

## NATURAL PROCESSES ISSUE

### Problem

Natural processes, especially fire, have been disrupted in the forests of Oregon. Many of these forests are now overly-dense, experiencing extensive forest health problems, and in danger of losing key ecological components to either wildfire or lack of successional processes.

### Problem Description

Natural processes on Oregon's federal forests have been modified by a number of factors. For example, fire suppression and silvicultural practices on some federal forestlands have modified fire regimes and behavior producing changes in vegetative conditions (including increased species composition, stand density, and a limited large tree component). Growth has dramatically exceeded removals on federal lands during the past decade causing a build up of fiber across the landscape. High tree mortality and fuels build-ups have altered how wildfire, insects, disease and invasive species interact with forests, ultimately modifying forest resiliency. Without an increase in active management these conditions may result in impacts to wildlife habitat, water quality, private timber investments, structures in the wildland-urban interface, and public impacts from smoke<sup>1</sup>.

### Context/Analysis/Impact

About 20 million acres of forestland in Oregon, have fire regimes ranging from high-frequency, low-intensity to moderate frequency, mixed-intensity. The majority of these acres are now outside their historic range of variability in terms of stand density and fuel loads and are at risk of losing key ecosystem components to uncharacteristically severe wildfire or uncharacteristic vegetation succession. 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 ignite in these overly dense stands, they are much more likely to develop into uncharacteristic stand-replacing crown fires. Historically, fires in these stands maintained healthy forests by thinning the forest from below and removing fuels that accumulated on the forest floor. The current forest conditions constitute an extremely large problem that continues to get worse with time. On federal lands in Oregon, there

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<sup>1</sup> “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 *Forestry Program for Oregon* and OAR 629-035-000 (1).]

are 13 million acres of over-dense forests outside of wilderness and inventoried roadless areas that are a high priority for treatment.

In addition, these overly-dense 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. On some dry Ponderosa pine forests, beetles have depleted the pine components of these stands and, in some cases, have converted the stand to less desirable and non-sustainable species, such as Douglas-, grand and white fir. Similarly, high elevation stands composed of whitebark pine are being replaced by supalpine fir and spruce because of fire exclusion. Similar to pine forests, low intensity ground fires maintained stands of whitebark pine by killing understory spruce, fir, and young whitebark pine. 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 increased fire danger, across hundreds of thousands of acres of forestland in Oregon, and the vast majority of this is on federal lands.

The current conditions in Oregon's forests are not sustainable with respect to fire and insects, and can only be solved with management. Increasing fire size and severity and insect epidemics are indicators of the extent of this forest health problem. The lack of active management in these forest are allowing current conditions to worsen, which is leading to a "train wreck" that affects many ecological, economic and social values. Fire suppression costs have become the dominant use of federal funds allocated by Congress to manage federal lands. As a result, funding related to the other management needs of federal lands, including stand and fuels management have been greatly reduced. The problem is being made worse by loss of trained personnel, the cost of analysis and NEPA compliance for treatment options at large scales, conflicts between the Clean Air Act and the impact of prescribed burns, and requirements for ESA consultation and comparison with the no action alternative.

### Policy Recommendations

1. Create a statewide task force, sponsored by the Governor, to develop and implement a comprehensive fuels management and stocking reduction strategy with the goal of identifying and prioritizing treatment opportunities across the landscape and across ownership boundaries.
  - Establish clear management policies and goals for fire-adapted forests that include policies and goals related to stand condition, fuels condition and wildfire risk management. This should include development of performance measures and rewards for accomplishments. The policies should emphasis stand condition,

- management and fuel treatment, rather than fire suppression. The fire suppression program needs to be better integrated into the land management program.
- Land management options should mimic natural fire when possible.
  - A variety of tools including prescribed fire, mechanical treatments, and natural fire should be used to reduce fuel loadings based on the purpose of the land. Address all ownerships and management categories including wilderness and roadless areas using appropriate treatment tools for each setting.
  - **The task force should adopt the Governor's Eastside Forest Advisory Panel's 2002 11-point strategy for eastern Oregon forests as a "Code of Collaboration and Cooperation for Eastern Oregon Forest and Community Health".**
  - Coordinate with the National Fire Plan.
2. In coordination with the comprehensive fuels reduction strategy (#1 above), develop a programmatic EIS to cover fuels treatments in dry forest types statewide. Clearly define and differentiate analysis that will be done at the statewide level and project level.
    - Tier EA's to reduce planning costs and expedite larger scale treatments.
    - Develop templates to expedite completion of project-level EA's.
    - Examine history of successful and unsuccessful EIS' and EA's (e.g, those that are appealed vs. not appealed, those that win appeals/lawsuits vs. those that lose) to identify key features of the process that lead to greater chance of success and more rapid approval of projects.
    - Analyze the impact of wildfire – there is no-no action alternative
  3. Sponsor Community Solutions projects (similar to the Lakeview and CROP Projects) to prioritize treatments and attract investments at the local level. The statewide strategy should be detailed out in local to mid-scale (up to 1 million acres) treatment plans that address the unique characteristics and variety of landscape conditions.
    - Develop Regional "strike teams" to provide better expertise to complete NEPA processes more efficiently than the current decentralized, District-base methods currently used. In particular, the strike teams could be used to assist completing work on larger scale high priority projects.
    - Treatment plans should consider site characteristics, the presence of sensitive ecological features such as endangered species or old-growth, and potential impacts to air and water quality.
    - Fireshed assessments should be done to design the pattern of treatments across the landscape to interrupt fire spread and get the maximum reduction of fire risk with minimum treatment of the landscape
    - Identify a coordinated strategy to provide a long-term stable, sustainable supply of small diameter material from multiple sources on public and private lands.
  4. The Healthy Forest Restoration Act (of 2003 P.L 108-148 - HFRA) provides authority for expedited vegetation treatments on federal land that are at high risk from wildland fires or have experienced insect or disease epidemics. The bill provided a process for expedited environmental analysis, and appropriated money for treatments.

However, the bill contained an acreage limitation allowing not more than a total of 20 million acres of federal land nationwide to be treated under its provisions. The bill also requires that at least 50 percent of the dollars allocated to HFRA projects be spent to protect areas adjacent to communities at risk of wildland fire. The provisions of the bill have been very helpful in getting projects on the ground, but both the acreage limitation and the funding fall far short of what is need to deal with the problem. HFRA should be modified to include far more than 20 million acres nationwide, and additional funding should be allocated.