

**SITUATION ASSESSMENT  
DONE FOR THE  
FEDERAL FORESTLANDS ADVISORY COMMITTEE**

**EXECUTIVE SUMMARY**

(to be written)

**INTRODUCTION**

The Federal Forestland Advisory Committee (FFAC) is developing a draft vision for how federal forestlands can better contribute and support Oregonians' economic, social, and environmental values. The purpose of this document is to provide the FFAC with information on the conditions, trends, and concerns over the management of forest resources.

**PUBLIC ATTITUDES**

Public attitudes toward forest resources in Oregon provide important context for the FFAC's vision. Oregonians value a variety of economic (jobs 30.8%), environmental (habitat 23.3%), and social (drinking water 22.8%, recreation 14.8%) goods and services produced from the forest (Mercury Public Affairs, 2006). People are very concerned about many forest issues including water quality, fish and wildlife, jobs and revenues, wildfire, and forest health.

Water quality is among the top public concerns in many surveys. Ninety-one percent of Oregonians are very or somewhat concerned about the protection of water quality during forest operations. Leaving streamside buffers and requiring forest managers to minimize erosion were the top remedies cited for improving water quality (Davis, et. al., 2006).

Providing fish and wildlife habitat is an important public goal for national forests. Eighty-eight percent of people agreed, or strongly agreed, that national forests should provide for as much diversity of plants and animals as possible (Institute for a Sustainable Environment, 2002).

Public attitudes toward timber harvesting on federal lands to provide jobs and revenues are more divided. A majority of people (54%) believe that old-growth forests should not be harvested in order to provide ecosystems for wildlife like spotted owls and salmon, but a substantial minority (32%) disagrees. When the question is turned around, a majority of people (53%) support harvesting timber on national forests if it is not in old-growth forests, and again a substantial minority (29%) disagrees (Institute for a Sustainable Environment, 2002). Many rural economies are dependent on timber. The public sees lack of family wage jobs (76%), other Americans wanting to shut down natural resource economies (62%), and damaging government policies (51%) as serious problems facing Oregon's rural communities (Davis, et. al., 2001).

Wildfire and forest health are major issues for many Oregonians, especially those living in the fire prone areas of southwest, central, and eastern Oregon. The vast majority of people agree with using both prescribed fire (83%) and thinning (88%) to reduce excess fuel in crowded forests (Davis, et. al., 2001).

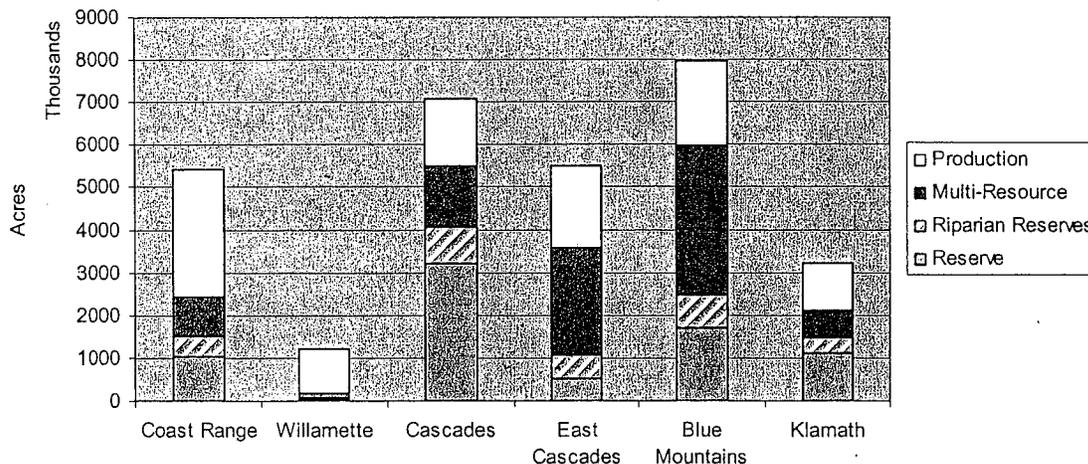
People want a balance of goods and services from federal forests. By a margin of 82% to 8% people agree that national forests should be managed to balance timber harvest, wildlife conservation, recreation and other forest values (Institute for a Sustainable Environment, 2002). However, Oregonians are deeply divided about whether balanced forest management is occurring. Forty-two percent feel that things are balanced, while 40% believe things are out of balance (Davis, et. al., 2001). When asked what the balance should look like on federal lands, Oregonians answered placing 40% of the emphasis on water quality and wildlife, 29% on growing forest produces, and 32% of the emphasis on meeting a wide range of social needs including employment, recreation, and revenues to support healthy rural communities (Davis, et. al., 2001).

**LAND OWNERSHIP AND ALLOCATION**

The federal government owns and manages the majority of the forestland in Oregon. In western Oregon the major landowner classes include federal (52%), private (42%) and state (5%). In eastern Oregon federal lands are even more important. The forest service owns 72% of all forestlands and about 3/4 of the land capable of producing commercial crops of timber.

Forest management philosophy encompasses three major strategic approaches, each with a different intensity of management and directed at yielding a different set of outcomes. These approaches have been called by a variety of terms. Here we are using a system developed for the Oregon Board of Forestry and calling the land allocation categories *reserve*, *multi-resource*, and *wood production* forests. These three strategic approaches work in concert with one another toward achieving sustainability across the forest landscape (see appendix for full descriptions of the categories and land allocations in them).

Figure 1 – General land allocation by category



Ecoregions denote areas within ecosystems where the type, quality, and quantity of environmental resources are generally similar. In evaluating the condition of a wildlife or plant species, it is essential to know the natural geographic range of the species. The geographic range of a species represents the broadest possible area where a species can exist, and is generally determined by major environmental patterns such as ecoregion, climate, and elevation. Figure 1 shows that all the major forested ecoregions in Oregon (the Willamette ecoregion is dominated by non-forestland) have significant proportions of their total forestland bases in reserves or riparian reserves, with the Klamath Mountains and Cascades ecoregions having more than half of all forestland in reserves. Wood production lands are primarily found on private lands. Only the Coast Range ecoregion has more than half of its land in the wood production allocation. Overall in Oregon, about 35% of all forestland is in reserves, 35% is in wood production, and 30% is in a multi-resource land allocation.

## **FOREST SUSTAINABILITY**

Opinion polls consistently show that people want a full range of economic, social, and environmental goods and values produced from forests. At the 1992 United Nations Conference on the Environment and Development, the United States committed to using our forests sustainably. Following that conference, through the Montreal Process, a group of 12 countries with 90% of the world's temperate forests have agreed to use a common framework to describe forest sustainability. The seven Criteria are like goals that define the essential elements of sustainable forest management. These include conservation of biological diversity, maintenance of productive capacity, forest ecosystem health and vitality, conservation of soil and water resources, maintaining forest's contribution to global carbon cycles, providing socioeconomic benefits, and creating the legal and institutional framework necessary for sustainable forest management. This situation assessment uses the first six criteria as an organizational tool to describe the conditions and trends of forest resources that need to be sustain.

### **Maintain Plant and Animal Populations (Biodiversity)**

#### Late-successional and Old-growth Forest

**(Date and information for this section are still being collected)**

1. Forest types - by size or age class and ownership
2. Forest types and size classes in reserves
3. Trends in LSOG forest
4. Critical habitat vs. reserves

#### Oregon Conservation Strategy

The Oregon Department of Fish and Wildlife (ODFW) conducted a comprehensive review of Oregon's, fish, wildlife and their habitats, in 2005, the Oregon Conservation

Strategy (ODFW, 2006). The goals and scope of the Conservation Strategy include: maintain healthy fish and wildlife populations by maintaining and restoring functioning habitats, preventing declines of at-risk species, and reversing any declines where possible.

The Conservation Strategy is intended to provide a long-term, big-picture “blue print” for conserving Oregon’s natural resources to maintain or improve environmental health for today and for future generations. It outlines how and where the state and its conservation partners, including landowners and land managers, can best focus this work. The Conservation Strategy is not regulatory. It works within existing legal structure and is not a substitute for existing regulations or planning efforts. It synthesizes and builds upon existing efforts to promote a statewide framework for action.

The Conservation Strategy presents issues and opportunities, and recommends voluntary actions that will improve the efficiency and effectiveness of conservation in Oregon. Six key statewide conservation issues were identified and include: 1) land use changes; 2) invasive species; 3) changes in disturbance regimes (fire, flood); 4) barriers to fish and wildlife movement; 5) water quality and quantity; and 6) institutional barriers to voluntary conservation.

The strategy also includes an ecoregional approach to conservation. For each ecoregion characteristics of ecology and economy were used to identify strategy species and habitats, conservation issues and actions, and provide examples of successful collaborative conservation efforts. The strategy also includes and Conservation Opportunity Area (COA) maps that identify some issues on federal lands.

Conservation Opportunity Areas (COA’s): prioritize landscapes where fish and wildlife conservation goals can best be achieved, increase likelihood of long-term success over larger areas, improve funding efficiency, promote cooperation across land ownership boundaries.

The Conservation Strategy also includes:

- 11 Strategy Habitats. Statewide: aquatic, riparian, wetland. Ecoregions: aspen, coastal dunes, estuaries, sagebrush, grasslands, late-successional mixed conifer, oak, ponderosa pine.
- 286 Strategy Species: 17 amphibians, 62 birds, 65 fish, 59 invertebrates, 18 mammals, 60 plants, and 5 reptiles; some are statewide, others in one or more ecoregion; limiting factors, special needs, data gaps, and recommended actions listed for each species.

The FFAC can use the Conservation Strategy: *as a reference* (4 scales of planning, background information on Oregon’s habitats and species); *for priorities* (lists conservation issues and actions that will help fish and wildlife, identifies important landscapes [COA’s] and habitats to focus investments); *for data sharing* (data layers available for COA’s, species distribution, habitats); *to build partnerships* (identify broad approaches across ownership boundaries); *to measure success* (through collaborative

initiatives, such as the Registry of Conservation Actions and Fish and Wildlife Monitoring Team).

### **Maintain Productive Capacity – Economic Well-Being**

Timber and forest products are very important to Oregon's economy. Many factors influence the capacity of Oregon's forests to sustain commercial production of various forest products, but a stable forest landbase devoted to growing and harvesting timber is prerequisite to sustaining any timber harvest level. The private land base devoted to timber production has been relatively stable since county land use plans were implemented in the mid-1980's. However, due to changes in the land use laws, declining federal timber harvests, and changes in land ownership, the stability of the private landbase is eroding. Large tracts of timberland, once owned by the forest industry, are being sold to people with little background in forestry or being developed for other uses. Private timber harvests have been relatively stable over the past 20 years. Timber harvests are at a level that can be sustained (Sessions et. al., 1989); private harvests are also at a level that is close to the maximum biological potential that can be produced from the private land base.

With the designation of late successional reserves, riparian reserves, and other land allocations that are out of the timber base, public land devoted to timber production has significantly declined since the 1980's. Timber harvest levels that can be sustained on public lands under current management allocations and restrictions (see Appendix A) are about 20% of historic harvest levels and about half of what was projected in major planning efforts (FEMAT, ICBEMP, and State plans).

Another way to look at whether timber harvests can be sustained is by comparing growth and harvest levels. Net growth has substantially exceeded harvests on forest service lands since the 1950's. This is most dramatic in the inland west where less than 10% of the net volume growth has been harvested during the last 20 years. Between 1993 and 2004, on non-Congressionally withdrawn federal lands, timber harvest has been about 4% of total growth in western Oregon and 10% of total growth in eastern Oregon. During the same time period, mortality on federal lands was 26% of total growth in western Oregon and 44% of total growth in eastern Oregon (Hovee, 2005).

### **Maintain the Health of Forest Ecosystems**

Disturbances such as fires and windstorms are key ingredients that shape the forests, contribute to species diversity, and control the relative abundance of individual species across the landscape. Fire suppression, timber harvesting, development, agriculture, and grazing can change the processes that have shaped Oregon's forests, and can lead to forest health problems.

There are currently about 20 million acres of forestland in Oregon, where fires historically burned frequently, that are now overstocked and in danger of losing key ecological components to uncharacteristically severe wildfire. Some forest stands which

historically had 50 to 100 trees per acre now have as many as 500 or 1000 trees per acre. When fires burn in overstocked stands they are much more likely to climb into the crowns of the trees and consume the entire forest, rather than staying on the ground, thinning the forest from below, and removing fuels that have accumulated on the forest floor. This is an extremely large problem that continues to get worse with time.

Overstocked forest stands are more susceptible to damage from insects. Crowded trees lack the water and vigor to fend off insects like bark beetles. During drought conditions in the late 1990's and from 2002 through 2005, insect activity was at epidemic levels in eastern Oregon. Aerial detection surveys show an almost eight-fold epidemic increase in tree death in the area along the eastern slopes of the Cascade Mountains during 2004. During epidemics, widespread tree mortality alters the forest ecosystem. Often, beetles have almost totally depleted commercial pine forests and, in some cases, have converted valuable forests to less desirable timber species, such as subalpine fir. Sometimes, forested areas are converted to grass and shrubs. The profusion of beetle-killed trees can change wildlife species composition and distribution by altering hiding and thermal cover and by impeding movement. Insect activity has left a legacy of dead trees, and increase fire danger, across hundreds of thousands of acres of forestland in Oregon, and the vast majority of this is on federal lands.

The introduction and spread of non-native invasive species is a problem on both public and private lands. On forest service lands in Region 6 there are more than 300,000 acres infested with invasive species. Some of the problems associated with invasive species include:

- Changes in fire frequency, leading to type conversions of habitat (cheatgrass, Arundo)
- Changes in nutrient cycling (cheatgrass, knotweed)
- Toxicity to livestock (tansy ragwort, yellow starthistle)
- Loss of forage quality and quantity for big game (leafy spurge, knapweeds, yellow starthistle)
- Invasive shrubs acting as a population sink for native birds due to increased predation of nests within invasive shrubs (buckthorn)
- Changes in stream and river hydrology (knotweed, blackberry)
- Loss of nesting habitat and increased nest predation on endangered snowy plovers (European beachgrass)

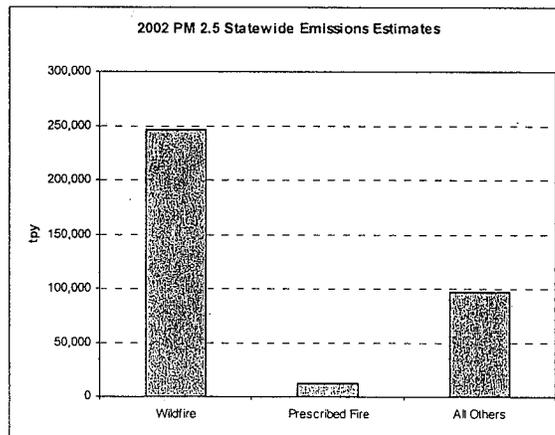
Changes in disturbance regimes from fire suppression, selective timber harvesting practices, development, invasive species, and grazing have combined to create forest health problems across large areas of the state. To treat the overstocked acres on non-wilderness, non-roadless public lands over a 20 year period would require treating 559,000 acres per year. Preliminary data from the Forest Inventory shows a significant decline in the volume of large Ponderosa pine in excess of 21" dbh. Even with the current restrictions on harvesting large trees, we may be losing that component of the forest due to forest health problems.

### **Maintain Soil, Air, And Water Quality**

Air Quality

Air quality can be severely impacted by smoke from wildfires and prescribed burning. DEQ monitors air quality and develops plans to make sure areas are in compliance with national ambient air quality standards. EPA revised the daily fine particulate standard in September 2006 from 65 ug/m<sup>3</sup> to 35 ug/m<sup>3</sup>. Klamath Falls and Oakridge, Oregon are likely to be designated as nonattainment areas for the new standard, and several other communities are at risk of violating the standard. Oregon's Smoke Management Plan and rules are designed to keep smoke away from certain areas, including national parks and wilderness areas and smoke sensitive receptor areas. However, smoke intrusions do occur and the public health can be affected by this smoke. The 2002 data (Figure 2) indicates that 69% of the fine particulate emissions statewide, on an annual basis, were from wildfires and 4% from prescribed burning. To help prevent wildfires, one method to treat stands at risk in wildfire-prone areas is to increase the amount of prescribed burning and manage the smoke away from smoke-sensitive receptor areas. Increasing prescribed fire use requires developing more sophisticated smoke management forecasting techniques, improving emission inventories, using appropriate emission reduction techniques, and greater use of real-time monitoring equipment. Increasing biomass utilization (wood chipping and developing markets for fuel and energy production) should be the preferred alternative to prescribed burning wherever feasible, particularly in wildland urban interface areas.

**Figure 2: Fine particulate emissions, 2002**



Surface Water Quality

The Clean Water Act, section 303(d), requires periodic assessment of water quality conditions within the state to determine whether they meet the beneficial use needs of both present and future inhabitants. In the past, "number of river miles assessed meeting standards" has served as a benchmark of performance, but it has its limitations. The most

recent water quality assessment (2002) suggests that there are impairments on federal lands due to temperature, sedimentation and toxics.

- 4700 stream miles due to high temperature
- 340 stream miles due to sedimentation
- 70 stream miles due to elevated levels of toxics.

It is important to note that the 303(d) listings are limited to water bodies with available data, and that severity of these water quality problems are not captured. The extent and severity of impairments for water bodies where data is not available is unknown. It is also important to note that many impaired streams that were on previous lists but have TMDLs in place are no longer on the 303(d) list.

Oregon Plan data - DEQ studied water quality on federal forestlands within the Coho Evolutionarily Significant Unity (ESU--mainly in the Umpqua Watershed). Table 1 shows that federal lands, these data indicate:

16% of wadeable streams did not meet the fine sediment benchmark  
77% of wadeable streams exceeded Oregon's temperature benchmark

The Oregon Plan monitoring produced unbiased estimates of the ecological condition of stressors in streams within the Coho ESU.

**Table 1: Percent Of Stream Miles That Fail To Meet Standards Or Benchmarks For The Factors For The Decline Of Coho**

ESU	Temperature	Fine Sediment	Vertebrates	Macro-invertebrates
Federal Forest	77	16	18	16
Private Industrial Forest	43	45	33	33
State Forest	*	16	1	24
Agriculture	*	63	46	63

Aquatic and Riparian Effectiveness Monitoring Program – The 2005 Pacific Northwest Assessment of federal lands within the Northwest Forest Plan area aggregated road, vegetation and in-channel conditions to assess the condition of sixth field watersheds, to describe the distribution of watershed conditions in the Northwest Forest Plan area. The study focused on the effectiveness of the Aquatic Conservation Strategy, and indicated:

57% of watersheds showed improved conditions  
40% of watersheds showed little change in condition  
3% of watersheds showed a marked decrease in condition

#### Drinking Water Quality

High quality drinking water is an extremely important issue to Oregon citizens and contributes significantly toward achieving public health. Watershed protection and management, combined with effective water treatment and monitoring, are important steps in providing high quality drinking water to Oregonians.

In Oregon, approximately 75% of the municipal watersheds are forestlands. Of these, USFS manages 4.3 million acres and BLM manages 2.6 million acres. Federal agencies acknowledge their role in protecting municipal watersheds and have signed Intergovernmental Agreements with many local communities. From federal lands, municipal water providers are primarily concerned with sedimentation/turbidity and pesticides. For some providers, there are additional concerns about fire retardants. Even the best state-of-the-art drinking water treatment facilities cannot fully remove many of the commonly used pesticides and fire retardants. Implementing protective actions in sensitive areas, and minimizing the use of pesticides and fire retardants, can be effective in providing clean source water to public intakes and wells.

#### Herbicides and Pesticides

**(Date and information for this section are still being collected)**

#### **Enhance Carbon Storage – Climate Change**

Climate has been warming since the end of the “little ice age” about 1860. Human activities have changed and are continuing to change the chemical composition of the atmosphere. Many of these influences, such as fossil fuel burning, and land management activities, release greenhouse gases, which increase the amount of radiation absorbed by the atmosphere. The changes caused by these gases may further alter the climate. Forests can play a role in climate change by sequestering carbon, but equally important is the role climate change can have on our ability to sustain forests.

Oregon’s forests contain about 1.8 billion metric tons of carbon. Oregon’s forests store about 16 million metric tons of carbon per year through forest growth. Carbon is also stored in wood products. In general, the longer a forest rotation, the greater the amount of carbon stored. However, a short rotation, when combined with wood products substituted for high energy using building materials (i.e., concrete), will store more carbon than long forest rotations (Wilson, 2006).

Historical fire regimes have been disrupted, and climate change may combine with wildfire to dramatically alter forests. We are observing increased rare wildland fire conditions like extreme wildfire events, lengthened wildfire seasons, and large-scale wildfires in fire-sensitive ecosystems. Fire may become the primary agent of forest changes leading to wholesale conversions of some habitat types. We could see changes from dry temperate forests to grasslands, moist tropical forests to dry woodlands, and high-severity fires may eliminate entire forest types. This type of change would increase risks of species extinction, and reduce economic and social values derived from the forest.

To address the problem, fire ecologists and managers (Third International Fire Ecology and Management Congress, 2006) recommend that we:

- Identify fire-dependent or fire-sensitive ecosystems,
- consider climate change and variability when developing plans,
- consider alternate climate scenarios when determining post-fire vegetation management, and
- reduce uncharacteristic fuel levels.

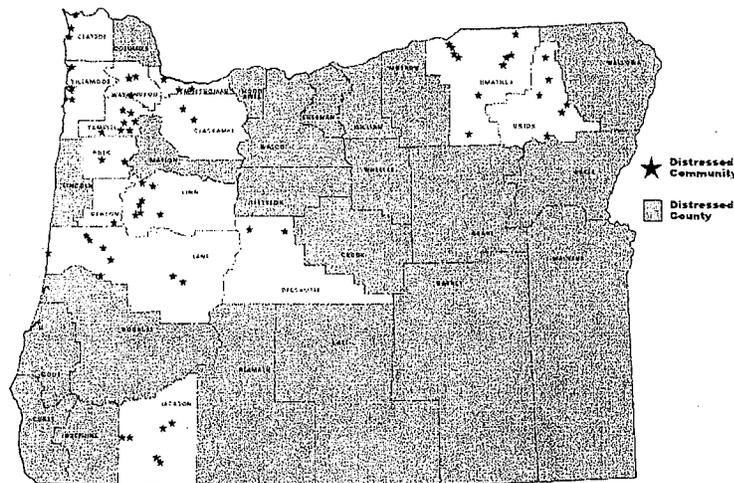
### **Maintain Socio-Economic Benefits**

Societies need both forests and forest resources, and people have many values related to forests, goods, and services. These values and needs can sometimes be in conflict with each other. Sustainable forest management must find a way to meet competing uses and demands in ways that reflect human values. Some values are direct, such as the production of commodities, source of employment, and source of income. Other values are indirect, such as education, scientific, knowledge, or spiritual uses. Resources that have little or diminishing value to people will inevitably be converted to other uses.

The forest industry is an important sector in Oregon's economy. In 2002 it produced \$12.8 billion or 6.9% of total industrial output. It also created 75,500 living wage jobs. The forest industry is even more important in many areas of rural Oregon. In 2001 it accounted for more than half of the traded sector employment in eight counties. Firms in the traded sector bring money from outside the local economy and create a base that supports local services and other local business.

Between 1980 and 2003 Oregon lost more than 250 mills and 24,000 jobs in the forest industry (Ehinger and Associates, 2003). Family income has a direct relationship to standard of living and is often used as an indicator for quality of life. Average earnings per job in the forest products industry are well above the state average and a very important source of family wage jobs in rural communities. In many forest dependent areas of the state, average earnings per job fell during the 1980's and first half of the 1990's as the forest industry was declining. Throughout the rest of the 1990's, as Oregon's economy was growing, earnings in forest dependent communities were flat or declining. At the same time, unemployment rates in these areas remained much higher than the state average for long periods of time, and reached 10 or 15% in some counties.

The loss of forest industry jobs has hurt many rural communities. The Oregon Legislature directed the Economic and Community Development Department (OECDD) to "give priority to counties, cities, communities or other geographic areas that are designated as distressed areas," based on indicators of economic distress or dislocation, including but not limited to unemployment, poverty and job loss (Figure 3). A large majority of the distressed counties and cities in Oregon have historic ties to the forest industry and have experienced job losses and associated social problems due to mill closures.

**Figure 3 – Distressed areas as of Oregon - 2005**

Prepared by Department of Economic  
Development

Federal forests provide an important source of revenues to local governments in Oregon. Since the enactment of two compacts, one in 1908 and the other in 1937, Oregon counties have counted on revenue from the Forest Service and the Bureau of Land Management (BLM). This revenue compensates the counties for lost property tax revenues they would have otherwise received had the land been sold or transferred into private ownership. Historically, 25% of Forest Service and 50% of BLM timber revenues were shared with counties.

Because of harvest declines in the 1990's, Congress passed the Secure Rural Schools Act to replace this revenue. In total, more than \$250 million have been provided to Oregon counties annually since 2001 through the Secure Rural Schools Act. The bill expired in 2006 leaving the future of federal funding in doubt. This money is an important revenue source used by counties to support things like general funds, roads, and schools. In Douglas County about 2/3 of the general fund, more than 90% of county school fund, and more than 60% of the public works funds come from federal payments. In Wallowa County 57% of the roads fund and 74% of the schools fund comes from Forest Service payments. Dramatically decreasing federal payments to local governments in areas where local economies have already been hurt by reductions in federal timber harvests could cause severe social problems. The economic and social distress in rural communities has directly affected many people in Oregon.

### **CONFLICTS, RISKS/UNINTENDED CONSEQUENCES, MISSING ELEMENTS**

**(Date and information for this section are still being collected)**

Feedback from the FFAC is needed about what conflicts to explore.

## BIBLIOGRAPHY

Davis, Hibbits, and McCaig, Inc. 2001 . *A Forestry Program for Oregon: Oregonians Discuss Their Opinions on Forest Management & Sustainability, A Quantitative Research Project*. Prepared for: Oregon Department of Forestry.

Davis, Hibbits & Midghall, Inc. 2006. *Forestry Values and Beliefs: Benchmark Survey of Oregonians*. Prepared for the Oregon Forest Resources Institute. Davis, Hibbits & Midghall: Portland, Oregon.

Ehinger and Associates. 2003. Proprietary data on mills and associated employment in Oregon.

Hovee, E.D & Co. 2005. Baseline Growth and Mortality Assessment. Oregon Forest Resources Institute. Portland, OR. 61 pgs.

ODFW. 2006. The Oregon conservation strategy. Oregon Department of Fish and Wildlife (ODFW). Salem, OR.

Institute for a Sustainable Environment. 2002. *National Forest Management in Timber and Spotted Owl Country: A Survey of Interested People in Western Oregon and Washington*. Robert Ribe and Tony Silvaggio. University of Oregon.

**Johnson, Norman K., et. al.,** 1993. Sustainable harvest levels and short-term timber sales for options considered in the report of the Forest Ecosystem Management Assessment Team: methods, results, and interpretations.

Mercury Public Affairs. 2006. Survey Conducted in Oregon for Conservation Groups

Oregon Department of Fish and Wildlife. 2005. Oregon Conservation Strategy. Oregon Department of Fish and Wildlife, Salem, Oregon.

**Session, John, and Norman K. Johnson, John Beuter, Brian Greber, Gary Lettman.** 1990. Timber for Oregon's tomorrow: the 1989 update. Forest Research Lab, Oregon State University, Corvallis, OR.

**USDA Forest Service.** Forest inventory and analysis data records.

Wilson, James. 2006. Using wood product to reduce global warming. In *Forests, Carbon, and Climate Change: A Synthesis of Science Findings*. Oregon Forest Resources Institute. Portland, OR. 182 pgs.

Third International Fire Ecology and Management Congress. 2006. The San Diego declaration on climate change and fire management. The Association for Fire Ecology.

## APPENDIX A

### Forest Land Management Classifications

1. **Nonforest** – land with <10% crown closure that has not previously been in forest use and has not been converted from forest to another use (Note: recent timber harvest units are forestland).
2. **Reserved Forest** (Forest Reserved for Conservation and Recreation) – includes land reserved from regularly scheduled timber harvest by law, regulation, or forest plan requirement. The primary purpose of the designation is to reserve the land for production of non-timber values. Forest management is used to produce wildlife, esthetic, or other values, and limited harvests may only be conducted when it will benefit those values (i.e., safety, maintaining wildlife habitat, etc.).
  - ◆ Includes: Administratively Withdrawn Areas, Congressionally Reserved Areas (Including - National Monuments, National Park, National Wildlife Refuges, Steens Mountain Cooperative Management and Protection Area, Wild and Scenic Areas, Wild and Scenic Rivers, and Wilderness Areas), Late-Successional Reserves, State and County Parks, Riparian Reserves (Federal), Special Areas (Includes: Areas of Critical Environmental Concern, Botanical Areas, Ecological Emphasis Areas, Outstanding Natural Areas, and Research Natural Areas), The Nature Conservancy Lands, and Wildlife Areas.
3. **Multi-resource Forest** (Forest with Restricted Timber Management) – includes lands where restrictions on timber harvesting have been implemented through Forest Plans, state laws, or agency policies. This includes portions of land within management allocations where scheduled timber harvest may occur, but where restrictions for wildlife habitat or other uses will significantly reduce timber outputs.
  - Federal: Adaptive Management Areas, Eastside Screens, Experimental Forests, Key Watersheds, Matrix Land (Federal), National Grassland, National Recreation Areas, and National Scenic Area.
  - Private/Other Public: Habitat Conservation Plans, Oregon Scenic Waterways, Riparian Management Areas (FPA), State Forests, and State Research Areas.
4. **Wood Production Forest** (Actively Managed for Timber Production) – includes lands where scheduled timber harvest may occur and where sustainable supplies of timber are anticipated. These forestlands are regulated through the Oregon Land Use Planning laws to maintain the land in forest uses by restricting development and through the Oregon Forest Practices Act to protect soil, air, water, and wildlife resources by regulating commercial forest operations.

