



# Achieving Oregon's Vision for Federal Forestlands

OREGON BOARD OF FORESTRY



January 2009



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## Executive Summary



Forest health and sound stewardship are critical to Oregon's current and future well-being. Healthy federal forests are needed to sustain social, environmental, and economic values. But in the current system of governance, Oregonians have relatively little direct influence on how these forests are managed and used. Federal agencies manage 60 percent of the total forestland in the state, and Oregon cannot chart a sustainable, productive future for its forests without considering federal forestlands. As the Governor noted in an address to the Oregon Board of Forestry,

“Ensuring sustainable forests in Oregon requires that we understand that the social, environmental and economic benefits of forests are not only important – but also interconnected. . . . We have to get past this costly conflict over our forests and craft the public policy model that is described in the *Forestry Program for Oregon*.”

*Governor Kulongoski,  
October 22, 2004*

Therefore, the Governor directed the Oregon Board of Forestry to “create a unified vision of how federal lands should contribute” to sustainability, and to “make that vision action-oriented and comprehensive – following through to the last step, including implementation.”



This document sets forth a vision and set of key goals that should be pursued on federal forestlands to create forests that are ecologically sustainable, economically viable, and appreciated by all stakeholders. It presents recommendations to implement our vision and includes specific policy steps necessary to achieve the vision we have crafted. This document articulates Oregon's interests at the national policy level and is intended to guide the State's participation in planning the future of Oregon's federal forestlands.

## Vision and Goals

### **Our Vision for Oregon's Federal Forests**

*F*ederal forestlands in Oregon are a legacy, a refuge, and a resource; loved and celebrated by our citizens; inhabited by healthy populations of fish and wildlife; and managed with humility, wisdom, and innovation to sustain the economic, environmental, social, and cultural well-being of our rural and urban communities.

### **Our Goals to Achieve the Vision**

#### ***Environment***

1. Forest and rangeland ecosystems are protected, restored, and managed for a full range of sustainable ecosystem benefits within the context of climate change. These benefits include aesthetic values; biodiversity; clean air; grazing; human health; native fish, wildlife and plants; recreation; resiliency; soil productivity;



timber; water quality and quantity; and wilderness.

### ***Social***

2. Federal forestlands respond to site-specific variations and community-based management principles, taking into consideration tribal, local, state, and national needs and priorities. Management provides opportunities for people to realize their material, spiritual, and recreational values and relationships with the forest. Federal forestland management rebuilds and maintains trust within affected communities using collaboration, adaptive management, and other innovative strategies.

### ***Economic***

3. Federal forestlands provide a predictable, sustainable supply of the full suite of goods and services now and into the future. Federal forest policy contributes to the creation of stable jobs and economic well-being for local communities across the state.

### ***Process***

4. Federal forestland managers take action to address national, state, and local needs. The Governor, the Oregon Legislature, Oregon Congressional Delegation, and others actively support federal forestland management to accomplish these goals and take action on the most pressing problems identified in this report to enable federal managers to carry out the necessary work.
5. Federal forestlands are managed with a clearly defined vision and strategic goals developed and implemented through a collaborative partnership with national, state, local and tribal governments, and public involvement. The vision and goals are understood and supported by the public. These processes and relationships address management challenges and provide a new consensus approach to problem solving and conflict resolution, resulting in a synergy of benefits.
6. The federal government is committed to providing adequate and stable funding from multiple sources and mechanisms so that federal agencies can meet their stewardship, restoration, and sustainability obligations.
7. Federal policy guidance provides stability and balances the need for accountability, while preserving local flexibility in the management of federal forestlands to ensure sustainability, and simultaneously meet state, tribal, local, and national needs.



# Problems

There are many problems reducing the ability of federal forestlands in Oregon to contribute a full range of sustainable forest values to Oregonians and the Nation. **These problems are interrelated and difficult to solve in isolation.** In this report we have identified the most pressing “problems of place” and those overarching problems that if solved would help to address problems of place and other concerns.

## Problems of Place

Problems of place are the most important and immediate issues facing Oregonians, particularly those living in rural communities.

Moreover, these problems are major impediments to the sustainability of forests and associated economic, environmental, and social values in Oregon. There are three interrelated problems of place with the biophysical conditions of forests and the infrastructure needed to manage them. These are as follows:

1. **Forest health** and resiliency have declined in Oregon’s federal forests. Specific problems vary, depending on the type and location of

forests. The manifestations of degraded forest health are most extreme in the dry forest types (eastern and southwestern Oregon) where overstocked forest stands have resulted in unprecedented landscape-scale problems like uncharacteristic wildfire and insect epidemics that may result in the loss of key ecological components. In western Oregon, hydrologic regimes have been altered by roads and other factors, and conditions may not protect



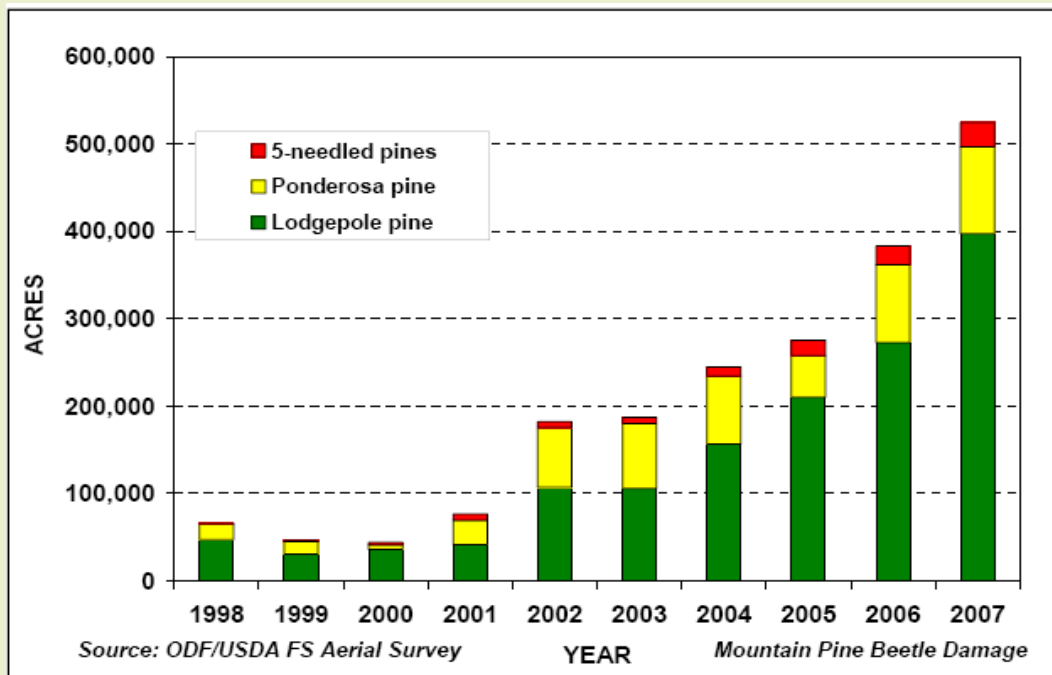
*Photo courtesy of the U.S. Forest Service*

**Retardant Drop on the Hash Rock Fire, Ochoco National Forest**





## Mountain Pine Beetle Damage in Oregon



beneficial uses like water quantity and quality. Climate change is and will continue to tax the resiliency of federal forestlands across the state.

2. **Reduced timber harvest** from federal forestlands has led to a decline in forest industry infrastructure, with unintended economic and social losses to rural communities, including receipts from timber used to support roads and schools.
3. **The desired amount of older forests** on federal forestlands needs to be established and protected as a component of sustainable forest management. A well-balanced program of forest management activities is necessary to maintain the mix of successional stages and vegetation conditions that provides for the full diversity of habitats and species.

## Overarching Problems

Overarching problems affect our collective abilities to adequately



address the problems of place. Overarching problems are issues involving federal laws and administrative rules and their interpretation, administrative and legal processes, relationships between people, organizations, and different levels of government, financial support for federal management operations, and their

interactions. These overarching problems are affecting the ability to make decisions, resolve conflicts, and implement projects on the ground to address problems of place. The four most important overarching problems are:



Photo courtesy of the U.S. Forest Service

#### Old Growth Forest

*Old growth forest at Lookout Creek, part of the H.G. Andrews Experimental Forest on the Willamette National Forest*

1. Federal laws, policies, and court decisions that govern federal forestlands have led to a **collection of discordant goals and mandates** that often work at cross purposes and inhibit agencies from reacting decisively to issues such as declining forest health. This

confusion complicates rather than solves the need to integrate social, economic, and environmental values.

2. Past forest management, changing public values, lack of clear, widely accepted goals, repeated court challenges, and the inability to implement decisions have led to a **lack of trust** between stakeholders and federal forestland management and regulatory agencies.
3. Federal, state, local, and tribal governments lack an effective **process to coordinate policy decisions** and achieve landscape-scale objectives.
4. **Funding is not adequate** or appropriately allocated to achieve land management objectives on federal forestlands. Adequate and more stable funding sources are necessary to achieve long-term management goals and sustainability.



# Recommended Solutions

Addressing the complex and interrelated problems identified in this report requires a strategy at different scales: (1) solutions at the state and local level, and (2) solutions at the national level. Actions at both scales must be implemented simultaneously.

The specific action items needed to implement each recommended solution can be found in the body of this report.

## State and Local Solutions

The overall *strategy* for state and local solutions is to ***take action to improve forest health***. Symptoms of declining forest health (e.g., uncharacteristic wildfire, altered water quality and quantity, degraded fish and wildlife habitat, and reduced biodiversity and ecosystem resiliency) are of immediate importance. However, long-term success will require solving related problems (i.e., reduced timber harvest below sustainable levels and decreased infrastructure, reducing conflict over the desired amount of older forests, lack of trust, and policy coordination).

### ***State and Local Recommendation #1***

The Governor and the State Legislature should create a Federal Forestland Liaison Program to facilitate and support federal agency and local community efforts to improve forest health on federal forestlands.

### ***State and Local Recommendation #2***

The Governor and the State Legislature should assist federal agencies in providing administrative, financial, and technical resources to local collaborative partnerships to build trust and help identify scientifically informed and socially acceptable forest management projects to improve forest health. State funds should be managed by the Oregon Department of Forestry as one element of the Federal Forestland Liaison Program. We recommend that state and federal funding be sufficient to create three new collaborative processes annually and provide ongoing support for existing collaborations.





Photo courtesy of the U.S. Forest Service

**Old Growth Forest at Mack Creek in the Willamette National Forest**

### ***State and Local Recommendation #3***

Local collaborative groups in cooperation with state and federal agencies should first assess forest health conditions and then plan projects at the landscape scale to address high priority needs. By planning at the landscape scale, treatments can be designed to improve the ecological effectiveness and efficiency of actions taken. To address the scale of the problem, it is our recommendation that these collaboratives convene around a geographic area of at least 100,000 acres.

### ***State and Local Recommendation #4***

Collaborative groups should define and delineate the amount and characteristics of older forests that should be conserved and re-established to maintain ecological sustainability and resiliency as part of their landscape assessment.

### ***State and Local Recommendation #5***

Leaders from state and federal agencies, county and tribal governments, and private forestland owners should meet on a regular basis to discuss and coordinate policies that affect forest health issues and the recommendations in this report.

## **National Solutions**

Congressional action is needed to help address many of the problems that are identified in this report. Local groups and the State of Oregon working alone cannot solve the fundamental issues that are caused by uncoordinated forest policies, a lack of clear goals for sustaining all forest values, the potpourri of goals and mandates, or a lack of funding for federal agencies to carry out their management responsibilities.

### ***National Recommendation #1***

Congress should develop legislation that creates an overarching federal forest policy for sustainable forests. This legislation should be on a par with the federal Farm Bill or Energy Bill, and establish a comprehensive framework for reviewing forest conditions and making decisions. Legislation could create a renewed national commitment and social contract to understand, enhance, and protect



the health, productivity, and sustainability of America's forests.

***National Recommendation #2***

Congress should develop comprehensive Forest Restoration Legislation that makes restoring healthy forest conditions a top priority, removes barriers to implementing restoration treatments, appropriates funding to support local communities engaged in forest restoration, and recognizes new scientific knowledge and contemporary stewardship goals that promote all environmental services provided by forests.



*Photo courtesy of the U.S. Forest Service*

**Heritage Demonstration Forest**  
***A thinning project in the Heritage Demonstration Forest along Highway 126 near the Metolius River in the Deschutes National Forest.***

***National Recommendation #3***

Congress should increase funding for forest management activities. This should be accomplished through a combination of increased appropriations, efficiencies, revenue generation, decoupling fire-fighting costs from agency budgets, and leveraging of federal dollars through partnerships at the state and local level.

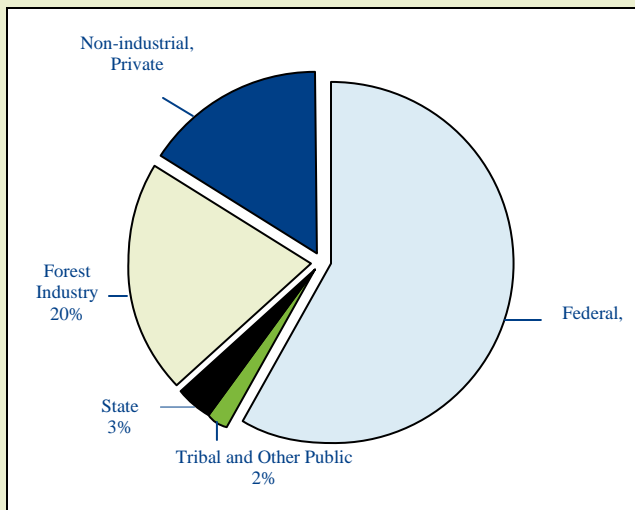






# Introduction

## Forest Ownership in Oregon



Federal forestlands are a resource intended to benefit the nation as a whole. In Oregon, these lands represent 60 percent of the total forestland in the state. The health and sound stewardship of these lands are critical to the state’s current and future well-being. Our economy relies on these lands for family-wage jobs—particularly in our rural communities where jobs are becoming increasingly scarce. Oregon has traditionally funded roads and schools from revenue that has been generated from our federal forests. Our citizens and out-of-state visitors rely on these forests for a vast array of recreational opportunities. These lands provide important ecosystem services like clean water, carbon storage, biodiversity, and habitat for a multitude of animal and plant species. The National Forest System lands generate, on average, 44 percent of the State's total runoff each year<sup>1</sup>.

**Table 1:  
Water Supply in Oregon (Mm/yr) by Land Ownership Type**

USFS	BLM	NPS	BIA	Other Federal	State and Private	Total
43,016	9,212	474	1,049	302	43,727	97,779

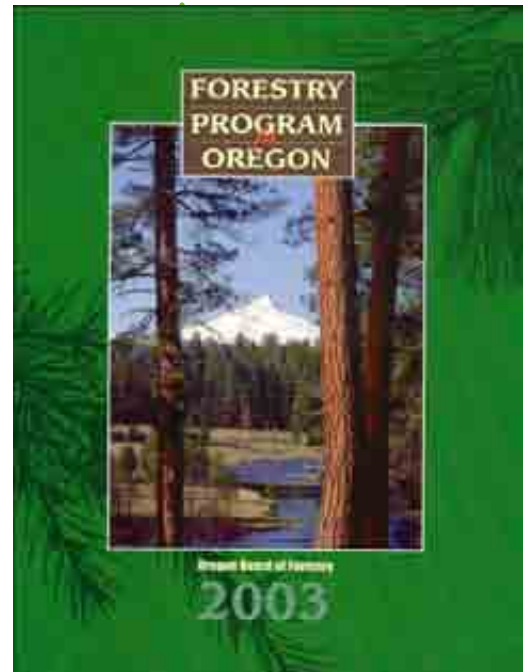
Source: U.S. Forest Service<sup>1</sup>



Oregon is well known for its forests, and the many environmental, economic, and social benefits we derive from these lands.

In the United States today, coarse-scale data and surveys suggest that more than half of all forestlands are densely stocked with trees and at risk from uncharacteristic wildfire<sup>2</sup>. In Oregon, past logging practices, grazing, and exclusion of fire have altered the characteristics of much of Oregon's frequent-fire forests. The 2006 LANDFIRE Rapid Assessment identified 13 million acres of federal frequent-fire forest as being altered and predisposed to moderate or severe risk of losing key ecosystem components. Use of prescribed fire, wildland fire, and mechanical treatments to restore ecological conditions to these lands is proceeding at a rate that only treats one to two percent of this area annually<sup>3</sup>.

The *Forestry Program for Oregon* articulates the Oregon Board of Forestry's (Board) goals, vision, and strategic plan for implementing policies and programs that promote sustainable forest



management<sup>4</sup> of Oregon's public and private forestland. The Board believes that to be truly sustainable, forest management must be economically viable, environmentally robust, and socially acceptable. Oregon's forests are diverse, and so are the objectives of forest landowners. To achieve sustainable forest management, Oregon must take advantage of different management

**Sustainable forest management:** *forest resources across the landscape are used, developed, and protected at a rate and in a manner that enables people to meet their current environmental, economic, and social needs, and also provides that future generations can meet their own needs.*

strategies for different forest types, ownerships, and locations. The *Forestry Program for Oregon* groups forest management strategies



into four broad categories: Wood Production, Multiple-Resource, Reserve, and Residential Value Emphasis (urban forestry). Sustaining Oregon's forests should be viewed from a statewide, landscape perspective, with different landowners making different contributions in each of the broad categories. Together, the federal forestlands that are managed by the Forest Service and the Bureau of Land Management (BLM) provide the bulk of the Reserve lands and much of the Multiple-Resource lands in Oregon.

The Forest Service's goals are articulated, among other places, in the Multiple-Use Sustained-Yield Act of 1960, which states: "the national forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes." The Bureau of Land Management's forests in Oregon are managed primarily under the Oregon and California Railroad Act of 1937, which says the land will be managed for the "purpose of providing a permanent source of timber supply, protecting watersheds, regulating stream flow, and contributing to the economic stability of local communities and industries, and providing recreational facilities." In managing these lands, these two agencies must also comply with other federal laws like the National Environmental Policy Act, the Endangered Species Act, and the Clean Water Act. The Forest Service must comply with the National Forest Management Act and the Bureau of Land Management must comply with the Federal Lands Policy and Management Act. Federal lands are also bound by trust obligations with many Indian Tribes, including hunting and fishing rights.

Oregonians want to have greater influence on how federal forests are managed – forests that contribute significantly to the well-being of our state and particularly to our rural communities. Forests are dynamic ecosystems that do not recognize ownership boundaries – forest management on one ownership may impact other nearby ownerships. The diversity of Oregon's forested mosaic is important to ensure a legacy of healthy, productive forests for future generations. Oregonians aspire to chart a sustainable, productive future for all our forests regardless of ownership.



## Development of this Report



In October 2004, the Governor directed the Board to “create a unified vision of how federal lands should contribute” to sustainability, and to “make that vision action-oriented and comprehensive – following through to the last step, including implementation.” For this process the Governor has told the Board to “be bold, be open, and keep your eye on the big picture.”

In 2005, the Oregon Legislature passed Senate Bill 1072 into law with bipartisan support. That bill encourages the Board, in consultation with the Governor, to create a forum for interagency cooperation and collaborative public involvement regarding federal forest management issues. With input and ideas from a broad range of interests, Oregon will be better positioned to develop collaborative solutions that represent the views of the majority of Oregonians.

In order to have the discussion envisioned by the Governor and develop a vision for Oregon’s federal forestlands, the Board created the Federal Forestlands Advisory Committee (FFAC). Composed of a diverse group of stakeholders, the FFAC was directed to craft a document that articulates the state’s vision for how federal forestlands should be managed to contribute to the sustainability of Oregon’s overall forest land base. Starting in November 2006, the



*Photo courtesy of the U.S. Forest Service*

**McKenzie River, above the community of McKenzie Bridge, Willamette National Forest**





*Photo courtesy of the U.S. Forest Service*

**Sahalie Falls, Willamette National Forest**

FFAC held numerous meetings to engage the public, government officials, and the scientific community; collect information; review pertinent documents; discuss concerns and ideas; and formulate solutions. Subcommittees were also created to address key issues identified by the full committee. The content of this report represents careful analysis and thoughtful discussion of the information made available to the FFAC.

This document sets forth our vision and set of key goals that should be pursued on federal forestlands to create forests that are ecologically sustainable, economically viable, and appreciated by all stakeholders. It presents recommendations to implement our vision and includes specific policy steps necessary to achieve the vision we have crafted. This document articulates Oregon's interests at the national policy level and is intended to guide the state's participation in planning the future of Oregon's federal forestlands.





## Vision and Goals



Across Oregon's forested landscape, and in the context of other ownerships, federal forestlands should help deliver a set of environmental, economic, and social benefits sufficient to ensure that the state's forest resource in total is sustainable. "Sustainable" means meeting the needs of the present without compromising the ability of future generations to meet their needs. These needs include clean air, clean water, attractive scenery, sustainable and consistent supplies of wood fiber, sufficient recreational opportunities, robust biological diversity, resilient ecosystems, and socio-economically healthy rural communities. In order for federal lands to appropriately contribute to this sustainable forest landscape, federal planning and management implementation should be carried out under a fully coordinated, state-wide, all-ownerships-based system.

## Vision

### Our Vision for Oregon's Federal Forests

*Federal forestlands in Oregon are a legacy, a refuge, and a resource; loved and celebrated by our citizens; inhabited by healthy populations of fish and wildlife; and managed with humility, wisdom, and innovation to sustain the economic, environmental, social, and cultural well-being of our rural and urban communities.*



# Goals

## Our Goals to Achieve the Vision

### *Environment*

1. Forest and rangeland ecosystems are protected, restored<sup>5</sup>, and managed for a full range of sustainable ecosystem benefits within the context of climate change. These benefits include

***R**estoration: the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.*

aesthetic values; biodiversity; clean air; grazing; human health; native fish, wildlife, and plants; recreation; resiliency; soil productivity; timber; water quality and quantity; and wilderness.

***C**ommunity: the people living in a geographic area in, around, and/or neighboring federal forest lands.*

### *Social*

2. Federal forestlands respond to site-specific variations and community-based management principles, taking into consideration tribal, local, state, and national needs and priorities. Management provides opportunities for people to realize their material, spiritual, and recreational values and relationships with the forest. Federal forest-

land management rebuilds and maintains trust within affected communities<sup>6</sup> using collaboration, adaptive management, and other innovative strategies.

### *Economic*

3. Federal forestlands provide a predictable, sustainable supply of the full suite of goods and services now and into the future. Federal forest policy contributes to the creation of stable jobs and



economic well-being for local communities across the state.

### *Process*

4. Federal forestland managers take action to address national, state, and local needs. The Governor, the Oregon Legislature, Oregon Congressional Delegation, and others actively support federal forestland management to accomplish these goals, and take action on the most pressing problems identified in this report to enable federal managers to carry out the necessary work.
5. Federal forestlands are managed with a clearly defined vision and strategic goals developed and implemented through a collaborative partnership with national, state, local, and tribal governments, and public involvement. The vision and goals are understood and supported by the public. These processes and relationships address management challenges and provide a new consensus approach to problem solving and conflict resolution, resulting in a synergy of benefits.
6. The federal government is committed to providing adequate and stable funding from multiple sources and mechanisms so that federal agencies can meet their stewardship, restoration, and sustainability obligations.
7. Federal policy guidance provides stability and balances the need for accountability, while preserving local flexibility in the management of federal forestlands to ensure sustainability, and simultaneously meet state, tribal, local, and national needs.



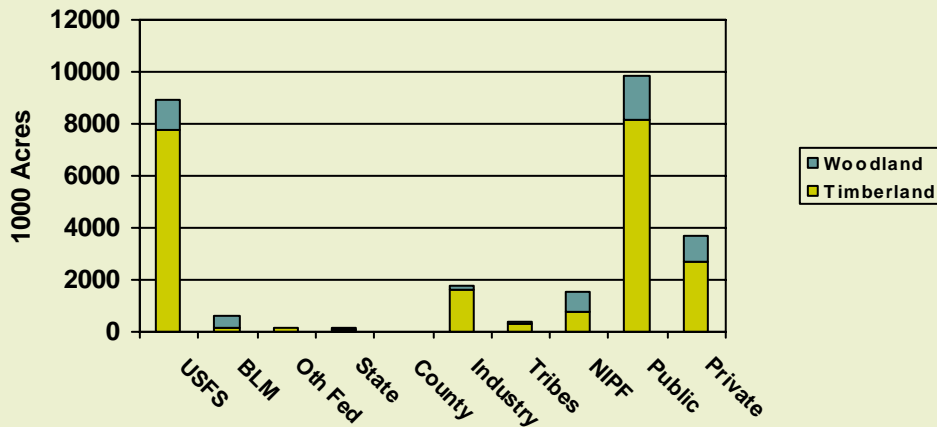


## A Sense of Urgency

Forests are extremely important to Oregon. Of Oregon's 62 million acres, 30 million acres are forested. Of those acres, 60 percent are federal forestlands. East of the Cascades, 72 percent of Oregon's forestlands are federally owned. Yet despite their importance, large segments of Oregon's federal forests are becoming progressively unhealthy, and there is particular concern about the increasing risk of

uncharacteristic wild-fire, a situation exacerbated by climate change. Moreover, the infrastructure to address these problems is rapidly disappearing, particularly in eastern Oregon. What happens on these lands is of vital importance

**Forestland Ownership in Eastern Oregon**



Source: Forest Inventory and Analysis Data, U.S. Forest Service PNW Research Station

to Oregonians and the nation. **It is also clear that time is not on our side.** Unless decisive steps are taken soon, we risk accelerated loss of important habitat for animal and plant species, further degradation of air and water quality, loss of aquatic species—including native fish, and continued decline in community well-being, among other things.



## Oregon is Not Alone — Local and National Issues

Many of the challenges we face are not unique to Oregon and some, in fact, are national problems that have implications for Oregon. Some examples follow:

- ◆ People in the United States need a better understanding of the connection between their decisions and forest sustainability. The United States grows more wood than it harvests each year,<sup>7</sup> yet to meet our ever-increasing consumption demands that the nation be a net importer of wood.<sup>8</sup> In this country, we have some of the most advanced forest management and protection rules in the world, yet the United States obtains significant amounts of wood from developing countries, regardless of the environmental and social consequences our consumptive practices have on those countries. In Oregon, federal forests could contribute more to the domestic wood supply.
- ◆ Wildfires emit significant amounts of greenhouse gases into the atmosphere. Overstocked forest conditions and climate change have combined to increase the recent extent and frequency of fires in the western United States, further contributing to climate change.
- ◆ For millennia, disease- and insect-caused tree mortality has been a natural occurrence in forests. However, in the United States today, there are millions of acres of infested trees, many of them



Photo courtesy of the U.S. Forest Service

**“The Sentinel” - Hash Rock Wildfire Burn-out**  
*Ignited by dry lightning in the late summer of 2000, the Hash Rock Fire ultimately burned approximately 18,500 acres in the western portion of the Ochoco National Forest, including areas of the Mill Creek Wilderness and drainage. The fire burned in an area of historic, natural fire frequency of 15-25 years that had*



dead, often the result human activities and past management practices. In Oregon alone, coarse-scale analysis has identified tree mortality caused by bark beetles on approximately 700,000 acres of federal forestland. These infestations and the increasingly variable climate underscore how important it is to restore natural processes and resiliency to our federal forests.<sup>9</sup>



*Photo courtesy of the U.S. Forest Service*

**Lookout Creek**  
*Located on the H.G. Andrews Experimental Forest in the Willamette National Forest, this old growth/older forest scene exhibits many of those characteristics as defined by the National Commission on Science for Sustainable Forestry*

◆ Across the forested landscapes of Oregon there is a deficit of old-growth forests and a critical need to recruit more old growth. Because there is such a shortage of old growth, the FFAC uses the term “older forests,”<sup>10</sup> as described by the National Commission on Science for Sustainable Forestry,<sup>11</sup> which is more inclusive of older, mature stands starting to develop old-growth characteristics. Some of these stands will evolve into future old growth and will need to be retained in order to provide recruitment of large trees and snags that will eventually become old-growth forests. Older forests are critical to carbon sequestration, biodiversity, and ecological resiliency in the face of global climate change.

◆ Many areas of federal forestlands need efforts to improve watershed conditions and restore landscape resiliency. Scientific assessments of current conditions for forested systems consistently yield the same broad conclusions: a century or more of road building, logging, grazing, mining, fire suppression, and water withdrawals, in conjunction with the loss of key species and the introduction of invasive species, have degraded watersheds, modified streamflows and water quality, altered ecosystem processes, and decreased biological diversity.

◆ Federal budgets show a long-term trend of disinvestment in federally and privately owned forestlands across the full range of values – recreation, wilderness, access, wildlife, water, and timber. The proportion of fire suppression funds in the Forest Service budget was 13 percent in 1991, and will exceed 52 percent in

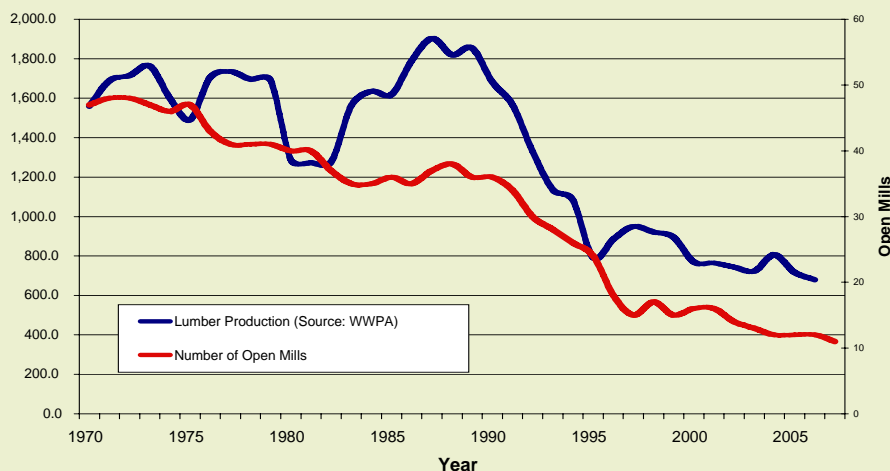




2008, while the total management budget has decreased. From 1999 to 2008, National Forest system budgets (in constant dollars) have declined 54 percent in the Pacific Northwest Region (Region 6).<sup>12</sup> From 1995 to 2008, BLM budgets (in constant dollars) for managing forestlands (excluding fire suppression) in western Oregon have declined 29 percent.<sup>13</sup> There are billions of dollars in deferred maintenance of the dense network of roads on federal forestlands that has created serious water quality and fish passage issues.

- ◆ What were once strong, forest-based rural economies in all corners of the country – Georgia, Maine, Minnesota, Oregon, New Mexico – now have similar concerns about long-term community health and viability due to the loss of forest industry. Annual federal timber harvests in Oregon were four to five billion board feet for much of the period from 1962 to 1989. However, we now know these levels of timber harvest were not sustainable. Since 2000, federal harvests have averaged only 310 million board feet,<sup>14</sup> reflecting an equally extreme swing in the opposite direction. Since 1992, the number of sawmills in Oregon has gone from 263 to 125,<sup>15</sup> and employment in the forest industry has gone from 57,500 to 42,500.<sup>16</sup> In 1999, there were four Oregon counties with more than 15 percent of their population below the poverty level; by 2004, there were nine.<sup>17</sup>

### There Are Few Sawmills Currently Operating in Eastern Oregon



Source: Ted L. Helvoigt, ECONorthwest—Presented to FFAC on November 5, 2007



Many of these issues are interconnected. Yet there are no policies to understand and address the linkages between them.

## Moving Beyond Conflict— The Need to Work Together

In 2004, Governor Kulongoski described the problem we face in an address to the Oregon Board of Forestry:

Ensuring sustainable forests in Oregon requires that we understand that the social, environmental and economic benefits of forests are not only important – but also interconnected. For example, if we don't protect soil and water, the land's economic value will be eroded. Enhancing fish and wildlife habitat provides recreational, scenic and other social benefits. Being able to generate revenue from forests lets us afford environmental protection and social amenities. And if we don't have strong social acceptance of our forest policies, the public will demand new policies – and new ways of managing our forests.

Over the last three decades, these passionate – and sometimes competing – views of our forests have led to an “us versus them” mentality in many parts of our state. And for that we have *all* paid a price. That price includes catastrophic fires and high unemployment – especially in some of our rural communities. The fires have destroyed endangered species habitat, degraded watersheds, affected air quality and turned magnificent backcountry recreation areas into black char. High unemployment has hurt local schools, allowed community infrastructure to deteriorate and pushed the cost of higher education beyond the reach of many citizens. We have to get past this costly conflict over our forests and craft the public policy model that is described in the *Forestry Program for Oregon* (October 22, 2004).



# Problems



There are many problems reducing the ability of federal forestlands in Oregon to contribute a full range of sustainable forest values to Oregonians and the nation. **These problems are interrelated and difficult to solve in isolation.** In this report, we have identified the most pressing “problems of place” and those overarching problems that if solved would help to address problems of place and other concerns.

## Problems of Place

Problems of place are the most important and immediate issues facing Oregonians, particularly those living in rural communities. Moreover, these problems are major impediments to the sustainability of forests and associated economic, environmental, and social values in Oregon. There are three interrelated problems of place with the biophysical conditions of forests and the infrastructure needed to manage them. These are as follows:

1. **Forest health**<sup>18</sup> and resiliency have declined in Oregon’s federal forests. Specific problems vary, depending on the type and location of forests. The manifestations of degraded forest health are most extreme in the dry forest types (eastern and southwestern Oregon), where over-

***F**orest Health: a condition where the parts and functions of an ecosystem are sustained over time and where the system’s capacity for self-repair is maintained, such that goals for uses, values, and services of the ecosystem are met.*





Photo courtesy of the U.S. Forest Service

**Bald Butte—Fremont-Winema National Forest**  
*Mortality in lodgepole pine caused by mountain pine beetles.*

stocked forest stands have resulted in unprecedented landscape-scale problems like uncharacteristic wild-fire and insect epidemics that may result in the loss of key ecological components. In western Oregon, hydrologic regimes have been altered by roads and other factors, and conditions may not protect beneficial uses like water quantity and quality. Climate change is and will continue to tax the resiliency of federal forestlands across the state.

2. **Reduced timber harvest** from federal forestlands has led to a decline in forest industry infrastructure, with unintended economic and social losses to rural communities, including receipts from timber used to support roads and schools.
3. **The desired amount of older forests** on federal forestlands needs to be established and protected as a component of sustainable forest management. A well-balanced program of forest management activities is necessary to maintain the mix of successional stages and vegetation conditions that provides for the full diversity of habitats and species.

## Overarching Problems

Overarching problems affect our collective abilities to adequately address the problems of place. Overarching problems are issues involving federal laws and administrative rules, and their interpretation, administrative and legal processes, relationships between people, organizations, and different levels of government, financial support for federal management operations, and their interactions. These over-



arching problems are affecting the ability to make decisions, resolve conflicts, and implement projects on the ground to address problems of place. The four most important overarching problems are:

1. Federal laws, policies, and court decisions that govern federal forestlands have led to **a collection of discordant goals and mandates** that often work at cross purposes and inhibit agencies from reacting decisively to issues such as declining forest health. This confusion complicates, rather than solves, the need to integrate social, economic, and environmental values.
2. Past forest management, changing public values, lack of clear, widely accepted goals, repeated court challenges, and the inability to implement decisions have led to a **lack of trust** between stakeholders and federal forestland management and regulatory agencies.
3. Federal, state, local, and tribal governments lack an effective **process to coordinate policy decisions** and achieve landscape-scale objectives.
4. **Funding is not adequate** or appropriately allocated to achieve land management objectives on federal forestlands. Adequate and more stable funding sources are necessary to achieve long-term management goals and sustainability.

## Problem Interactions

All of the problems described in this report are interrelated. For example, large areas of Oregon's federal forestlands are in need of an integrated approach to forest restoration and fuels management through thinning, which includes the use of prescribed fire, wildland fire, and mechanical treatments. The goal of this thinning should be to restore natural processes, make the landscape more resilient, and reduce the risk of uncharacteristic wildfire. At the same time, Oregon has been losing the infrastructure (i.e., skilled workers, mills, equipment, etc.) that could be employed to restore landscape resiliency while also supplying timber for the mills. And, the unresolved controversy over the amount and type of management needed to protect



older forests is a major stumbling block to taking any large-scale actions on federal forestlands.

The lack of a unified goal and conflicting values has led some to say there is a process predicament on federal lands. In a 2002 paper,<sup>19</sup> the Forest Service describes the problem this way: “Unfortunately, the Forest Service operates within a statutory, regulatory, and administrative framework that has kept the agency from effectively addressing rapid declines in forest health. This same framework impedes nearly every other aspect of multiple-use management as well.” Others have pointed out that the agencies have the tools to manage the forest, and Government Accountability Reports have shown that very few fuels-reduction projects have been challenged or litigated.

Large-scale issues like planning for fire risk reduction and maintaining connected blocks of older forests require planning across multiple ownership boundaries. The lack of trust among stakeholders and insufficient funding for the Forest Service and the BLM have resulted in small, scattered projects instead of the coordinated strategy needed to address these large-scale, landscape-level issues.

## Problem Interactions with Climate Change

*The FFAC views forest restoration as one essential part of a comprehensive strategy to reduce greenhouse gas levels in the atmosphere, while ensuring the continued viability of the natural carbon flux in the forest soils and vegetation—not a mechanism to solve the problems created by carbon emissions from burning below-ground fossil fuels.*

The Intergovernmental Panel on Climate Change has concluded that strong likelihood exists for both global and regional climate change, which creates a significant challenge to restore diverse and resilient forests that can simultaneously adapt to and withstand global warming and the resulting climate change. Addressing this challenge provides a significant opportunity because healthy older forests, particularly in the Pacific Northwest, act as long-term carbon sinks and thus can help reduce the extent and severity of global climate change.<sup>20</sup> In other words, healthy forests will be more resilient and able to





withstand the impacts of climate change and sequester carbon. They also provide an opportunity to mitigate the effects of climate change.

Restoring self-sustaining forests in the face of climate change is a complicated undertaking because in many cases we are starting with forestlands that have been degraded and are in need of restoration. As noted in a study of fire and land management, “ecosystem conditions on Federal public lands have changed, particularly within the last 30 years. Wildfires in the West have increased to levels close

to or above those estimated for historical conditions, despite increasing efforts and expertise in fire prevention and suppression capability. To reverse these trends, planning for fire and land management policies, budgets, and restoration must address multiple decisions at the national, regional, local and project level and incorporate an improved understanding of conditions and their linkage across these scales.”<sup>21</sup>

In the coming century, average annual temperatures in the Pacific Northwest are projected to rise at a rate of 0.0° to 0.6°C (0.2° to 1.0°F) per decade. Although there is more uncertainty in projected changes in precipitation, in general, winters are projected to be wetter and summers are projected to be drier. These changes will have profound effects on many ecological systems across the state. For example, temperature-driven reductions in snowpack will affect stream-flow patterns and, in turn, many freshwater systems. Increasing temperatures may result in drier fuels, leading to more frequent, intense, and/or extensive wildfires, and rising sea levels could inundate many low-lying coastal areas. All of these changes have the potential to alter habitat and other finely balanced ecological relationships.<sup>22</sup>

A century of fire-suppression has made western forests even more vulnerable to these anticipated impacts of climate change. As a result,



Photo courtesy of the U.S. Forest Service

**Jack Creek Area Photo #1—Before Thinning**  
***This overstocked stand of dead and dying trees near the Santiam Pass on the Deschutes National Forest shows tree mortality prior to thinning.***



recent changes in wildland fire are likely due to a combination of factors that include an increase in fuel caused by fire suppression and a greater tendency toward wet and dry extremes that lead to more weather-driven events. Increasing average temperatures in the future are anticipated to cause changes in relative humidity and drying over much of the west, which may increase the number of days of high fire danger.<sup>23</sup> Research is increasingly showing a strong link between climate change, fire size, and fire severity.<sup>24</sup>

The natural role and behavior of fire in forest ecosystems is complex and depends on the forest type. Fire sets the stage for a natural cycle of forest renewal, and is the first step in plant succession in wet forests west of the Cascades. These forests have a natural fire regime of stand-replacing crown fire every several hundred years. Infrequent disturbances allow moist forests to store large amounts of carbon, if they are allowed to grow. Mature and old-growth forests store the largest amount of carbon per acre, but older forests release large

amounts of carbon if they are logged or if they burn in a wildfire. Dry-side forests, like Oregon's ponderosa pine-dominated systems, historically burned, on average, every 5 to 30 years, with fire largely confined to the surface.<sup>25</sup> Unnatural crown-fire in these forests can result in significant carbon release, both at the time of the fire and for years afterwards, as dead trees decay. Because most of the carbon in frequent-fire forests is stored in large, fire-resistant trees, thinning from below to remove small diameter wood and protecting old growth will reduce the probability of

crown fire, while retaining carbon in the standing forest.<sup>26</sup> Wildfires produce carbon emissions<sup>27</sup> immediately and over time, as dead trees lose carbon over periods lasting a century or more.<sup>28</sup> However, the carbon release from decaying, dead trees also helps rebuild soil structure and complexity, and increase soil carbon storage.



Photo courtesy of the U.S. Forest Service

**Jack Creek Area Photo #2—After Thinning**  
**The same stand of trees near the Santiam Pass on the Deschutes National Forest following a thinning treatment designed to protect the stand against the effects of uncharacteristically severe wildfire.**



At this time, fire ecologists are warning us that historical fire regimes have been disrupted, and climate change may combine with wildfire to dramatically alter forest conditions and habitat types in frequent-fire forests. One of their recommendations is to prepare for extreme fire events by restoring ecosystems and reducing uncharacteristic fuel levels with expanded thinning programs using a variety of “thinning” tools – burning and mechanical treatments.<sup>29</sup> A thinned stand could be best able to withstand fire, drought, insects, and disease,<sup>30</sup> although these operations will lead to an initial decrease in carbon storage and an increased carbon output due to use of fossil fuels. Operations also lead to the release of carbon from disturbed soils, which contain as much as half of all forest carbon. Soils are a critical resource, particularly because the average time period in which carbon is stored in soil is far longer than carbon is stored in vegetation, and soils in the interior of Oregon are particularly vulnerable to impacts from natural and human-caused disturbance.<sup>31</sup>



Photo courtesy of the U.S. Forest Service

**Jack Creek Area Photo #3—Thinned Stand after Wildfire**  
*The same stand of thinned trees near the Santiam Pass on the Deschutes National Forest showing relatively little mortality after the B&B Fire passed through the area.*

In sum, a comprehensive plan to deal with climate change must balance region-specific, short- and long-term strategies to produce forests that act as carbon sinks, weather natural disturbance, and maintain biological diversity. The likelihood of constrained funding for the Forest Service creates an opportunity to apply local and regional knowledge to achieve these benefits in federal forests going forward.<sup>32</sup>







## Recommended Solutions

**Addressing the complex and interrelated problems identified in this report requires a strategy at different scales: (1) solutions at the state and local level, and (2) solutions at the national level.**

Actions at both scales must be implemented simultaneously, recognizing that change at the federal level will likely be a long-term endeavor. To date, the federal government has not adequately addressed pressing forest resource-related problems affecting Oregonians' well-being.

More direct and focused action by Oregon state government in cooperation with local and tribal governments, citizens, and federal managers will facilitate immediate action by federal agencies to address crucial problems. To date, actions by the federal government have



*Photo courtesy of the U.S. Forest Service*

**Drews Creek—Before Culvert Replacement**  
***A culvert beneath Highway 140 in southwest Oregon on the Fremont-Winema National Forest that was blocking native fish passage because of the drop-off from the edge of the culvert to the normal water level of the creek.***





*Photo courtesy of the U.S. Forest Service*

#### **Draws Creek — After Culvert Replacement**

***In a cooperative project between the U.S. Forest Service and the Oregon Department of Transportation, a new fish-friendly culvert (on the left in this photo) was installed and the creek bed re-aligned to its natural channel. The original culvert (on the right) was left in place as a cost-saving measure, and for other native wildlife species to use as a safer route when moving from one side of the highway to the other side.***

been largely inadequate to resolve the problems identified in this report. Moreover, unless a different approach is taken soon, these problems will worsen and become even more challenging and expensive to fix. However, this report and the recommendations in it should not be construed to imply the State of Oregon should assume responsibility for the management of federal forestlands. Rather, at the state and local level, the recommendations are focused on creating multi-party collaborative partnerships, facilitated and initially supported financially by the state to help federal agencies achieve the necessary actions.

A successful partnership between the people of Oregon and federal forest managers is needed before progress can be made at the pace and scale required to solve the full spectrum of forest health issues. This partnership can be accomplished through shared leadership, community engagement, and alignment with clearly articulated local, state, and national goals. Collaboration among diverse interests to develop broadly accepted methods to accomplish these goals must become the norm. A successful partnership can lead to outcomes that include protection, restoration, and conservation of natural resources,



a sustainable supply of goods and services, and the development and maintenance of programs and activities that contribute to community vitality.

Some problems must be addressed at the national level (e.g., inadequate funding, the collection of discordant goals and mandates). Oregon cannot make these changes alone, but it can lead the charge. Political coalitions among governors and congressional delegations can lead to new policies or change bad policies that impact Oregon and other states.

## State and Local Solutions

The overall *strategy* for state and local solutions is to work with federal agencies to *take action to improve forest health*. Symptoms of declining forest health (e.g., uncharacteristic wildfire, altered water quality and quantity, degraded fish and wildlife habitat, and reduced biodiversity and ecosystem resiliency) are of immediate importance. However, long-term success will require solving related problems (e.g., timber harvest below sustainable levels, decreased infrastructure, continued conflict over the desired amount of older forests, lack of trust, and inadequate policy coordination).

This document makes five strategic recommendations dedicated to solving problems at the state and local levels. Each recommendation identifies the action items that will be necessary for successful implementation. The recommendations are as follows:

1. The Governor and the State Legislature should create a Federal Forestland Liaison Program to support federal agency and local community efforts to improve forest health on federal forestlands.
2. The Governor and the State Legislature should assist federal agencies in providing administrative, financial, and technical resources to local governments and collaborative partnerships to build trust and help identify scientifically informed and socially acceptable forest management projects to improve forest health.
3. Local collaborative groups in cooperation with the federal agencies should first assess forest health conditions and then plan pro-





jects at the landscape scale to address high priority needs.

4. Collaborative groups should define and delineate the amount of older forest that should be conserved and re-established to maintain ecological sustainability and resiliency as part of their landscape assessment.
5. Leaders from state and federal agencies, county and tribal governments, and private forestland owners should meet on a regular basis to discuss and coordinate policies that affect forest health issues and address the recommendations in this report.

### State and Local Recommendation #1

**The Governor and the State Legislature should create a Federal Forestland Liaison Program to facilitate and support federal agency and local community efforts to improve forest health on federal forestlands.**

#### *Justification*

While the federal land management agencies retain authority to make land-management decisions, the state should become a partner to support actions on federal lands that improve forest health and resiliency. Federal forest managers lack adequate human resources to address the forest health problem in Oregon. This problem puts the many values Oregonians treasure from these lands in increasing jeopardy. In addition, degraded federal forests threaten the health of adjacent nonfederal forests. Where it is strategic, the Oregon Departments of Forestry, Fish and Wildlife, and Environmental Quality, and other state agencies should assist federal land managers to design



*Photo courtesy of the U.S. Forest Service*

**Forest Thinning—Fremont-Winema National Forest**  
***A thinning project on the Fremont-Winema National Forest designed to restore the health of a portion of the 300,000 acres of dead and dying trees—the result of damage by the mountain pine beetle.***



and implement treatments that will solve forest health problems. The state agencies should coordinate their involvement with the lead agency to create unified state input into the process. The Governor's Natural Resources Office should resolve disagreements between state agencies and review state positions to ensure alignment with Governor's Natural Resource Office policy and direction.

With increased capacity the state can provide technical assistance to accelerate the number of National Environmental Policy Act-ready acres available for treatment, and facilitate local partnerships involving state and local governments, tribes, citizens, and federal managers.

### *Actions*

- ◆ The Governor and Oregon Legislature should create and fund a **Federal Forestland Liaison Program** in the Oregon Department of Forestry that will:
  - Partner with federal land management agencies and local groups to encourage and support the development of projects that improve forest health and resiliency.
  - Coordinate involvement of other state agencies in the collaborative process so the State of Oregon speaks with one voice.
  - Provide strategic technical assistance to the BLM and Forest Service where capacity is inadequate to implement forest health treatments.
  - Promote and encourage the formation of local collaborative partnerships to address forest health problems on federal forestlands.
  - Provide administrative support and manage funding dedicated to support local collaboration. This funding will be used for neutral facilitation and to support the ongoing efforts of local collaborative partnerships.
- ◆ The Federal Forestland Liaison Program should be funded through legislative appropriations to the Oregon Department of Forestry (lead agency) and other agencies. In addition, the appropriation should include funds to hire neutral facilitators, support local collaborative processes, and engage independent scientific expertise when needed.

### **State and Local Recommendation #2**

**The Governor and the State Legislature should assist federal agencies in providing administrative, financial,**



**and technical resources to local collaborative partnerships to build trust and help identify scientifically informed and socially acceptable forest management projects to improve forest health. State funds should be managed by the Oregon Department of Forestry as one element of the Federal Forestland Liaison Program. We recommend that state and federal funding be sufficient to create three new collaborative processes annually and provide ongoing support for existing collaborations.**

### *Justification*

For 20 years, Oregon has been the center of controversy for the nation over federal forest management. Past management practices and concerns over endangered species and old growth have led to a culture of distrust between and among all interest groups.

Over the last 10 years, collaborative processes have led to some meaningful changes in the way stakeholders and federal agencies work. These processes enable communities to effectively participate in management decisions on federal forests and woodlands. We see the formation of local collaborative partnerships as a major way to address the problem of a lack of trust among stakeholders. Experience and extensive analysis show that there are key elements of successful collaboration and the building of trust that include:

- ⇒ Creation of a charter that defines the partnership's goals, clarifies the commitments of the participants, defines the decision making process, details how the land management agency will incorporate the work of the collaborative, and defines the roles and responsibilities of the parties involved



*Photo courtesy of the U.S. Forest Service*

**Thinning Operations—Fremont-Winema National Forest  
Yarding thinned dead and dying trees—the result of damage done  
by the mountain pine beetle—from a thinning operation on the  
Fremont-Winema National Forest.**



- ⇒ Active joint learning, education, and sharing to create a context for identifying mutually agreeable solutions
- ⇒ Neutral third-party facilitators (someone who has credibility with participants)
- ⇒ A focus on the landscape and managing the landscape holistically rather than on a project-by-project basis
- ⇒ Using small projects to operationalize the collaborative conversations, demonstrate outcomes, and create success
- ⇒ Meaningful and committed involvement by the federal forest management agencies
- ⇒ A process that is inclusive of the community (with community broadly defined – people who live outside the community and who are interested, committed and involved in management issues can become part of the community)
- ⇒ A process that is transparent and fair
- ⇒ Participants who understand and are committed to finding common ground
- ⇒ Field trips and other activities that develop relationships, explore interests, and foster understanding
- ⇒ Monitoring to determine if results, agreements, and expectations are being met (“trust and verify”)
- ⇒ Strong, fair leadership.

### ***Actions***

- ◆ The state agencies will work with federal agencies to encourage the formation of local collaborative partnerships and once formed, help federal agencies provide administrative and financial support for the partnerships.
- ◆ The state agencies will use the Policy Consensus Center at Portland State University to provide the Neutral Forum to work directly with local partnerships in facilitating their formation and implementation. The Center, which houses the state's collaboration and dispute resolution programs, Oregon Solutions and Oregon Consensus, will assist local partnerships in selecting experienced professional facilitators and ensuring the neutrality of the process. The Center will also assist in leveraging resources from public, private, and civic sources in supporting the partnerships' work.
- ◆ The state agencies will assist federal agencies in linking local collaborative partnerships to the technical expertise they need to help





Photo credit: Oregon Department of Forestry

**Board of Forestry Tour—Malheur National Forest**  
*In November 2008, the Oregon Board of Forestry met in John Day and toured areas of the Malheur National Forest to discuss and view federal forestland issues.*

them assess forest conditions and design projects, coordinate landscape assessments, and develop and conduct monitoring.

- ◆ Three pilot collaborative partnerships should be initiated in the first year to develop administrative and procedural processes and to learn how best to make this program successful. We recommend that the pilot partnerships be focused in eastern and southwestern Oregon where the forest health problem is most pressing, and that they should be coordinated with the Forest Service planning schedule where possible. Adjacent BLM lands would be incorporated in the partnership work as appropriate.

### State and Local Recommendation #3

**Local collaborative groups in cooperation with state and federal agencies should first assess forest health conditions and then plan projects at the landscape scale to address high priority needs. By planning at the landscape scale, treatments can be designed to improve the ecological effectiveness and efficiency of actions taken. To address the scale of the problem, it is our recommendation that these collaboratives con-**





vene around a geographic area of at least 100,000 acres.



Photo credit: Oregon Department of Forestry

**Board of Forestry Tour—Malheur National Forest**  
*In November 2008, the Oregon Board of Forestry met in John Day and toured areas of the Malheur National Forest to discuss and view federal forestland issues. This tour stop overlooks an area that was thinned to reduce fuels in the event of a wildfire.*

### **Justification**

Landscape-scale analyses are needed to assess conditions, establish coherent and integrated strategic goals, develop consensus on management and treatment options, and prioritize treatments across the landscape. In this regard, existing watershed analyses may be helpful. A well-designed landscape assessment will provide a systematic and efficient approach to comprehensively solve problems created by degraded forest health. A large-scale, systematic approach provides the opportunity to assess

treatment effectiveness over time and to identify whether there may be unintended consequences.

Even though predicting the climate of the future is difficult, climate change has and will continue to test the resiliency of federal forestlands. There is an urgent need to identify and prioritize forest health treatments based upon the best available science and principles of large-scale ecosystem dynamics to deal with the potential effects of climate change.

### **Actions**

- ◆ Landscape-scale assessments should be science-based and developed through inclusive, local collaborative processes. Landscape-scale analyses should be informed by the local collaborative process but driven by the best available science. Assessments should develop a management template that will help to maintain and restore ecosystem processes, identify large-scale treatment oppor-





tunities, and prioritize actions that provide the greatest gains in increasing forest health and resiliency. Local collaborative partnerships should strive to analyze forests at a scale that is appropriate to the problems managers seek to solve. Fires and insect and disease outbreaks occur at the scale of thousands of acres. Assessments should be conducted on at least 100,000 acres or greater.

The assessment should be used to:

- Identify forest types and areas where work is needed
  - Recommend map-based sideboards
  - Prioritize treatments for restoring forest health and protecting key ecological features (e.g., endangered species, older forests, road maintenance/removal, water quality, etc.)
  - Identify areas where a timber sale program is possible if carefully planned with attention to ecological and cultural values.
- ◆ The BLM, Forest Service, Oregon Department of Forestry, and other relevant state agencies should provide technical information to local partnerships. Landscape assessments should be largely drawn from existing information.
  - ◆ Assessments should include the development of outcome-based (e.g., reduced fire hazard, improved water quality) performance measures to track accomplishments, instead of simply numeric measures (e.g., acres treated as opposed to quality of work accomplished).
  - ◆ Assessments should prioritize and urge investments in the forest road network. These investments should be based on ground-based assessments of the aquatic systems followed by restoration efforts to improve fish passage and stream crossings, curtailment of practices that slow or retard the attainment of riparian recovery, and action to improve road location and address road density issues in



Photo courtesy of the U.S. Forest Service

**Cottonwood Creek Watershed Restoration Project**  
**Fencing off cattle access to the creek, culvert replacement to improve fish passage, and the placement of in-stream large woody debris and boulders to improve fish spawning habitat were all part of this watershed restoration project in the Fremont-Winema National Forest.**



watersheds. Initial proposals will be provided by the Forest Service or the BLM.

- ◆ Assessments should consider how to provide a stable, sustainable woody biomass supply and a predictable supply of timber. Lack of stability and dependability in product supply makes it extremely difficult for business to make long-term investments in the infrastructure needed to utilize products and help pay the cost of forest health treatments. Initial proposals should be provided by the Forest Service or the BLM.
- ◆ Local collaborative partnerships should help design and recommend projects that implement the forest health goals and priorities developed in the assessments. The priorities for selection of large-scale restoration projects should include the following criteria:
  - Fire threat to forest and to communities, both within the wildland urban interface as well as threats to other private, state, and federal forests
  - The need for improvements in hydrologic conditions and road systems
  - Protection of biodiversity hotspots
  - Economic viability: while initially projects may require federal, state, local, tribal, or private philanthropy support, over time projects should become economically viable
  - Project viability, including established transportation and timber processing infrastructure, and adequate supply of labor force: the initial focus of projects should be directed towards communities where the labor, transportation, and processing infrastructure are vulnerable to loss.
- ◆ Once assessments, prioritization, and planning have been completed, local collaborative partnerships should do everything within their power to ensure implementation actually takes place and projects are completed. Resources should be allocated carefully to ensure adequate funding for implementation is available.

#### State and Local Recommendation #4

**Collaborative groups should define and delineate the amount and characteristics of older forests that should be**

*The term “conserve” does not exclude human involvement to culture or nurture a value.*



**conserved and re-established to maintain ecological sustainability and resiliency as part of their landscape assessment.**

### *Justification*

The amount of old-growth forest has declined in Oregon compared with historic levels, and there is widespread public agreement that old growth is an essential component of our forests and that significant efforts should be made to maintain and enhance this forest type. Conserving<sup>33</sup> all or most remaining old-growth forests has clear benefits for biological conservation and landscape ecology. The delineation of areas for recruitment and management of future old growth are more controversial.



*Photo courtesy of the U.S. Forest Service*

**Old Growth at Mack Creek on the Willamette National Forest**

**O**lder forests are inclusive of a broader range of stand characteristics than normally associated with old growth.

The majority of older forests occur on federal lands.<sup>34</sup> The lack of social agreement on how much older forest is desirable and where it should occur are barriers to forest management operations. Public understanding of issues

and proposed solutions is a necessary prerequisite for social agreement. Confusion and mistrust must be dispelled to achieve the kind of social agreement that is needed for effective conservation and restoration of older forests. Thus, conservation and restoration plans for older forests must be primarily local in construction and effect, but they must also create bridges among stakeholders to establish an effective pattern of older forests on the landscape.



Development of regional- and forest-type-specific definitions and goals for older forests based on local-community stakeholder processes that build from science-based definitions will help reduce tension and distrust over forest management. Definitions of older forests should be broadly based in science and social perspectives and shared across the community of stakeholders and should lead to successful management.

### Examples of Classification of Douglas-fir Stand Development

Typical Age	Oliver and Larson 1990	Franklin et al. 2002
0	Stand Definition	Legacy
20	Stand Definition	Pioneer Establish
30	Stem Exclusion	Canopy Closure
80	Understory Reintroduction	Maturation
150	Old-growth	Vertical Diversity
300	Old-growth	Horizontal Diversity
800-1200	Old-growth	Pioneer Loss

Source: Thomas A. Spies, PNW Research Station—Presented to FFAC January 7, 2008

### Actions

- ◆ Local collaborative processes should
  - Define “older forests” by forest type within the broad definition described in this report drawn from the report of the National Commission on Science for Sustainable Forestry (*Beyond Old Growth: Older Forests in a Changing World*, Reference #11) as a guide
  - Develop goals for older forests informed by the best available science



- Conserve existing old-growth forests and identify opportunities for providing additional older forests
- Make recommendations consistent with Forest Service and BLM plan standards and guidelines
- Receive initial proposals from the Forest Service or BLM.

## State and Local Recommendation #5

**Leaders from state and federal agencies, county and tribal governments, and private forestland owners should meet on a regular basis to discuss and coordinate policies that affect forest health issues and the recommendations in this report.**

### *Justification*

Forest ecosystems and forest health transcend ownership boundaries. Effective management of contiguous expanses of forest demands coordination of action across different ownerships. We must continually question our assumptions as part of the learning process and adapt our management practices accordingly. By working together, limited funding and human resources can be maximized to sustainably manage forests.

### Actions

- ◆ The chief executives of state and federal agencies, tribes, legislative leadership, and local government representatives should meet to discuss the recommendations of this report. They should develop a Memorandum of Agreement that institutionalizes a broad framework for implementing the report's



*Photo courtesy of the U.S. Forest Service*

**Black Crater Fire—Deschutes National Forest in 2006  
Governor Kulongoski, Former Regional Forester Linda Goodman,  
and State Forester Marvin Brown attend a briefing on this  
interagency incident near Sisters.**







Photo courtesy of the U.S. Forest Service

**Drews Creek Photo Point #2—Before Restoration**  
*This second restoration project on Drews Creek in the Fremont-Winema National Forest shows a culvert that was blocking fish passage underneath the “old” highway before culvert removal.*

**A**ctive Management should not be equated with “intensive timber management”. Instead, it refers to taking proactive steps to achieve whatever management objectives have been established for a forest site.

recommendations, specifies the roles and contributions of individual agencies, provides state and local government with cooperating agency status, and creates a system for interagency cooperation that will last beyond political cycles.

- ◆ The State Forester should organize regularly scheduled meetings (at least annually) of the chief executives of the state and federal agencies with responsibilities for forestland management, representatives of county and tribal governments, and private forestland owners. The purpose of these meetings should be to discuss and coordinate policies that affect forest health issues and the recommendations of this report.
  - ◆ Forestland managers should use collaboratively developed landscape assessments as a framework to coordinate projects across public and private ownerships to meet common goals.
  - ◆ The interface between public and private land ownership should be defined to develop and implement “good neighbor” policies and incentives for effective, efficient landscape-scale management and stewardship on both federal and private lands.





*Photo courtesy of the U.S. Forest Service*

**Drews Creek Photo Point #2—After Restoration**  
***This second restoration project on Drews Creek in the Fremont-Winema National Forest shows the creek after culvert removal and the old highway decommissioned.***

- ◆ Forests are dynamic ecosystems that can benefit from active management.<sup>35</sup> A comprehensive system of monitoring and feedback is needed so we can learn from our experiences and prior decisions.
  - Forestland managers should expand and fund research and pilot projects to guide future management strategies. By engaging private and public partners Oregon can expand its knowledge of long-term restorative benefits, hydrologic dynamics and cause and effect relationships among physical and biological parameters.
  - Forestland managers should identify a comprehensive strategy to invest in creating and then expanding successful large-scale pilot projects that address the scientific uncertainties of dual-purpose (e.g., economic and wildlife) management practices.
  - A monitoring system that is coordinated across ownership boundaries is needed to learn about potential landscape-scale problems caused by the current pattern of management activities.
- ◆ Federal agencies should work with state, local, and tribal governments to address the legacy road system through contracting with these local entities to accomplish priority objectives. Collaboration on road-related issues is essential because roads cross jurisdictional boundaries and local governments have systems and crews in place to undertake this work.



## National Solutions

Congressional action is needed to help address many of the problems that are identified in this report. Local groups and the State of Oregon working alone cannot solve the fundamental issues that are caused by uncoordinated forest policies, a lack of clear goals for sustaining all forest values, the potpourri of goals and mandates, or a lack of funding for federal agencies to carry out their management responsibilities.

In this report we have identified three recommendations directed at Congress and the President to help promote sustainable forest management. The recommendations are as follows:

1. Congress should develop new legislation that creates an overarching policy for sustainable forests. The bill should harmonize existing laws so that they do not work at cross-purposes, recognize new scientific knowledge, and establish clear goals that promote sustaining all environmental services provided by forests.
2. Congress should develop comprehensive Forest Restoration Legislation that makes restoring healthy forest conditions a top priority, removes barriers to implementing restoration treatments, and appropriates funding to support local communities engaged in forest restoration.
3. Congress should increase funding for forest management activities through a combination of increased appropriations, efficiencies, and revenue generation.

### National Recommendation #1

**Congress should develop legislation that creates an overarching federal forest policy for sustainable forests. This legislation should be on a par with the federal Farm Bill or Energy Bill, and establish a comprehensive framework for reviewing forest conditions and making decisions. Legislation could create a renewed national commitment and social contract to under-**



**stand, enhance, and protect the health, productivity, and sustainability of America's forests.**

*Justification*

Policies that guide forest management extend back to 1905 and accrued through the twentieth century. A large pulse of policy making occurred in response to the environmentalism of the 1960s and 1970s. Those laws have had a significant impact on forest management over the last 30 years, although there are divergent views on their effectiveness. Today, however, most people acknowledge that the current problems facing our forests are interconnected and that we must therefore find ways to reconcile our goals and sustain all forest values. Citizens expect forests to deliver a full and integrated set of economic, environmental, and social values across large areas. A national policy that clarifies the goals and limits of forest management will help foster trust and enhance the roles of federal, state, and local governments, promoting regional collaboration, joint planning, and coordinated action.

We need a national policy that recognizes the interdependence of environmental, social, and economic values – across public and private



*Photo courtesy of the U.S. Forest Service*

**John Day River, Malheur National Forest**  
*A national forest policy could help ensure the continued health and restoration of Oregon's watersheds, such as this one for the John Day River in the Malheur National Forest.*



forest landscapes. Without this, we will continue to struggle with boundaries, constraints, and conflicting laws. What we need is a unified goal that makes sustainable forests a national core public policy commitment. Without an underpinning legislative commitment to sustainable forests, acreage loss and declining forest health are all too frequently the unintended consequence of policy and budget decisions brought forward on other issues.

### *Actions*

- ◆ Adopt a unified national policy for sustainable forests to guide the future stewardship for and investment in the nation's forests based on internationally supported concepts for defining and promoting sustainable forests.
- ◆ Develop a national consensus for specific priority measures to implement an integrated national policy and programs for sustainable forests that reflect contemporary forest ownership, science, uses, and values.
- ◆ Promote, review, and amend if needed, existing federal authorities, policies and programs to ensure their support for sustainable forests.
- ◆ Promote regional landscape-level approaches to forest management that assure core areas for economic/community sustainability and biodiversity.

### **National Recommendation #2**

**Congress should develop comprehensive Forest Restoration Legislation that makes restoring healthy forest conditions a top priority, removes barriers to implementing restoration treatments, appropriates funding to support local communities engaged in forest restoration, and recognizes new scientific knowledge and contemporary stewardship goals that promote all environmental services provided by forests.**

### *Justification*

Many traditional forest-management activities are controversial, making projects difficult to implement. Yet many forest landscapes need active management to restore forests to historic stocking levels, improve wildlife habitat, restore hydrologic functions, reduce the likeli-







*Photo courtesy of the U.S. Forest Service*

**Chewaucan Riverbank Stabilization,  
Fremont-Winema National Forest**

***An uprooted juniper being placed into the Chewaucan River, near Paisley in Lake County, as part of riverbank stabilization work. On the right, a previously placed juniper can be seen. In addition to providing in-stream woody debris for improved fish-spawning habitat, this project removes unwanted vegetation—juniper—from the surrounding area where it is robbing the soils of much-needed water, and overtaking and replacing needed native plant species in the area.***

hood of stand replacement fire, or accelerate the development of older forest conditions. Restoration projects are less controversial and could represent a middle ground that will benefit both the economy and the environment. Congressional legislation is needed to direct agency priorities, fund projects, and increase local capacity to do work on the ground.

### ***Actions***

Congress should develop comprehensive Forest Restoration Legislation that:

- ◆ Ensures that restoring forest conditions and improving their resilience is identified as a priority in federal land management plans
- ◆ Provides targeted funds for community-based collaborative projects with locally driven utilization plans for the material removed



- ◆ Appropriates money for capacity-building programs in local communities
- ◆ Develops outcome-based performance measures that focus achievements on ecological conditions, developing collaborative partnerships, and the creation of rural jobs
- ◆ Increases Forest Service and BLM funding for priority landscape forest-restoration projects as an investment in future reductions in fire fighting costs, resource losses, and carbon emissions
- ◆ Reexamines the use of categorical exclusions to focus on scientifically supported restoration efforts for priority needs
- ◆ Provides the authority to the Forest Service and BLM to enter into longer-term commitments – beyond 10 years – to supply biomass: Congress should make stewardship contract authority permanent and in limited circumstances change the maximum contract length to 20 years, subject to periodic monitoring and review
- ◆ Assists renewable power producers and others to provide access to or upgrade infrastructure through targeted tax incentives and loans
- ◆ Creates targeted incentives for co-generation, and upgrading of milling and extraction technologies to maximize high-value use of small-diameter trees
- ◆ Changes federal law to allow county revenue sharing from stewardship contracts



*Photo credit: Oregon Department of Forestry*

**Biomass Facility**

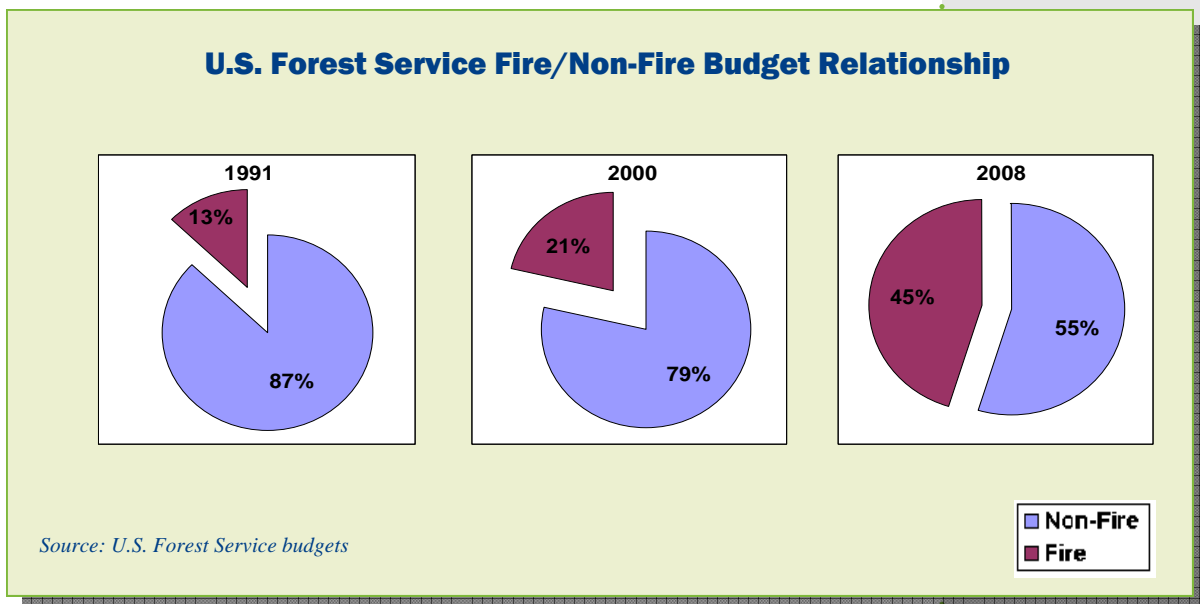
*A new biomass facility in Lakeview dedicated in November 2007.*



- ◆ Encourages tax incentives for the sustainable removal of biomass from federal lands for energy production and forest health.

### National Recommendation #3

**Congress should increase funding for forest management activities. This should be accomplished through a combination of increased appropriations, efficiencies, revenue generation, decoupling fire-fighting costs from agency budgets, and leveraging of federal dollars through partnerships at the state and local level.**



### *Justification*

There is a severe lack of funding for non-fire-suppression forest management at the federal agencies. Funding is not adequate or appropriately allocated to achieve forest management objectives, and a stable funding source is necessary to achieve long-term management goals. For decades the forests of the Pacific Northwest have generated wealth for the nation. For the health of the nation, environment, and economy, we need to reinvest in the restoration of forest ecosystems and human communities.



Current funding is insufficient to provide basic stewardship of the land and its resources, much less to offer a high level of environmental, economic, social, and cultural benefits. Declining budgets limit the agencies' ability to maintain staff with the expertise required to conduct the services needed to accomplish forest management objectives. For example, an increase in fire suppression funding has come at the expense of preparedness, fuel reduction, and all non-fire programs. The proportion of fire suppression funds in the Forest Service budget was 13 percent in 1991. By 2008, that budgeted amount was 45 percent—with actual fire spending exceeding 52 percent, while the total budget for land management activities has decreased. This results in insufficient funding for environmental assessment and monitoring of aquatic ecosystems, wildlife habitat restoration, invasive species management, range management, facilities and access maintenance, road maintenance and decommissioning, and recreation management. Wildfires escaping from federal land may be resulting in additional fire-suppression costs for states, and economic losses on private lands.

In particular, funding, incentives, and structural support are needed to prepare and execute a strategic effort to comprehensively address the negative environmental impacts from the transportation system on federal forests. The legacy road network, which includes failing culverts, inadequate stream crossings, and improperly designed roads, is aging and in need of attention. A new system is needed to fund a permanent, all-weather road system.

### *Actions*

- ◆ Increase Forest Service and BLM appropriations.
- ◆ Increase fire-suppression budgets in order to fully address fire-fighting costs but decouple fire-suppression budgets from the base Forest Service budget.
- ◆ Further examine internal business operations policy to identify cost-saving changes.
- ◆ Create a new funding system to manage forest transportation including addressing water quality and fish passage problems from legacy roads, decommissioning unneeded roads, and creating a permanent, all-weather road system for needed uses.
- ◆ Increase the volume of timber harvested from traditional timber sale programs that are environmentally and culturally responsible to generate revenue, jobs, and infrastructure.
- ◆ Federal managers and policymakers should explore the possibility of leveraging federal dollars through partnerships at the state and local levels.









## References and Definitions

### Introduction

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3. MacDonald, C., S. Buttrick, and M. Schindel. 2006. *The Condition of Oregon's Forests and Woodlands: Implications for the Effective Conservation of Biodiversity*. The Nature Conservancy, Portland, OR.
4. **Definition:** "Sustainable forest management" means forest resources across the landscape are used, developed, and protected at a rate and in a manner that enables people to meet their current environmental, economic, and social needs, and also provides that future generations can meet their own needs. [Based on ORS 184.421.]

### Vision and Goals

5. **Definition:** For the purposes of this report, "restoration" involves the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed.
6. **Definition:** For the purposes of this report, the term "community" refers to the people living in a geographic area in, around and/or neighboring federal forest lands.

### A Sense of Urgency

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9. USDA Forest Service. 2005. *Forest Health Highlights in Oregon – 2004*. R6-NR-FID-TP-03-05, Joint publication of the Oregon Department of Forestry and the USDA Forest Service, Pacific Northwest Region, Portland, OR.

10. **Definition:** “Older forests” include both old growth and mature forests. As defined by the National Commission on Science for Sustainable Forestry, old-growth forests are those dominated by big, old trees, both live and dead, standing and fallen, and usually contain many other smaller trees. The individual trees are irregularly distributed over the land, and their diverse sizes give rise to a layered canopy structure. Old-growth forests give an overwhelming impression of diversity instead of uniformity. In this report, mature forests are those older stands starting to exhibit old-growth characteristics and which have the potential to eventually become old growth. The ecological characteristics and appearance of older forests vary across forest types in Oregon. It is the presence of the assemblage of characteristics that determines whether a forest can be classed as older forest rather than a specific age. These characteristics accrue slowly over time and do not develop instantaneously at a certain age.

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### ***Problems***

18. **Definition:** “Forest health” is a condition where the parts and functions of an ecosystem are sustained over time and where the system's capacity for self-repair is maintained, such that goals for uses, values, and services of the ecosystem are met. One of the signs of a healthy ecosystem in good working order is its ability to respond to disturbances such as fires, insects, or floods in a dynamic way. The system absorbs and recovers from disturbances without losing its processes or functions, although recovery may take varying amounts of time, or specific conditions may look different afterward. If the ecosystem is healthy, it will continue to produce populations of plants and animals that are diverse and viable, waters that are clear, air that is clean, and soils that remain productive. (Central Oregon Intergovernmental Council. December 2002. *COPWRR Strategy Framework: Reducing Wild-fire Risks in Central Oregon by Removing and Utilizing Forest Fuels*. Central Oregon Intergovernmental Council, Redmond, OR.)



19. USDA Forest Service. June 2002. *The Process Predicament: How Statutory, Regulatory, and Administrative Factors Affect National Forest Management*. Washington, DC.
20. *Note:* The FFAC does not view forest restoration as a mechanism to solve the problems created by carbon emissions from burning below-ground fossil fuels. Rather, forest restoration must be one part of a comprehensive strategy to reduce greenhouse gas levels in the atmosphere, while ensuring the continued viability of the natural carbon flux in the forest soils and vegetation.
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### ***Recommended Solutions***

33. **Definition:** The term "conserve," as used in this paper, does not exclude human involvement to culture or nurture a value.

34. **Definition:** The FFAC uses the term "older forests" to be inclusive of a broader range of stand characteristics than normally associated with old growth. See Note 10 of this report for more information.

35. **Definition:** "active management" means the application of practices through planning and design, over time and across the landscape, to achieve site-specific forest resource goals. Active management uses an integrated, science-based approach that promotes the compatibility of most forest uses and resources over time and across the landscape. "Active management" should not be equated with "intensive timber management." Instead, it refers to taking proactive steps to achieve whatever management objectives have been established for a forest site. [Based on the 2003 *Forestry Program for Oregon* and OAR 629-035-000 (1).]









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# OREGON

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The photos below tell the story of one forest stand in the Deschutes National Forest near the Santiam Pass. All photos were taken from approximately the same location on the road in to Suttle Lake.



**Photo #1:** An overstocked forest stand before any treatment.



**Photo #2:** The same stand after being thinned.



**Photo #3:** After thinning, a prescribed fire treatment was applied to the stand.



**Photo #4:** Subsequent to thinning and prescribed fire, a wildfire passed through the stand, causing relatively little tree mortality.



**Photo #5:** The same forest stand, five years after the prescribed thinning and burning, and wildfire passage.



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