2.0 Problem Statements/Potential Solutions

2.1 Natural Processes

Problem Statement: Natural processes have been disrupted in Oregon forests. Problems are most extreme in the dry forest types where unprecedented landscape scale forest health problems are resulting in the loss of key ecological components. Hydrologic regimes have been altered 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 and identifying the impacts is challenging. An integrated approach to forest restoration and fuels management that considers historic conditions, natural hydrology and adequate streamflows, fish and wildlife conservation, natural fire intervals, and silvicultural techniques is necessary to achieve long term management goals.

Problem Description: Natural processes on Oregon's federal forests have been modified by a number of factors. For example, decades of fire suppression and silvicultural practices on some federal forestlands have modified fire regimes and behavior producing changes in vegetative conditions – including changes in species composition, increased stand density, and a reduction in the large tree component – ultimately reducing forest resiliency and impacting aquatic habitat. Growth has dramatically exceeded removals on federal lands during the past decade causing a build up of fiber across the landscape. The results have been high tree mortality and fuels build-ups due to insects, disease and invasive species, and large un-natural wildfires resulting in impacts to wildlife habitat, water quality, private timber investments, structures in the wildland-urban interface, and public impacts from smoke. Without an increase in active management these conditions are expected to continue.

Water quantity and quality are inseparable issues. Adequate streamflows and natural hydrology help maintain high water quality in Oregon's rivers and streams. Water quality and quantity issues are linked to changes in land uses, increasing intensities of land management, growing demand for water, and uncertainty about the role climate change will play in long term supply. In the Pacific Northwest, watershed health also is directly related to healthy populations of migratory salmon. Many measures of ecosystem performance, water quality, and watershed health have been linked to salmonid populations.

Climate change may be affecting forest and hydrological conditions in Oregon. If trends continue, changes from dry temperate forests to grasslands, moist 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. Management decisions will determine if federal forests will serve as net carbon sinks or carbon sources.

Potential Solutions

	Potential Solution	Add/Delete	Changes – issues to FFAC for Discussion
	2.11 Issue/ impediment – 2.11a - Lack of understanding about large scale dynamic ecosystems and their management. 2.11b - Currently many legal, economic, and administrative frameworks limit the ability to manage large scale dynamic ecosystems to provide for certainty at the expense of managing for dynamic ecosystems.		
1	Create clear goals for the use of dynamic processes in land management plans and regulatory agency implementation plans.		
2	Commission a study to review the litigation against the federal agencies. Determine which issues are driving the litigation and whether there is a pattern to the court rulings against the agencies.		
3	Create and act on learning opportunities. Expand the range of management options and actions selected in controversial Environmental Impact Statement. (The Five Rivers Project provides an example where multiple strategies, proposed by different constituent groups, were selected as part of an alternative.)		
4	New research (pilot projects) to look for new solutions. Design pilot projects as a way to test new science (issues, controversies, ensuring long term – ensuring funding).		
5	Federal land management agencies need to better integrate into existing collaborative processes for landscape-scale watershed assessments and innovative approaches to forest management across land uses and ownerships. • Identify, evaluate and participate in current collaborative processes, policy frameworks and scientific processes related to landscape management; • Development of IMAP methodology should be a priority. • Apply watershed assessment protocols consistent with watershed assessment protocols developed by OWEB • Identify research needs, regulatory and non-regulatory policies, and technical methods to support landscape-scale approaches; and • Improve cooperative approaches and partnerships among local,		

	state and federal governments, and private landowners. • Strengthen involvement in "Oregon Plan for Salmon and Watersheds" support for basin and watershed-scale assessment, collaboration, and restoration by linking federal actions to basin and watershed priorities established by the Oregon Watershed Enhancement Board (OWEB). • Use these processes to assess opportunities for water storage and enhanced water management. • The federal agencies should become strong partners in the Watershed Research Cooperative paired watershed studies to establish cause and affect relationships among physical and biological parameters.		
6	DEQ should create standards that reflect knowledge of dynamic ecosystem processes and that are applied based upon disturbance and resultant variability of conditions across the landscape. (See discussion of "options forestry.")		

	Potential Solution	Add/Delete	Changes – issues to FFAC for Discussion
	2.18 Issue/ impediment – Lack of strategic plan for a transportation system (e.g., roads, culverts, ditches) in forests: impact, how maintain, funding; legacy federal forestland road networks are aging and in need of rehabilitation (existing roads, fire roads); how temporary are temporary roads in terms of their effects on the landscape; impact on county roads to access forest roads (maintenance); and connect to stewardship contracting (link to culvert replacement, etc.) and biomass.		
7	As part of the land management planning process, federal agencies should assess fish passage, stream crossing, and road location problems and develop road maintenance and abandonment plans. Strengthen involvement in the "Oregon Plan for Salmon and Watersheds" and support for basin and watershed-scale assessment.		
8	Develop a new system to fund roads. Budget separately for a "key" or administrative road system that is permanent and all weather. Invest in roads for firefighting up front rather than have firelines/temp. roads built while fighting fire Increase funding and trained personnel devoted to improving the road system. Non-timber projects, (i.e. fire suppression, fuels/biomass projects, recreation, and others) need to have an explicit budget component to support the transportation system.		
9	Develop a "new paradigm" that allows the use of temporary roads for projects – local projects road systems that may or may not be all weather but are temporary and removed after the project is completed, i.e. no pipes.		

	Potential Solution	Add/Delete	Changes – issues to FFAC for Discussion
	2.19 **Issue/ impediment** – Certain federal forestlands (including juniper woodlands) in Oregon are over-stocked and are experiencing changes in species composition contributing to the threat of: • Uncharacteristic wildfire • Forest insect pest and disease outbreaks • Losing key ecological components • Impact on the hydrologic cycle and watershed functions Large areas of overstocked juniper woodlands also need treatment to limit the spread of juniper and restore healthy range conditions. During outbreaks, widespread tree mortality alters the forest ecosystem and makes it more susceptible to large scale wildfires.		
10	Clearly define and articulate management objectives – what is the mission(s)?		
11	Develop management plans that address the public-private interface Potential for conflicts, insects don't respect boundaries, management on public lands affects forest insect pests on neighboring lands Lessons learned on private land will inform federal agencies and they should be encouraged to partner		
12	Maintain and enhance efforts to prevent new introductions of non-native insect pests and eradicate those that occur o Accountability for new introductions		
13	Revise NEPA process to allow more timely management actions. For example, harvesting windthrown or fire-damaged trees to prevent bark beetle outbreaks		
14	Provide resources for treating large areas. Reducing fire hazard. Treat overstocked stands		
15	Create a statewide task force to develop and implement a comprehensive strategy to effectively improve the forest health		

	related problems in Oregon. o Develop a fuels management and stocking reduction strategy with the goal of identifying and prioritizing treatment opportunities across the landscape and across ownership boundaries. Development of performance measures to track accomplishments. o Coordinate with the National Fire Plan		
16	In coordination with the comprehensive fuels reduction strategy (above), develop a programmatic EIS to cover fuels treatments in dry forest types. Clearly define and differentiate analysis that will be done at the statewide level and project level. o Tier EA's to reduce planning costs and expedite larger scale treatments. o Develop templates to expedite completion of project-level EA's. o 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. o Analyze the impact of wildfire – there is no-no action alternative		
17	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. o Federal land management agencies should develop short-term (2-5 year) and longer-term (10-20 year) treatment plans based on priorities developed at the landscape scale and initiate treatments in places where a collaborative process has preliminarily identified and prioritized landscape attributes at risk (#1 above). o 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.		