389.0	307.5	230.7	\$23,622,899	\$20,744,315	\$8,676,540	\$15,004,892	\$6,420,732	\$2,350,770			
	LAKE TAHOE BASIN MG	150.4	107.7	65.0	\$10,687,967	\$7,944,828	\$2,690,179	\$4,463,063	\$3,863,151	\$1,004,130			

R5 RGNL OFFC	537.8	661.0	430.8	\$50,146,778	\$59,741,466	\$22,597,204	\$11,393,547	\$17,012,125	\$9,129,909
7,099.9	7,601.8	4,710.6	\$439,847,270	\$472,584,961	\$172,426,478	\$181,718,133	\$194,293,116	\$77,307,262	
GRD MESA-UNC-GUN N	173.0	171.8	127.6	\$11,851,970	\$12,116,559	\$5,151,725	\$2,803,082	\$1,791,823	\$476,201
RIO GRANDE NF	99.9	97.1	75.0	\$6,641,865	\$6,967,080	\$2,969,162	\$524,610	\$976,013	\$1,041,586
ARAPAHO-ROOSEVELT	205.6	223.5	155.2	\$15,231,753	\$16,763,843	\$6,540,764	\$7,223,405	\$3,729,594	\$1,939,274
PSI NF'S & CC NG'S	252.8	240.2	179.3	\$16,837,520	\$16,650,643	\$6,962,129	\$5,421,397	\$4,857,649	\$2,458,834
SAN JUAN NF	287.4	162.5	106.7	\$17,396,311	\$11,600,939	\$4,495,978	\$12,311,747	\$1,153,832	\$772,933
WHITE RIVER NF	164.5	170.6	110.3	\$12,072,838	\$12,510,126	\$4,558,780	\$1,719,858	\$1,512,311	\$717,344
R2 REGIONAL OFFICE	276.0	214.1	184.3	\$26,378,776	\$23,989,618	\$10,727,318	\$6,872,854	\$4,964,565	\$1,176,913
1,459.2	1,279.9	938.1	\$106,411,033	\$100,598,788	\$41,405,875	\$36,876,954	\$18,985,756	\$8,583,085	
IDAHO PANHANDLE NF	312.3	310.4	201.7	\$19,526,182	\$20,046,189	\$7,740,842	\$4,293,683	\$5,470,387	\$2,735,104
CLEARWATER NF	151.4	0.0	0.0	\$9,462,890	\$0	\$0	\$3,098,562	\$1,014,683	\$241,023
NEZPERCE NF	204.1	454.6	226.1	\$12,798,076	\$26,953,533	\$8,624,995	\$8,287,239	\$12,792,884	\$4,276,750
BOISE NF	347.0	365.4	166.4	\$20,003,509	\$21,237,471	\$6,564,185	\$11,878,657	\$9,265,493	\$1,309,023
PAYETTE NF	318.5	321.0	170.7	\$19,819,698	\$20,399,078	\$6,801,838	\$10,387,984	\$8,424,174	\$863,382
SALMON-CHALLIS NF	335.7	196.7	118.5	\$18,238,435	\$13,032,969	\$4,806,731	\$12,643,535	\$1,802,356	\$1,079,258
SAWTOOTH NF	216.0	163.3	105.9	\$12,477,249	\$10,586,924	\$4,177,514	\$7,480,554	\$5,725,241	\$1,250,308
CARBON-TARGHEE NF	175.6	199.6	128.2	\$12,586,038	\$13,772,443	\$5,331,881	\$839,346	\$889,293	\$765,929
2,080.5	2,011.0	1,117.4	\$124,911,777	\$126,009,733	\$44,047,986	\$59,009,559	\$45,484,513	\$12,520,777	
BEAVERHEAD-DRLDGE	271.5	188.3	114.2	\$15,625,433	\$11,746,695	\$4,648,433	\$6,514,027	\$1,317,843	\$599,398
BITTERROOT NF	188.7	135.8	77.9	\$11,729,713	\$9,028,233	\$3,237,530	\$7,352,957	\$2,101,957	\$599,080
CUSTER NF	82.6	0.7	0.0	\$5,985,884	\$3,633	\$0	\$3,149,445	\$2,090,148	\$86,865
FLATHEAD NF	188.2	194.6	121.6	\$11,689,009	\$13,190,764	\$5,065,654	\$2,125,322	\$1,813,646	\$765,743
GALLATIN NF	198.8	228.4	148.8	\$12,861,509	\$16,528,513	\$6,200,569	\$7,289,278	\$2,474,501	\$2,062,918
HELLENA NF	134.2	138.6	80.7	\$8,441,151	\$9,072,751	\$2,970,034	\$2,142,089	\$1,175,006	\$644,765
KOOTENAI NF	220.4	248.1	155.7	\$14,739,388	\$15,689,862	\$6,023,347	\$2,628,260	\$1,857,955	\$666,255
LEWIS AND CLARK NF	121.5	122.6	100.3	\$7,778,588	\$8,413,708	\$4,039,226	\$1,689,444	\$1,226,186	\$596,216
LOLO NF	313.9	294.0	145.6	\$18,352,864	\$17,681,020	\$5,746,444	\$8,635,958	\$5,369,174	\$917,573
R1 REGIONAL OFFICE	340.3	362.7	297.0	\$31,653,976	\$33,802,774	\$14,702,678	\$3,843,542	\$3,364,787	\$1,658,274
2,040.1	1,893.9	1,241.9	\$138,757,316	\$135,157,953	\$52,723,916	\$45,370,321	\$22,791,102	\$8,597,088	
CARSON NF	144.2	135.9	112.6	\$10,258,944	\$9,963,138	\$4,449,119	\$1,061,131	\$1,191,498	\$547,210
CROOK NF	176.2	198.0	118.4	\$11,762,922	\$12,740,932	\$4,702,762	\$1,924,371	\$1,634,105	\$826,838

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	GILA NF	336.2	289.4	142.7	\$19,304,034	\$17,550,623	\$5,814,273	\$10,764,101	\$5,437,073	\$344,435
	LINCOLN NF	155.7	157.1	96.5	\$9,742,731	\$10,038,862	\$3,716,824	\$1,776,179	\$2,682,460	\$698,683
	SANTA FE NF	216.0	239.6	146.1	\$14,810,313	\$15,847,918	\$5,731,100	\$3,330,387	\$6,039,479	\$1,936,279
	R3 RGNL OFFC	268.2	247.2	176.3	\$24,074,417	\$23,494,862	\$9,235,973	\$6,425,622	\$5,369,787	\$2,305,085
NM Total		1,296.5	1,257.2	792.7	\$89,954,172	\$89,635,445	\$33,653,050	\$28,195,790	\$22,641,402	\$6,694,329
NV	HUMBOLDT-TONYABE NF	406.6	290.9	161.1	\$25,911,220	\$19,595,869	\$6,786,084	\$15,018,086	\$8,204,801	\$5,388,319
NV Total		406.6	290.9	161.1	\$25,911,220	\$19,595,869	\$6,786,084	\$15,018,086	\$8,204,801	\$5,388,319
OR	DESCHUTES NF	383.8	429.2	255.2	\$25,499,544	\$26,829,180	\$9,478,135	\$9,644,370	\$12,244,828	\$2,826,988
	FREMONT-WINEMA NF	233.7	267.7	178.4	\$15,285,286	\$17,158,568	\$6,745,286	\$3,865,265	\$4,108,251	\$2,589,012
	MALHEUR NF	262.9	329.7	191.1	\$15,746,873	\$19,454,612	\$6,769,329	\$7,743,962	\$9,283,107	\$1,619,626
	MT HOOD NF	144.4	192.1	123.3	\$10,700,782	\$13,299,087	\$5,137,839	\$4,367,660	\$5,400,850	\$5,242,793
	OCHOCO NF	112.6	159.1	90.3	\$7,568,632	\$9,699,052	\$3,391,964	\$449,955	\$4,832,129	\$837,770
	ROG RVR/SISKIYOU NF	285.4	383.1	169.2	\$18,504,534	\$22,982,004	\$6,571,969	\$9,088,114	\$20,392,236	\$6,079,126
	SIUSLAU NF	112.9	122.2	90.9	\$8,569,550	\$9,052,057	\$3,735,145	\$2,809,878	\$2,604,443	\$1,822,349
	UMATILLA NF	206.8	212.4	126.9	\$13,340,294	\$13,481,461	\$4,991,100	\$6,634,359	\$5,490,700	\$1,565,051
	UMPQUA NF	303.4	209.1	131.7	\$17,521,950	\$13,572,590	\$4,936,141	\$13,999,080	\$3,871,095	\$2,147,810
	WALLOWA WHITMAN NF	272.3	338.6	182.6	\$17,653,775	\$21,101,831	\$7,233,325	\$5,482,710	\$11,735,867	\$2,794,383
	WILLAMETTE NF	275.8	507.1	188.1	\$18,123,950	\$28,376,259	\$7,294,611	\$3,821,502	\$21,554,900	\$5,485,997
	CLIMBIA RVR GRGE	40.9	50.1	29.6	\$2,664,770	\$3,165,197	\$1,121,253	\$313,209	\$765,927	\$7,399
	R6 RGNL OFFC	374.0	433.5	360.3	\$37,378,230	\$43,958,069	\$19,036,209	\$5,961,035	\$6,613,277	\$3,443,816
OR Total		3,009.1	3,633.9	2,117.5	\$208,558,169	\$242,129,967	\$86,442,306	\$74,181,098	\$108,897,610	\$36,462,121
UT	ASHLEY NF	108.1	118.1	76.3	\$7,518,934	\$7,923,792	\$3,045,040	\$995,029	\$713,284	\$428,217
	DIKE NF	144.6	155.3	106.8	\$9,895,054	\$10,851,942	\$4,385,166	\$2,934,876	\$2,645,312	\$1,499,895
	FISHLAKE NF	118.2	123.2	88.2	\$8,301,982	\$8,735,581	\$3,660,716	\$3,974,702	\$1,422,533	\$128,950
	MANTLASAL NF	131.9	105.9	72.6	\$7,867,945	\$6,989,886	\$2,800,046	\$2,336,337	\$316,004	\$232,207
	UINTA-WASATCH-CACH	224.4	221.0	138.1	\$13,884,809	\$14,415,364	\$5,658,314	\$2,703,426	\$2,136,883	\$1,226,642
	R4 REGIONAL OFFICE	313.6	322.6	259.1	\$29,070,611	\$30,567,676	\$13,455,387	\$3,579,366	\$3,052,968	\$1,138,688
UT Total		1,040.9	1,046.2	741.1	\$76,539,335	\$79,484,242	\$33,004,668	\$16,523,736	\$10,286,984	\$4,654,599
WA	GIFFORD PINCHOT NF	138.6	151.3	102.6	\$10,337,868	\$11,364,550	\$4,370,752	\$1,795,454	\$3,000,070	\$972,110
	MT BKR-SNOQUALMIE NF	133.9	132.0	98.8	\$9,966,561	\$10,167,339	\$4,432,946	\$2,874,136	\$2,763,066	\$1,383,860
	OLYMPIC NF	65.8	65.6	52.7	\$5,381,777	\$5,422,578	\$2,368,286	\$3,352,888	\$2,536,187	\$1,142,593
	OKANOGAN-WNTCHEE	382.7	644.8	236.5	\$25,404,603	\$37,162,997	\$9,306,280	\$13,567,883	\$30,867,927	\$3,363,757

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COLVILLE NF	140.5	167.2	116.7	\$9,582,356	\$10,976,893	\$4,366,008	\$2,526,263	\$3,334,640	\$763,857
WY Total	861.5	1,160.9	607.4	\$60,673,166	\$75,094,358	\$24,844,272	\$24,116,624	\$42,501,890	\$7,626,177
BIGHORN NF	82.4	100.6	63.7	\$6,111,645	\$6,973,447	\$2,641,910	\$293,124	\$1,222,697	\$667,543
MED BOW/ROUTT	206.4	225.4	152.2	\$14,411,218	\$15,462,538	\$6,070,572	\$1,402,809	\$1,613,512	\$765,618
SHOSHONE NF	129.6	106.8	77.4	\$7,970,888	\$7,167,897	\$2,936,186	\$3,723,570	\$2,434,347	\$1,161,929
BRIDGER-TETON NF	165.0	164.5	111.4	\$10,637,494	\$11,436,360	\$4,444,090	\$2,447,327	\$1,595,463	\$642,987
WY Total	583.4	597.3	404.7	\$39,131,245	\$41,040,242	\$16,092,758	\$7,866,831	\$6,866,019	\$3,238,077
Grand Total	21,687.7	22,755.2	14,130.8	\$1,445,467,246	\$1,526,867,803	\$568,046,174	\$536,817,734	\$536,709,782	\$193,808,995

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**Questions for the Record Submitted to Mr. Robert Bonnie
from Senator John Barrasso**

Questions: Mr. Bonnie, I am concerned with the amount of money being spent on fires and the declining health of our national forests. I support ending fire borrowing, but we cannot stop there.

Does either the Administration proposal or S. 235 contain language guaranteeing funds will be directed to preventative active management activities such as hazardous fuel reduction?

Answer: Both proposals eliminate the need to transfer funds from non-fire accounts to pay for fire suppression.

Does either proposal contain language providing legislative reforms aimed at streamlining environmental analysis and reducing litigation?

Answer: The Administration's proposal and S. 235 eliminates the need to transfer funds from non-fire accounts to pay for fire suppression. As a general matter, we welcome legislation that incentivizes collaboration and expands the toolset we can use to complete critical work on our nation's forests, without overriding environmental laws. In recent years, we have made strides in pursuing efficiencies and generally support provisions that will help us pursue treatments at the landscape scale in a reasonable time to address problems before they can worsen. We look forward to working with this committee and others to find incentives and efficiencies for collaboration, analysis, and market promotion, within the scope of existing environmental laws.

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**Questions for the Record Submitted to Mr. Robert Bonnie
from Senator Ron Wyden**

Question 1: SRS – Sustainable Logging

As I'm sure you know, Secure Rural Schools is a lifeline for rural communities across the country, particularly as timber yields have continued to decrease over the years and the timber receipts aren't enough to fully support these rural communities. Renewing SRS is necessary to ensure that these communities can provide critical services to their citizens, but tying the well-being of rural economies to unsustainable logging levels is a dead-end, leaving the counties in exactly the same position they're in now while depleting our nation's forests. These counties need certainty and predictability.

Since it has been suggested that simply increasing timber production could sustain our counties, I'd like to ask you – how much would the Forest Service have to increase timber harvest by, both nationally and in Oregon, in order to get to sufficient SRS levels?

Answer: In FY 2014 the Forest Service made SRS payments to the states totaling \$300 million. Of this amount, nearly \$77 million was funded from receipts. The difference of \$223 million was paid from amounts warranted from Treasury. To generate receipts sufficient to make 25-percent payments in the same amount as payments made under the SRS Act (assuming the SRS Act were not reauthorized), the Forest Service would have to sell, and the industry would have to harvest, an additional 15.5 BBF. This estimation assumes that the amount of receipts from other uses that are deposited in the National Forest Fund (NFF) will remain constant.

\$300,000,000	Total commitment to Payments to States
-\$76,512,000	FY 2013 NFF Available for Payments to States
\$223,488,000	Remainder to be derived from timber sales (assuming other receipts stay the same.)
×4	Reciprocal of .25 ¹
\$893,952,000	Total timber receipt increase needed to cover Payments to States @25% of sale value
÷\$57.51	FY 2013 average national harvest value/MBF (excludes fuelwood, personal use)
15.5	BBF additional volume to generate \$223 million in new Payments to States
+2.4	BBF regular program already contributing to the \$77 million

¹ Four times the "Remainder to be derived from timber sales" would have to be generated through timber receipts to fully fund the 25% payments authorized under the Act of 1908 in an amount to equal \$300 million.

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	available
17.9	BBF total timber program

\$67,900,000	Total commitment Oregon
-10,792,300	FY 2013 NFF Payments to Oregon Available
\$57,108,700	Remainder to be derived from timber sales
×4	Reciprocal of .25 ²
\$228,434,800	Total timber receipt increase needed to cover Payments to States @ 25% of sale value
÷\$76.70	FY 2013 Oregon harvest value/MBF (excludes fuelwood, personal use)
3.0	BBF additional volume to generate \$228 million in new Payments to Oregon
+ .48	BBF regular program already contributing to the \$11 million available
3.48	BBF total timber program for Oregon

Question 2: Collaborative Forest Landscape Program

As you identified in your testimony, there has been some impressive work happening through the collaboratives in states like Oregon, but some collaboratives still struggle to get enough timber to the mills, putting a strain on local economies. What are some things that Congress can do to be helpful to ensure that these collaboratives grow and have the tools they need to be successful across the West?

Answer:

The twenty-three Collaborative Forest Landscape Restoration (CFLR) projects generate considerable economic impact in local communities. The CFLR projects are taking advantage of a suite of tools to accelerate work on the ground, and to generate restoration by-products made available for commercial forestry. For example, stewardship contracts, which utilize receipts to pay for other work, are being used for thinning projects that both reduce the risk of catastrophic fire and generate woody byproducts. In FY 2014, the three CFLR projects in Oregon generated over \$532,000 in goods for services through stewardship contract work. Other restoration tools including Good Neighbor Authority and other 2014 Farm Bill provisions like the Biomass Cross Assistance Program help the projects sustain restoration successes and create benefits.

Congress' continued support for these authorities will help give collaboratives the tools they need to be successful. Additionally, the FY 2016 President's Budget proposes to

² See footnote 1.

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expand CFLRP to \$60 million dollars per year. This expansion of the program would allow for additional investments in restoration activities that support the sustainable supply of restoration byproducts that in turn can bolster local markets.

Question 3: Wildfire Management – Fuels treatments and funding

a. You are well aware of the impacts that wildfires have on the nation's forests and communities, particularly in the West, and the fire borrowing that continues to rob the Forest Service coffers, depleting the funds meant to conduct the very work in the forests that would decrease the number and severity of fires. Senator Crapo and I introduced a bill that would fix the wildfire budgeting structure to ensure that instead of bankrupting the wildfire account every year, the largest 1% of fires would be treated and funding like other natural disasters. If we protect the forest management budget every year from being pilfered, those funds will be there to do critical prevention work in the forests. Isn't that correct?

Answer:

That is correct. Without a legislative fix, the current budget structure affects forest management activities through reduced funding in the Forest Service's budget request and appropriation and/or when funds are reduced through the fire transfer process, which has occurred seven times since fiscal year 2002.

b. As appropriators determine funding for Forest Service programs for the 2016 Fiscal Year, given the current structure of wildfire funding and going into what is projected to be a particularly difficult fire season, in your opinion: is it better to increase funding for wildfire suppression activities now, or increase funding for the wildfire severity prevention work, in other words: forest restoration, knowing that it may be "borrowed" for wildfire suppression down the line?

Answer:

The Forest Service believes the only way to effect an outcome of reduced wildland fire risk is through a balanced pursuit of both restoration-related activities and hazardous fuels reduction. The fire cap adjustment enables that balance to be better achieved.

Question 4: Growing Forested Economies

Can you tell the Committee about other efforts the Forest Service is engaged in, other than straight out forest management, to grow the local economies and environmental health of forested communities? Work you may be doing with the Natural Resources Conservation Service? Or even other agencies outside of USDA?

Answer:

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The Forest Service is engaged in many programs and projects that help grow local economies and improve environmental health of forested communities.

For example:

- **NRCS/FS Two Chiefs' Joint Landscape Restoration Partnership** – The goal of this collaboration is to improve the health and resiliency of forest ecosystems where public and private lands meet through a partnership between the Forest Service and NRCS. The vision is to restore lands across large landscapes regardless of ownership, reduce wildfire threats to communities and landowners, protect water quality and supply, and improve habitat for at-risk species seamlessly across public and private lands. To accomplish this, Forest Service and NRCS launched a coordinated effort on priority forested watersheds to deliver on-the-ground accomplishments by leveraging technical and financial resources, and coordinating activities on adjacent public and private lands.
- **State and Private Forestry Programs** -- More than 50 percent of our Nation's forests—over 420 million acres—are privately owned. These forests supply almost 30 percent of the surface drinking water to cities and rural communities and over 90 percent of our domestically-produced forest products (Report to Congress on Cooperative Forestry Assistance Act and Other USDA Programs That Benefit Private Forests, 2011). S&PF programs help protect these forests and provide support to keep working forests intact. This Federal investment leverages the capacity of State Foresters and their partners to manage State and private lands and produce ecological, social, and economic benefits for the American people. For example, almost 11 million acres are now being managed more sustainably because of landowner planning, have been treated to protect against wildfires and insects and diseases, or have been protected from development since 2008 as a result of S&PF program investments.
- **Partnership with NRCS for Agro-Forestry Center** -- The FS, through the Forest Stewardship Program provides funding with the National Resources Conservation Service to support the National Agroforestry Center, which successfully transfers sustainable agroforestry technologies to thousands of land management professionals each year. This center, a multiagency Department of Agriculture (USDA) partnership, is focused on three primary outcomes: (1) increasing the adoption of agroforestry practices that improve water, soil and air quality; sustainable agriculture; product diversity and rural wealth; (2) creating tailored, science-based agroforestry tools that can be used by landowners to address complex environmental, economic, and social conditions across all lands; and (3) integrating agroforestry into USDA programs and policies.
- **Wood utilization/ Biomass Energy** – The Forest Service is part of the USDA Wood to Energy initiative. This focus on bioenergy and bio-based products will result in secure, sustainable, renewable energy sources; strong rural economies; and more acres of hazardous fuels treated with less air pollution. Wood energy

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and bio-based products are newer products that are part of an integrated wood products industry.

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**Questions for the Record Submitted to Mr. Robert Bonnie
from Senator Jeff Flake**

Question 1: I continue to hear from private industry in Arizona about the tremendous uncertainty regarding the availability of timber. The White Mountain Stewardship contract revitalized the forestry industry in Eastern Arizona, and helped the state begin to take significant steps toward restoring its forests and promoting healthy watersheds. Through those efforts, we have seen more than \$130 million in private investment flow into Arizona's eastern forests. This industry is now in jeopardy because the Department has failed to reliably make treatment available after the end of the White Mountain Stewardship project and the burning of 56,000 NEPA-approved acres in the Wallow Fire. What is the Department doing to ensure some measure of predictability needed to attract and keep the industry that keeps the forests healthy?

Answer: The Forest Service is consistently increasing the supply of timber in Arizona with over 100 million board feet (mmbf) currently advertised for sale which will treat approximately 25,000 acres. The Four-Forest Restoration Initiative (4FRI) currently has twenty-three timber sales or stewardship contracts for restoration treatments outside of the 4FRI Phase 1 contract, totaling about 100 mmbf on 22,000 acres. Eleven of those contracts, totaling more than 52 mmbf on more than 13,000 acres, are in Eastern Arizona (the Apache-Sitgreaves National Forest) and the forest will advertise another 40 mmbf on approximately 10,000 acres in the next six months.

Question 2: There is a proposal for the President to bypass Congress and designate over 1.7 million acres of land in northern Arizona, including nearly 1 million acres of the Kaibab National Forest, as the Grand Canyon National Monument. This would lock up not only Federal land, but would also encompass over 60,000 acres of State Trust land, and nearly 30,000 acres of private land. Such a designation would have a devastating effect on the economic productivity on private land and existing mining operations. The creation of this monument has been strongly opposed by representatives in the State, as well as some members of Arizona's congressional delegation. Is the Department taking any actions toward designating this Monument?

Answer: We have not formally received, nor have we participated in, a proposal to designate a national monument in Arizona.

Question 3: In the 2014 Farm Bill the Department was given the authority to work with governors and designate certain National Forest Lands as part of an insect and disease treatment program. These areas were to be eligible for an expedited NEPA process and some possible use of categorical exclusions. Has the Department used the expedited NEPA process? How many of the acres (Nationwide and in Arizona) designated under this program have been treated?

Answer: Once the Farm Bill was signed, the Forest Service moved quickly to work with Governors in 36 states to designate about 46 million acres as impacted by insects and

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disease. The legislation allows for expedited procedures for projects developed by collaborative groups on each National Forest. These collaborative groups may take some time to recommend projects. In addition, Forest Service personnel are generally already engaged on existing project proposals. As a result, Forest Service expects that the use of this new authority will increase over time as projects are developed locally and then staff work is completed to move projects forward. Currently, nine Farm Bill projects have been entered in the agency's Planning Appeals and Litigation System (PALS) database. Seven are categorical exclusions and two are Environmental Assessments. Two of the seven categorical exclusions have decisions associated with them, and plans are to implement them this year. Estimated size of these two projects to be implemented in FY 2015 is approximately 700 acres. The initial projects were developed in California, Idaho, Montana, New York and Utah, where the new insect and disease provisions were identified as appropriate tools to address insect and disease issues on units of the National Forest System as well as in areas where there has been support from the State and other partners. These initial projects will help the agency and its partners better understand and implement the new categorical exclusion authority while additional projects are identified, planned and implemented.

Question 4: It has come to my attention that the Forest Service is considering a Traditional Cultural Properties listing on the National Register of Historic Places for land in and around Oak Flat. What is the status of that listing? Does it include any private property? Has the Department consulted with the Arizona State Historic Preservation Office about the potential listing?

Answer: The National Register nomination is currently in the regional office awaiting final review and transmittal to National Park Service. The proposed nomination has been shared with the Arizona State Historic Preservation Office. There is no private land associated with the Traditional Cultural Properties.

Question 5: Would you support amending the Wildfire Disaster Funding Act (S.235/H.R.167) to include the four criteria proposed on page 253 of the Forest Service's FY16 Budget request, limiting the Forest Service's ability to access the proposed budget cap adjustments?

Answer: Yes. The Administration supports the declaration criteria for accessing the cap adjustment.

Question 6: I have introduced the bipartisan Stewardship End Result Contracting Improvement Act (S.326) that would amend the Healthy Forests Restoration Act of 2003 to provide the USFS and BLM flexibility to obligate funds for cancellation ceilings over multiple years, facilitating larger longer-term stewardship contracts. Are you aware of the July 25, 1998 Memorandum for the Heads of Executive Departments and Establishments regarding Federal Use of Energy Savings Performance Contracting, in which then-acting director of the Office of Management and Budget, Jacob Lew, encouraged the use of multi-year obligation for cancellation ceilings? Are you aware of the November 2008 GAO report "Use of Stewardship Contracting is Increasing, but Agencies Could Benefit

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from Better Data and Contracting Strategies” in which the GAO cites several Forest Service officials expressing an opinion that the USFS should be exempt from having to obligate funds for the cancellation ceiling at the outset of the contract; cites other USFS officials as saying that the first year obligation requirement “needlessly ties up agency funds that could be used to conduct additional work;” and states the first year obligation may create a reluctance to “enter into a multiyear contract that involves a large cancellation ceiling”? Will the Department support S.326, which allows multi-year obligation of cancellation ceiling funds consistent with the GAO recommendation and the 1998 OMB memorandum?

Answer: We are aware of the 1998 Memorandum and the 2008 GAO report. The Administration does not yet have a position on S.326 “The Stewardship End Result Contract Improvement Act”. We have improved our process in ways that will make implementation easier; however, in some situations significant funds will still need to be tied up. We look forward to working with you on improving and implementing stewardship contracting.

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**Question for the Record Submitted to Mr. Carlton Owen
from Senator John Barrasso**

Question 1: Mr. Owen, your testimony touches on the connectivity between the different types of active management and the correlating economic and ecological benefits.

How does active management promote healthier wildlife habitat, forests, economies, and watersheds?

Forests are dynamic systems in a state of constant change in ecological timeframes. When we look specifically at western coniferous forests which are fire-dependent systems, and where we've spent decades attempting to keep fire out, we are left with highly unnatural conditions – stands that are heavily over-stocked and thus at greater risk to disease and insect attack and of catastrophic wildfire. While we should reintroduce fire where possible and practical, doing so without first addressing the unnatural stocking conditions is not an option. Therefore, restoration forestry – forest management designed to remove unnatural levels of small-diameter, invasive, dying or dead trees – offers the best opportunity to return such stands to a more natural and healthier condition.

Restoration forest management provides additional benefits in that it also restores more natural wildlife habitat conditions, ensure that watersheds are not prone to catastrophic wildfire, and that local communities can benefit from the jobs and products that flow from these operations.

**Questions for the Record Submitted to Mr. Carlton Owen
from Senator Ron Wyden**

Question 1: Stewardship Contracting -- In your testimony, you spoke of the benefits of collaboration and Stewardship Contracting to fulfill the many goals supported by the forest including restoring ecosystems, removing hazardous fuels to prevent wildfires, and harvesting sustainable amounts of timber to revitalize rural economies. What are some specific ways that Congress can help to promote and support successful Stewardship Contracting?

Stewardship Contracts are perhaps the most promising tools to have entered the forest management tool chest in recent times primarily because they ensure local engagement and are founded on restoration forestry rather than having timber production as their primary objective. Timber sale contracts have their place in the Forest Service, but Stewardship contracts offer much more, and provide options for the Forest Service to bundle services. These contracts offer the government more opportunity to combine activities into one contract, producing a more efficient process and save on total costs for forest management needs.

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If Stewardship Contracts are to reach their full potential, the following changes should be considered:

- A. Terms should be extended from 10 to at least 20 years to better attract and amortize the private capital investments necessary to provide the infrastructure necessary to take advantage of the massive amounts of small-diameter material that comprise most such projects.*
- B. We must find ways to address NEPA issues in a much more cost-effective and time sensitive way. Perhaps, where the purpose of the contract is to address forest health issues and thus militate against catastrophic wildfires that would do perhaps irreparable damage to soils, watersheds, and endangered species habitats, there should be a truncated approach to NEPA.*
- C. To attract the private investment necessary to fully take advantage of the low-value materials that should be removed from Stewardship Contract areas, we need to find ways to offer additional incentives – perhaps in terms of watershed protection payments from local communities that benefit from such management interventions.*

Question 2: Biomass -- As you may know, I'm very interested in ways that responsible forest management can dovetail with the establishment of strong rural economies. This means thinking creatively about how forest management practices can also generate marketable products. One way of doing this that you touched on in your testimony is using biomass for energy, either for heat or for making electricity. This creates a value-stream for small diameter wood products that cannot be used for lumber, and this is the same stuff that we need to remove to reduce the threat of wildfires, and to keep our forests healthy.

Biomass to energy has enormous potential in Oregon, and many people are trying to make it work, but the problem is usually (1) being able to guarantee a steady supply of biomass for the energy project, or (2) to do so in a way that is cost competitive with other energy sources after the biomass is transported.

Do you have suggestions for how to help solve either of these two problems, and help biomass to energy achieve its potential for driving economic growth, promoting healthy forests, while also helping to address climate change?

Our nation's energy future will be much more of a distributed, local-based approach. In areas like Oregon, where nature provides large amounts of solar energy stored in solid form (biomass), woody biomass must be part of the solution to ensure that we keep our forests healthy and productive and that we create local jobs that take advantage of locally-produced energy sources. In my testimony I note that using a local energy product ensures that 75% of energy dollars circulate within the community rather than being exported outside the community. In rural economies such can mean the difference between economic viability and economic doom.

While we are big fans of conversions of facilities from fossil fuels to woody biomass energy where appropriate, these conversion and the related potential of more

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conversions of homes to next generation environmentally-friendly wood heating appliances, such transitions most often must be accompanied by federal and/or state tax incentives to off-set the potentially higher front-end costs of such conversions. At the same time, these conversions are not likely to create enough demand to fully supplant costly taxpayer-subsidized forest health thinnings on one hand, nor are they likely to provide enough market demand to meet the magnitude of market pull needed to address the multitude of acres needing treatment.

We therefore, believe that it is critical that public/private partnerships be rapidly developed and advanced to develop markets that can create a new type of energy product closer to the forest that will then support greater transport distances and products that have a much greater "shelf life." We think torrefied wood and/or liquid fuel products are the most promising. To make torrefied products – roasted wood – that has the potential to off-set a significant portion of coal use with a product with far fewer environmental downsides, while opening an entirely new mass market for low-value woody biomass. Too, torrefied wood offers the potential for a range of value-added products from carbon black, to plastic fillers, to soil amendments and water filtering material.

To fully explore and exploit the torrefied wood market we need strong public/private collaboration like that being led by the Endowment and USDA Forest Service's Consortium for Advanced Wood-to-Energy Solutions. Specifically, direction to the Department of Energy and federal facilities that currently are fired with coal, to explore and convert to torrefied wood, would speed the work and more rapidly advance the transition to market pull.

Question 3: Growing economies -- In order to best support the collaborative work that your businesses, organizations, and communities are doing in the forest, it's helpful to know what you think is working and what isn't when it comes to forest management and achieving economic growth, which is desperately needed in rural communities across the country. I'd like to know what agencies could be helpful to you in achieving your forestry and economic goals, both inside and outside the Department of Agriculture, and which agencies should I be checking in with to ensure that they're doing all they can to support your efforts?

Sticking only with torrefied wood and the potential of woody-cellulose-based nano products as the best currently available examples, it would be extremely helpful to have the Department of Energy put a major focus on these products and their greater societal benefits to keep forests as forests and to protect America's vital watersheds and wildlife habitats as concomitant benefits. Additionally, working with USDA Rural Development and perhaps the Rural Utilities Service to ensure that these two agencies, similarly, make torrefied wood and conversion of federal coal-fired facilities a priority. Finally, the Department of Defense has taken some very positive steps to address energy security of certain bases. Added priority to torrefied wood on the one-hand and the use of next generation Cross-laminated Timbers (CLT) in base construction on the other, could help prove these markets and speed their private sector adoption.

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**Question for the Record Submitted to Mr. Mark L. Peck
from Senator John Barrasso**

Question: Mr. Peck, the Forest Service and collaborative groups have encouraged the use of stewardship contracts. However, counties do not benefit from a stewardship contract in the same way they would from a timber sale because they do not receive 25% of the generated receipts. One of Mr. Vaagen's recommendations is for a portion of stewardship contract revenue to be made available to counties. As a county commissioner, would you support counties sharing in the revenue generated by stewardship contracts?

Answer: Absolutely! The Stewardship Program is a good tool for supply predictability, helping offset local USFS budget issues, etc. However, it currently does nothing for local government budgets and the authority needs to extend further than 10 years. I would recommend 12-15 years for industry and forest management predictability. I would also recommend that a majority of funds raised for the USFS stay within the timber management program for use on forest improvement and timber projects.

I would also like to entertain a new concept, trust land management for the local government level. I would recommend that a pilot project be authorized where counties may opt out of SRS and possibly PILT in lieu of 10-20% of forest holdings placed under county management in a trust very similar to state level trust management, which by all accounts is very successful. This helps address the current funding issues on the federal level and allows counties, under state law, to manage the wildland urban interface, provide for economic stability, keep lands open for public access and recreation and manage habitat, water quality and forest health. We would like to discuss the concept further when your staff has the time. I want to thank you for your leadership on this critical issue and offer our assistance in any way we can to help attain meaningful reforms and on the ground solutions.

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**Question for the Record Submitted to Mr. Mark L. Peck
from Senator Ron Wyden**

Question: Growing economies

In order to best support the collaborative work that your businesses, organizations, and communities are doing in the forest, it's helpful to know what you think is working and what isn't when it comes to forest management and achieving economic growth, which is desperately needed in rural communities across the country. I'd like to know what agencies could be helpful to you in achieving your forestry and economic goals, both inside and outside the Department of Agriculture, and which agencies should I be checking in with to ensure that they're doing all they can to support your efforts?

Answer: Very little is working very well. The new Farm Bill has taken good steps forward, but on a local level we really have little or no control over our destiny. As I stated in my written testimony, we have a strong history of collaborative efforts that have gone nowhere because we have no ability to implement. Most recently our collaborative group, through our common ground committee, developed an excellent plan for timber management on the Kootenai National Forest. It has unanimous support from conservation groups, industry, local government and recreation. The group went so far as hiring a very reputable consulting firm to analyze the recommendations and compare them with the new forest plan. We have a plan that has been socially and scientifically vetted and we have no means of implementation. The key agency is obviously the U.S. Forest Service (USFS) but they are so burdened by an overload of conflicting, vague and antiquated laws that create a no win scenario for a once proud and highly effective organization.

The Energy Independence & Security Act is the last to rear its ugly head. Well intended as it may be, it prohibited RIN credits for woody biomass product off of federal lands, 78% of our county is federal land. We are in the process of negotiating Libby, MT as the site for Biodiesel plant that is most likely not viable without the RIN credits. We are striving to diversify our economy and all too often federal laws, regulations or rules pop up putting us back at the drawing board. Many are at least understandable, this RIN issue makes absolutely no sense. Here we have a non-emission based process that can also neutralize the asbestos fibers at the root of the superfund site we are dealing with, plus provide a market for woody debris that is open burned due to lack of market, and once again we can't get there.

There are no easy buttons here, we need congress to roll up it's sleeves, invest the time and effort to truly overhaul the system. As I said in my written testimony, no one is winning under the current system. We stand ready to assist and work towards viable solutions, the time for band aid fixes has long since passed. We thank you for your years of working on and leadership regarding this issue and stand ready to help where you need us.

Alcan Forest Products

May 30, 2015
 Senator Ron Wyden,

Re: follow up question on hearing of March 25, The Health of the Nation's Forest System, Senate Energy and Resources

Thank you for the question and in answering it I would like to stress that I appreciate your willingness to work on behalf of rural communities to try and reverse some of the economic misery that has occurred. However, from our perspective, the government agencies you may be asking about are not going to be a solution to this problem at least in our region of Southeast Alaska.

The issue that faces us today is that there are no longer any choices most people can make to earn a livelihood. Most talented young people leave the region and the ones who stay do not have the opportunity to succeed in what would be historically considered to be middle class, where you could raise a family and own a home. The timber industry used to provide this stability as it provided full time work at decent pay and a stable environment. I am not here to say that the industry can be rebuilt to where it once was, but that if it can be stabilized and allowed to grow modestly so that there is some opportunity for people to earn a living and have stable lifestyles it would do far more good than what any government agency can provide.

In Southeast Alaska, there are only a few remaining companies left harvesting timber. It is not possible that everyone else has left because of the lack of government programs or compassion. Lack of federal timber is the reason. The solution lies in the anomaly that in a 17 million acre forest, where only around 2% is slated for timber production, the USFS is not able to supply enough timber to keep the region from becoming one of broken homes and welfare dependency. Grants, loans and restoration work will not rebuild the infrastructure needed to provide stability, but a stable supply of timber will. During the hearing I was struck by how so many people expressed the sentiment that the forest is a liability and was costly and cumbersome to manage; that is not the attitude I learned while studying at Oregon State and working in the timber industry for the last 40 years. The forest is an asset and should not have to be subsidized or require stimulus to provide products and a livelihood for people. While the SRI funding benefits the communities to some extent it does not address the lack of opportunity that destroys communities. A stable supply of timber can do that; however it is something the USFS cannot seem to deliver.

If Congress wants to help further in this endeavor, it would be far more advantageous, instead of throwing money at the problem in the way of loans or grants, to look at the regulations that strangle our businesses and make it difficult to stay in business. All that is left in Southeast Alaska are small companies, like ours, and dealing with the regulators becomes way too cumbersome. A partial list of Federal Government agencies we deal with would be:

- 1) EPA
- 2) US Coast Guard
- 3) Army Corps of Engineers
- 4) US Fish and Wildlife
- 5) US EEOC
- 6) US Dept of Labor
- 7) ATF
- 8) National Marine Fisheries
- 9) Dept of Justice (USFS law enforcement)
- 10) FCC

While a big corporation can probably have a division or staff, devoted to government relations, our company cannot so it is left to the owners to deal with this bureaucratic maze of rules and regulations. So while working 16 hours a day to run a business you get to worry about all these things if you ever get lucky enough to develop some free time.

Just as in the Pacific Northwest. Alaska needs a mix of State and federal management to sustain a successful timber industry and foster an economy to give our citizens and particularly our children a future

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Alcan Forest Products

in rural areas. As you know, Oregon manages 821,000 acres of state forests with a vibrant state sale program. The state of Washington manages 2.6 million acres of forest lands. These forest programs provide a variety of opportunities for timber harvest and support schools and communities as well. In Southeast Alaska the USFS can't provide timber to our industry, and manages to be a net drain on the treasury even though it owns virtually all the timber in the region.

That is why the Alaska Forest Association supports the Congress passing a law to establish a State Forest as we testified at the recent hearing.

Thank you,

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**Questions for the Record Submitted to Mr. Duane Vaagen
from Chairman Lisa Murkowski**

Questions: We have lost milling infrastructure across the West. In many places in the West when the industry died forest health declined. Today, in many states, like Arizona and Colorado, we are trying to rebuild an industry so that we are able to address the unhealthy state of our forests.

- a. In your experience why is it important to maintain the timber milling infrastructure where it exists?
- b. What is necessary to ensure that existing infrastructure is not lost?

**Questions for the Record Submitted to Mr. Duane Vaagan
from Senator Ron Wyden**

Question 1: Growing economies

You spoke about the need to restore the health of our forests while also improving rural economies. In Oregon, we've seen a steady decline of work in our forests, forcing mills to close and leaving rural communities reeling. Collaborative forestry has proven to be a successful way to bring all interests together to accomplish the many goals of the forests, but there has to be buy-in and support from all sides. As a business owner and participant in collaborative groups, what do you think Congress and agencies like the Forest Service and the BLM can do to better support these collaboratives to ensure their success?

Question 2: Growing economies

In order to best support the collaborative work that your businesses, organizations, and communities are doing in the forest, it's helpful to know what you think is working and what isn't when it comes to forest management and achieving economic growth, which is desperately needed in rural communities across the country. I'd like to know what agencies could be helpful to you in achieving your forestry and economic goals, both inside and outside the Department of Agriculture, and which agencies should I be checking in with to ensure that they're doing all they can to support your efforts?

From: [Duane](#)
To: [Ripchensky, Darla \(Energy\)](#)
Subject: Energy Hearing
Date: Wednesday, June 03, 2015 4:04:40 PM

Senator Wyden question # 1& 2

1 Bigger landscape projects that would fill current milling infrastructures, especially rural community mills! Also help fund local collaboratives to keep them operating using retained receipts on projects that they helped move forward.

2 Have the USFS include SBA in the stewardship program would be most beneficial!
The mechanical acres treated is the most important metric to measure solid forest health treatments, which help rural communities & forest health to minimize the growing wildfire threats!

Senator Murkowski question A&B

A When you loose your mills you loose your markets and your abilities to manage your forest!
No mills, No markets, No management! If we can't keep the existing mills with ample fiber supplies, How would you ever attract new mills in the future?

B Time is of the essence! We must have adequate log supplies for current & existing mills!
If we are ever going to treat enough acres to minimize wildfire threats, we either treat aggressively or burn aggressively!

**Testimony of Phil Rigdon
President, Intertribal Timber Council
Submitted to the Senate Committee on Energy & Natural Resources
Hearing on “Improving Forest Health & Socioeconomic Opportunities on the
Nation’s Forest System”
March 24, 2015**

I am Phil Rigdon, President of the Intertribal Timber Council (ITC) and Natural Resource Deputy Director for the Yakama Nation in south-central Washington State. The ITC is pleased to submit this testimony for the Committee’s record on this March 24, 2015 hearing to share concerns and recommendations regarding the management of the United States’ National Forests.

There are significant differences between the management of federal and Tribal forests, with similarly different outcomes.

On a total of 334 reservations in 36 states, 18.6 million acres of forests and woodlands are held in trust by the United States and managed for the benefit of Indians. Pursuant to both Tribal direction and federal law, Indian forests must be sustainably managed. Indian Tribes are direct partners with the Bureau of Indian Affairs in the active management of our forests. We operate modern, innovative and comprehensive natural resource programs premised on connectedness among the land, resources, and people. Our approach is holistic, striving to simultaneously sustain economic, ecological, and cultural values, the “triple bottom line.”

Recommendation #1: Independent Review

Unlike Forest Service and BLM forests, an independent scientific panel – an Indian Forest Management Assessment Team (IFMAT) reviews Indian forests and their management every ten years. In 2013, the IFMAT released its third report to Congress since 1993.

The 2013 IFMAT report (IFMAT III) shows that Tribal forests are suffering from chronic underfunding and challenges created by the loss of leadership and staffing: on a per acre basis, Tribal forests receive about one-third the funding for forest and wildfire management as the Forest Service; Tribal forests are also understaffed by 800 positions.

Yet IFMAT III also shows significant progress being made on Tribal forests. One of the key findings of the IFMAT report is that Tribes are able to accomplish more in our forests with far less funding than other federal land managers, and the management of our forests has the potential to serve as models for others.

These are not rubber stamp reports, and they’re not intended to collect dust on shelves. Instead, the IFMAT reports are exhaustive in scope and hard-hitting in their findings. IFMAT III includes a list of 68 recommendations, and the ITC is partnering with the

Department of the Interior and the Department of Agriculture to implement these recommendations to the greatest extent possible. Our response to the recommendations will then be tested and reviewed in the next IFMAT report.

Such a comprehensive review of other federal forests would certainly be a daunting task. However, a more targeted, regular review of the National Forest System's timber program, forest health and other goals may produce objective recommendations for improving the performance of those programs.

Recommendation #2: Improve the Tribal Forest Protection Act

When Congress authorized the Tribal Forest Protection Act (TFPA) (PL 108-278) in 2004, it was intended to provide Tribes a means to propose projects on adjacent federal lands that would protect the Tribes' rights, lands, and resources by reducing threats from wildfire, insects, and disease.

Under the TFPA, the Secretaries of Agriculture and Interior are authorized to enter into agreements or contracts pursuant to Tribal proposals to address hazardous conditions on nearby Forest Service and BLM administered lands.

Although well intentioned in Washington, D.C., the TFPA has not met expectations on the ground. Since 2004, only six TFPA projects have been effectively implemented on Forest Service lands.

One project proposed by the Tule River Tribe in California took over ten years to navigate the Forest Service's NEPA process. Another project, proposed by the Warm Springs Tribe in Oregon, was abandoned before implementation because of the threat of litigation from environmental organizations. Without treatment, the Forest Service area targeted by the Warm Springs for TFPA not only burned, the fire spread onto Tribal land, burning an area being considered for carbon sequestration by the Warm Springs Tribe.

The Forest Service and the ITC recently completed a formal review of the TFPA and identified several recommendations to better accomplish its intended outcomes. These include greater education of Forest Service staff about the TFPA authority and finding other ways to encourage Tribes to commit the time and resources to the TFPA process. This spring, the USFS and ITC are conducting regional workshops for USFS, other federal personnel, Tribes, and other interested parties to learn about TFPA and to actually start forging TFPA agreements.

While we are hopeful that more TFPA projects will emerge, the ITC would like to work with this Committee to explore ways to amend TFPA or other authorities to expedite consideration, approval, and implementation of TFPA projects. These include addressing environmental compliance through categorical exclusions and faster timelines.

Recommendation #3: Anchor Forests

The loss of forest products infrastructure – both private and tribal -- threatens the ability to economically treat forests before fire. To help address this issue, the ITC has developed and is participating in a concept called “Anchor Forests.”

Anchor Forests is a way of looking at forest management across ownerships – federal, tribal, state and private. The goal is to collaboratively develop long-term wood and biomass production levels that are backed by local infrastructure and technical expertise, and through the application of active management, contribute to the restoration and maintenance of healthy, resilient and productive forests.

Tribes have traditional knowledge of the land and have demonstrated an integrated and holistic approach to forest management. We can act as “bridges” between stakeholders to develop consensus for large-scale forest health projects.

Currently, the ITC is engaged in a pilot project involving three Anchor Forest study areas in Washington State and Idaho, with participation and support from USFS, BIA, Washington State, the conservation community, and local forestland owners and businesses that are affected by forest health and productivity. The Yakama Nation is engaged in one of those study areas. Other current Anchor Forest study areas involve the Colville, Spokane and Coeur d’Alene Tribes. Tribes in the Lake States, the Plains States, Alaska, and the Southwest are beginning to express interest in the Anchor Forest concept as well.

This collaborative approach to forest management is something ITC would like to work on with this Committee to explore Anchor Forests on a larger scale.

Summary

Tribes understand, and many of our neighbors understand, that contemporary forest issues require that we consider and pursue reaching across our borders to address active forest management on a sustained landscape basis. The data, findings and recommendations of the IFMAT III report and the TFPA and Anchor Forests projects are tools to foster such necessary collaboration. Even with our shoestring federal support for trust forests, Tribes are operating innovative and effective forest management programs that can serve as models for other forest stakeholders. We stand ready to work with our neighbors to share our forest knowledge and management pursuits. I invite you to visit our reservations to see how Tribes are actively managing our forests to maintain healthy, resilient landscapes. Our management approaches could provide informative examples and contrasts to the results of over a century of policies on neighboring federal public forest lands.

That concludes the ITC testimony. Thank you.

**Statement for the Record from
Salt River Project**

**Submitted to the Senate Committee on Energy and Natural Resources
Hearing on "Management Reforms to Improve Forest Health & Socioeconomic
Opportunities on the Nation's Forest System"
Held on March 24, 2015**

Chairman Murkowski, Ranking Member Cantwell and members of the Committee, thank you for the opportunity to submit testimony for the March 24, 2015 hearing entitled "Management Reforms to Improve Forest Health & Socioeconomic Opportunities on the Nation's Forest System." For over a hundred years, the Salt River Project (SRP) has responsibly managed water supply for the Phoenix valley including efforts to protect the forested headwaters ~~are~~ that provide the majority of the water for metropolitan Phoenix. Around the turn of the 20th century, watershed protection efforts centered on setting aside lands in the federal forest system to ensure development and timber harvest were conducted in a way that preserved a sustainable water supply for Arizona. Today, the unhealthy state of these forests, created in large part to protect the water flowing from them, has led to catastrophic wildfires that threaten not only the wildlife, recreational, and multi-purpose value of these forests, but also the reliability, sustainability and quality of drinking water for millions of Arizonans.

SRP is currently involved with several forest restoration projects which have highlighted the need for federal action to address both fire suppression funding and the planning and compliance processes in order to accelerate the pace and scale of work needed to protect our forestlands and water supply. As the Committee has recognized, fixing the annual "fire borrowing" that often funds fire suppression, at the expense of preventative restoration activities, is important to increase the capacity of projects the U.S. Forest Service can administer. We appreciate efforts by the Chairman, Ranking Member, Senators Flake and McCain, and other senators to find an acceptable solution to this ongoing problem. However, budget is only one of several issues that must be addressed. The length of time it takes to undertake the required planning, environmental compliance, and administrative activities also needs to be addressed to recognize delayed action increases the risk of a catastrophic fire that will damage our national forests and watersheds, ecosystems, and species for decades.

Salt River Project

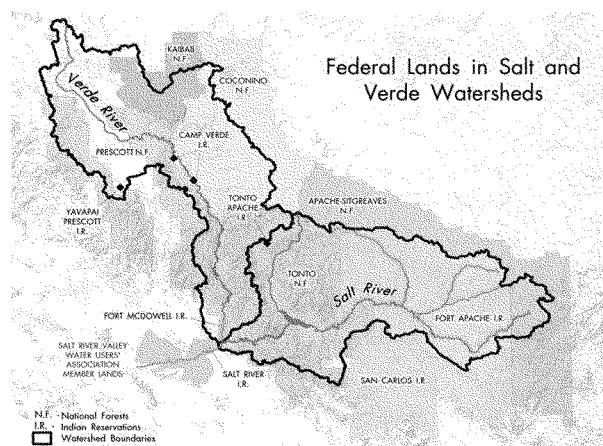
SRP is composed of the Salt River Valley Water Users' Association ("Association") and the Salt River Project Agricultural Improvement and Power District ("District"). Under contract with the federal government, the Association, a private corporation authorized under the laws of the Territory of Arizona, and the District, a political subdivision of the State of Arizona, provide water from the Salt and Verde Rivers to approximately 250,000 acres of land in the greater Phoenix area. Over the past century, most of these lands have been converted from agricultural to urban uses and now comprise the core of metropolitan Phoenix.

The Association was organized in 1903 by landowners in the Salt River Valley to contract with the federal government for the building of Theodore Roosevelt Dam, located some 80 miles northeast of Phoenix, and other components of the Salt River Federal Reclamation Project. SRP was the first multipurpose project approved under the Reclamation Act of 1902. In exchange for pledging their land as collateral for the federal loans to construct Roosevelt Dam, which loans have long since been fully repaid, landowners in the Salt River Valley received the right to water stored behind the dam.

SRP now operates six dams and reservoirs on the Salt and Verde Rivers in the Gila River Basin, one dam and reservoir on East Clear Creek in the Little Colorado River Basin, 1,300 miles of canals, laterals, ditches and pipelines, groundwater wells, and numerous electrical generating, transmission and distribution facilities. The seven SRP reservoirs impound runoff from multiple watersheds, which is delivered via SRP canals, laterals and pipelines to municipal, industrial and agricultural water users in the Phoenix metropolitan area. SRP also operates approximately 250 deep well pumps to supplement surface water supplies available to the Phoenix area during times of drought. In addition, SRP provides power to over 1 million customers in the Phoenix area, as well as other rural areas of the State.

SRP Watershed

Since the end of the nineteenth century, farmers and residents of the Salt River Valley have been integrally involved and interested in the management of the Salt and Verde watersheds. Although the Valley's involvement with the forested land has changed over the decades, the



interest has remained constant due to the watersheds' vital role in producing water for the Valley.

In 1891 and 1897, the U.S. Congress passed legislation enabling the federal government to set aside forests to help preserve the nation's water supply for future generations. In 1897, the Arizona Territorial Legislature wrote to Congress and stated, "The forests on these water-sheds [Salt and

Verde]... are in great danger of being entirely removed by settlers and large lumber companies to the great detriment of our water supply." Over the next decade, National Forests were created primarily to protect the watershed above Theodore Roosevelt Dam and to protect the

watershed along the Verde River. In 1901 the *Arizona Republican* touted the designations by saying: "Protection to the magnificent forest and the conservation of the waters that feed the Verde and Salt Rivers. The value of this action to the people of the Salt River valley cannot be overestimated." Today, 59% of SRP's 13,000-square-mile watershed lies within national forests as part of a plan to provide a renewable water supply for the Valley. The hydrologic values associated with healthy forests were recognized by the federal government during the early part of the 20th century, and was the underlying reason most forest lands were set aside in Arizona; for the protection of the water supplies used in the Salt River Valley.

Risk & Impact of Inaction

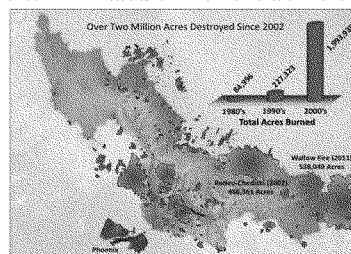
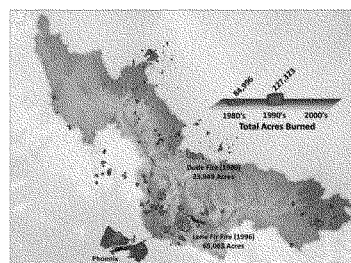
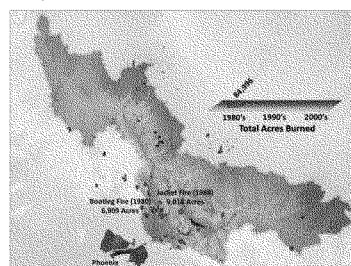
As the last three decades have proven, failure to take action to better manage and restore forested lands have resulted in more and larger fires. The growing size and impact of wildfires on SRP's watershed can be clearly seen in the included graphics. In the 1980's just under 85,000 acres in the watershed burned and a 5,000-10,000 acre wildfire was considered very large. In the 1990's the total acres burned grew to about 227,000, and since 2000 nearly 2 million acres have burned, with two fires alone consuming nearly 1 million acres.

The growing size and frequency of wildfires has clear economic, ecological and human impacts. Fighting and recovering from a catastrophic wildfire can cost up to 30 times more than restoration, and studies done following the historic Wallow fire in Arizona have shown that the total economic impact is quickly approaching \$1 billion.

Deteriorating forest health and catastrophic wildfires also impact the hydrologic characteristics of watersheds. Runoff and water yield, peak flows and low flows, erosion and sedimentation, and water temperature and chemistry are all negatively impacted by unnatural forest conditions and severe wildfires.

Water Supply and Storage

Unhealthy forests and catastrophic wildfires affect the short and long term management and sustainability of our water supply. The timing and characteristics of runoff, reservoir storage capability and water yield are being adversely impacted by the state of our forests and the recent megafires that continue to occur on the watersheds.



In Arizona and throughout the west, reservoir storage is a critical component of water supply and drought management. Dams are typically designed to have a specific useful life with storage capacity gradually decreasing as sediment carried by the streams and rivers discharge into the reservoir. Catastrophic wildfires, unlike the low intensity fires seen in healthy forests, cause burn areas that devastate the landscape and produce increased loads of sediment, ash and debris causing reservoirs to fill up faster and reduce the life and storage capacity of reservoirs. The loss of trees and groundcover from wildfire may also affect the timing and behavior of runoff, impacting the predictability and operations of water supply.

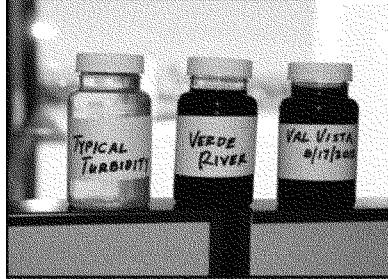
Heavily forested and steep walled watersheds have characteristics that amplify the impact of sedimentation due to wildfire. SRP's C.C. Cragin watershed, discussed below, is one such circumstance and is especially at risk of significant decrease of capacity from a single wildfire. In Colorado, wildfires in the watershed that feeds the Strontia Springs reservoir, a reservoir similar in size to C.C. Cragin reservoir, followed by summer rains, washed more than one million cubic yards of ash and debris into the reservoir. The significant inflow of sediment and debris required Denver Water to spend more than \$60 million in slope re-stabilization efforts, water treatment and reservoir dredging to mitigate the impacts caused by these wild fires.

Forest restoration may also have a positive effect on water yield, however the volume of potential benefit have not been analyzed extensively nor thoroughly investigated from a field measurement perspective. SRP's participation and funding of research efforts and in the field monitoring of precipitation, snowpack and stream flow will broaden community understanding of the connection between forest management in the Salt and Verde watersheds and dependable, high-quality water supplies in the Phoenix area. Together with NAU and the other State universities there will be increased focus on gathering field data and modeling water yield between control watersheds and those that have been treated. Other studies have estimated increases of runoff from 5% - 40% due to restoration, or forest thinning programs. However, the characteristics of each watershed differ in landscape, climate and geology. This study project with the State universities should provide SRP a better understanding of the impacts of restoration on surface water runoff and groundwater recharge.

Water Quality

The water quality impact of catastrophic fire and post-fire flooding has both short and long-term impacts, reaching throughout the watershed, and extending far beyond the immediate impact area of the fire and the surrounding communities.

The ash and sediment picked up by runoff after a fire severely impact the taste and purity of drinking water supplies causing an increase in turbidity, and nutrient and organics loads that must be removed during treatment. Runoff events following fires have also resulted in significant changes in the levels of nitrates, sulfates, chlorides and organics entering SRP's reservoir system. Over the longer term, the increased volume of sediment deposited behind reservoirs due to changes in runoff patterns and soil destabilization can impact the taste and odor as dissolved organics increase in the water.



In situations where fires occur low on the watershed and the runoff from the affected area does not enter a reservoir prior to entering delivery canals, the water quality impacts can be more immediate and severe. One such fire and post-fire flood required SRP to blend water in our canals with Central Arizona Project Water to bring down the particulates before delivering it to water treatment plants, and also required that a large quantity of valuable runoff be dumped without being put to a beneficial use.

The increase in organics and sediment in the SRP water supply from fires and ever increasing water quality standards have directly led to increased capital and operational costs at city water treatment plants. In many cases treatment facilities have been upgraded by adding carbon filtration to handle the increased levels of organics and sediment at a cost of hundreds of millions of dollars. SRP is partnering with our municipal customers to invest in forest restoration projects as a way to improve the health of the watershed and avoid ever increasing treatment costs related to water quality impacts from catastrophic wildfire.

SRP Forest Restoration Activities

SRP is actively involved in protecting the health of the watersheds that serve SRP customers and shareholders, with a primary goal of expediting forest restoration efforts through collaboration, targeted investments and fundraising, project and policy development, and educational programs that show the clear link between the interests of valley cities and businesses and the health of our forests. SRP also continues to invest in scientific research to better understand and communicate the importance of forest restoration treatments on the hydrologic function.

Four Forest Restoration Initiative

Through the nation's largest forest restoration effort, known as the Four Forest Restoration Initiative (4FRI), over 2.4 million acres are designated as needing some form of restorative work to improve the resiliency of the forest.

The Four Forests Restoration Initiative (4FRI) is a collaborative effort to restore more than 2.4 million acres of forests in northern Arizona. The goal is to restore these forests to a healthy state-- reducing the risk of catastrophic wildfire, while promoting functioning forests and supporting a sustainable forest industry that works to keep forests healthy and strengthen local economies. 4FRI is the largest landscape-scale restoration project in the United States, working to restore forested lands in the Coconino, Kaibab, Tonto and Apache-Sitgreaves National Forests. 4FRI is a collaborative effort that centers around the Forest Service working with more than 50 stakeholders to ensure that the multi-purpose nature of these Federal Lands is preserved. Additionally, 4FRI works to re-establish a strong forest products industry in the state—an effort that is essential in performing the restorative treatments necessary to reach the

goal of a healthy and resilient forest. The efforts taken by the Four Forests Restoration Initiative are key in helping ensure that the forested lands in the Salt and Verde watersheds are not destroyed by catastrophic wildfire.

The Restoration of C.C. Cragin Reservoir Watersheds MOU

The Town of Payson, US Forest Service, Bureau of Reclamation, the National Forest Foundation and Salt River Project signed a Memorandum of Understanding (MOU) on July 17, 2014. The MOU aims to reduce the threat of severe wildfire in and around the watersheds that drain into the C.C. Cragin Reservoir. The MOU was formed under the Western Watershed Enhancement Partnership program enacted by the U.S. Departments of Interior and Agriculture in 2013. The partnership was formed in response to the need for forest restoration activities to protect the C.C. Cragin reservoir, a water supply to the Town of Payson, Salt River Project and communities in northern Gila County. The area of interest has more than 64,000 acres of ponderosa pine and mixed conifer forests at risk to catastrophic wildfire. The project team is currently working to develop a 5-year action plan which specifies accomplishment targets for planned restoration and protection activities within the project area. The first year of planning is underway, requiring \$378,909 appropriated in the FY15 Coconino National Forest Service budget. The Coconino National Forest has requested \$501,000 be appropriated in FY16 for NEPA planning processes for the C.C. Cragin fuels reduction project.

Northern Arizona Forest Fund

Developed in partnership between SRP and the non-profit National Forest Foundation (NFF), the Northern Arizona Forest Fund (NAFF) was created to provide a funding mechanism for investment in site-specific projects on federal lands that are critical to improving the health and resiliency of forests located within the Salt, Verde and East Clear Creek watersheds. These watersheds provide surface water supplies and other important natural resources to SRP's customers, shareholders, and municipalities. With declining forest health and tighter federal budgets, leveraging public-private partnerships is critical.

The NAFF's projects focus on reducing wildfire risk, improving streams and wetlands, enhancing wildlife habitat, and minimizing erosion and sedimentation that can affect Arizona streams, rivers and reservoirs. NAFF's first year projects include two high-priority projects in the Verde Watershed; The Oak Creek Erosion Control Project and the Upper Beaver Creek Forest Health Project. Together, these projects will protect over 1000 acres of forested critical habitat for the Mexican spotted owl and improve conditions of over 20 miles of forest roads which minimizes sedimentation into the Oak Creek Watershed.

Along with SRP and NFF, Valley stakeholders, businesses, philanthropic groups and cities are committing to their engagement in the NAFF, improving the resiliency of the Salt and Verde watersheds – especially addressing the threats of fire, insects, drought and a variable climate. At the same time, SRP through the NAFF is providing certainty to our shareholders, while building capacity and awareness of the critical link between our forests and the long-term sustainability of the Valley's water supply.

Opportunities to Accelerate Forest Restoration

In Arizona as in many western states, there is a deep body of science that clearly demonstrates the need and benefit of thinning projects in overgrown forests, and important partnerships between academia, local stakeholders and conservation groups, and the federal, state and local governments that are working to translate the science into action. However, despite the strong coalition and engagement from a diverse set of interests, limits on USFS resources and capacity, litigation driven decision making, and lengthy environmental compliance requirements are slowing progress on forest restoration. Congress should consider a number of improvements to current law that reflect the urgency of action in our forests and rebalance the level of environmental analysis based on the risk of wildfire and severity of impact on ecosystems and habitat.

Fire Borrowing & Project Administration

As has been discussed, the growing cost of USFS fire suppression activities is negatively impacting the budget available to carryout critical restoration projects that protect forests and will begin to reduce firefighting costs over the longer term. SRP supports the FLAME Act Amendments of 2015 (S.508), but also recognizes there may be other potential structures that would address the “fire borrowing” issue. In order to provide the confidence necessary to encourage the private sector investments needed to repair our forests, it is important that the final solution provide budget flexibility to prevent the fire suppression spending from cannibalizing the budget for other USFS programs and provides assurances that increases in budget authority will provide dedicated and sustained funding for forest restorations programs. It is important to SRP that any increased funding or budget flexibility is directed toward restoration programs first to not only protect these federal lands but as an upfront investment to decrease future suppression costs.

Providing greater flexibility for stakeholders partnering with the USFS on specific projects to pursue opportunities for contractors to conduct portions of the planning, compliance or implementation process is another way to improve the resource and capacity issues faced by the agency. In addition, empowering project partners to play a greater role in the execution of this work could have the benefit of addressing the challenge associated with changing agency personnel and leadership at the forest level. Specifically, giving project partners some formal role in affecting which authorities and established processes the Forest Service uses to undertake thinning work could allow for best practices and success stories to be replicated in more projects.

Environmental Compliance

Conducting the extensive analysis and administrative steps needed to comply with the National Environmental Protection Act (NEPA) and Endangered Species Act (ESA) commonly takes multiple years and is often required prior to undertaking any work to reduce fire risk. While in some circumstances Categorical Exclusions can accelerate work on a limited number of acres, an EIS is typically required for projects of the scale necessary to significantly mitigate fire risk on watersheds. In order to accelerate forest restoration, some level of compliance streamlining is needed.

The C.C. Cragin watershed project discussed above is a good example of a project of critical priority – where the landscape is highly susceptible to a catastrophic wildfire and the impacts would severely impact a municipal water supply – but the environmental compliance processes is expected to take 2 years before hazardous fuels reduction activities can begin on the ground. That will leave the endangered species, ecosystem, and water supply vulnerable for two fire seasons, despite the known risk of delaying action for this length of time. While it is important to take reasonable steps to ensure that thinning projects avoid impacting endangered species and sensitive habitat, the current process prioritizes analyzing any potential impact over protecting against the certainty that a single unlucky lightning strike or cigarette can destroy the entire landscape.

One step that would be valuable in accelerating compliance is reassessing the basis in which Categorical Exclusions for forest restoration activities are granted to include the likelihood, intensity and effects of wildfire on wildlife and ecosystem function - factors that are being assessed as part of the USFS Wildfire Risk Assessments. These factors, as opposed to the size (in acres) of a project, are a better determinant of whether fire presents a greater risk to the environment than inaction. Additionally, limits on the intensity of thinning (i.e. hazardous fuels reduction v. full restoration) could also be a more appropriate assessment of potential impacts than simply the size of a project.

Another policy change that would improve the compliance process for treatments requiring a full EIS is allowing projects designed to mitigate fire risk on watersheds highly susceptible to catastrophic wildfire to analyze zero or one alternative no matter which existing authority the project partners utilize to undertake the work. This process authorized as part of the Healthy Forest Restoration Act has been useful where it applies, but expansion to allow it to be used on the most vulnerable landscapes could reduce the length and complexity of NEPA compliance.

Judicial Review

Litigation is often the cause of lengthy delays in forest restoration projects that increase the risk of catastrophic wildfires. Clearly changes to judicial review procedures can be contentious, but given the risk and impact of a catastrophic wildfire, a higher standard should be required to stop or delay projects in the most critical areas. Additionally, the constant threat of lawsuits often forces USFS staff to be more focused on process than on the risks and needs of the forest. In order to begin improving the functionality of the dispute resolution process to better align with the urgency of forest restoration, Congress should consider moving toward a process focused on an acceptable middle ground based on impacts and risks.

As has been discussed and proposed, a positive approach that would place a premium on timely resolution to and constructive engagement on disagreements is instituting binding arbitration in place of litigation on certain forest restoration projects. Limiting legal standing to entities that are directly impacted by the project in question and/or have registered an interest in the project during the scoping and public engagement opportunities would also provide for a

process geared toward finding consensus on what work can be undertaken quickly rather than obstructing progress on all actions regardless of whether they have broad consensus.

Conclusion

The continued value of our National Forests in providing wildlife habitat, ecological protections, clean water supply, recreational opportunities, forest products and healthy rural economies depend on accelerating restoration and hazardous fuels reduction. Restoration also results in significant carbon sequestration in certain forest types, which has a positive environmental benefit and may present an additional revenue stream to fund forest thinning. SRP and multiple partners in the conservation, forest products, academic and government sectors remain committed to taking every step possible as quickly as possible to treat and protect Arizona's forests. Thank you for the opportunity to submit testimony and for your attention to this critical and timely issue.