

## APPENDIX I: POLICY CHANGE MATRIX



= recommendation was abandoned.



= recommendation was carried through



= recommendation was collapsed into recommendations above

IC = institutional constraints

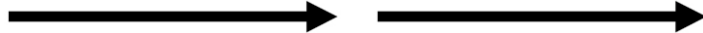
SC = social constraints

UC = uncertainty constraints

NA = no action

Synthesis paper recommendations	Recommendations from seminars	Recommendations discussed at policy summit	Final recommendations	Rationale for abandoning recommendation
<u>A. Aquatic ecosystems recommendations</u>  A1. Create water quality trading system that would allow variability in water quality over large landscapes.				IC, UC Budgetary constraints were identified; in addition, participants believed that water banking is already a similar existing policy instrument that continues to be expanded.

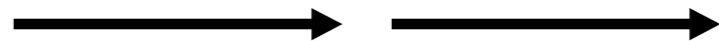
A2. Develop a “regime standard” based approach to Clean Water Act implementation.



Focus on large geographic areas when managing for water quality to reflect the temporal and spatial scale of disturbance processes. Evaluate and modify water quality standards as necessary to reflect the variable range of conditions that result from disturbance processes.

A3. Create management plans that “load” areas likely to deliver large wood and other material to streams with that material.

Restore the functionality of stream disturbance processes by further softening the line that current policy draws between riparian and upland areas, using fine-scale, spatially explicit landscape analysis to “set the stage” for disturbance events.



A4. Develop management that relies on temporary roads that can be hydrologically recovered.

Create incentives to use existing survey methodologies to improve road surfaces and disconnect roads from stream networks.



NA  
State Forests have already accomplished most of this work on their lands. Extensive voluntary road repairs and improvements by private forest landowners have been reported through the Oregon Plan for Salem and Watersheds. A survey protocol has been developed to quantify the current status of road risks to soil and water resources on all public and private forest ownerships. Implementation

A5. Plan for future infrastructure development that allows passage of material such as large wood.

X

of the protocol awaits funding.

UC

It is unclear how bridges, stream crossings, etc. could be designed to better accommodate passage of material like large wood, or whether new designs would be desirable from a cost or operational standpoint.

A6. Integrate different watershed assessments and protocols.

X

NA

This is seen as a valuable recommendation that should be implemented at the discretion of the agencies involved—it does not require detailed discussion within this process.

A7. Adjust Northwest Forest Plan riparian areas using watershed analysis process.

X

NA

This is seen as a valuable recommendation that should be implemented at the discretion of the agencies involved—it does not require detailed discussion within this process.

A8. Work with landowners to conserve instream flows.

X

NA

There has been considerable policy change—including statutory change and incentive programs—already undertaken with the aim of maintaining instream flows.

A9. Initiate large-scale watershed experiment that would test regime standards and alternative riparian area management.

X

IC, UC

It is unclear how the goals and management practices of different ownerships (e.g., federal private industrial, private non-industrial) could be synchronized across a scale large enough to test large-scale ecosystem dynamics processes. It would likely involve significant changes to existing legal frameworks.

A10. Initiate strategic land exchanges to more effectively manage landscape-scale ecological processes.

X

IC, UC, SC

Various large-scale land exchange processes have been undertaken and have encountered significant opposition. It is unclear how this recommendation could be accomplished without significant new budget resources and legal and institutional changes.

A11. Allow large concentrated harvest areas encompassing fifth field watersheds, while “resting” other watersheds.

X

SC

This recommendation involves large harvest units, which is deemed socially unacceptable. Furthermore, it is unclear whether it is feasible to expect landowners who depend on a steady flow of timber products to “rest” lands.

B. Fire and fuels management recommendations

B1. Promote a diversity of vegetation treatments that reduce tree density and biomass.

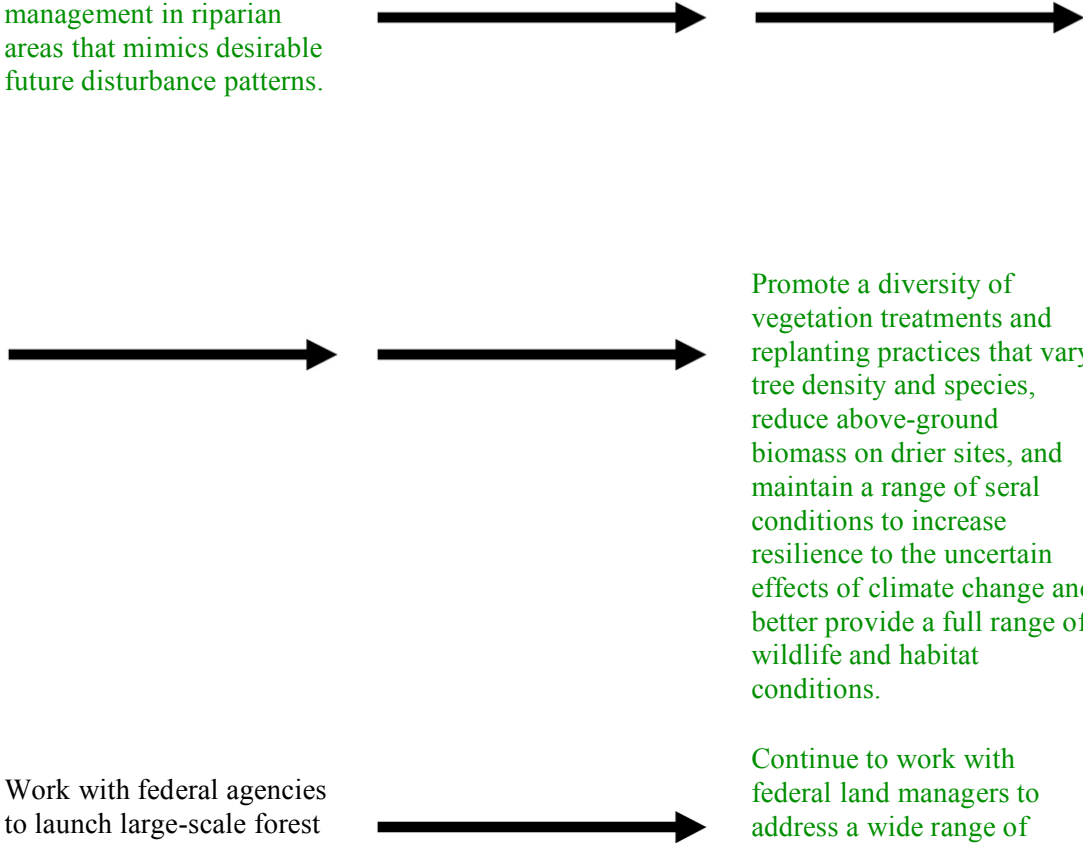
A12. Encourage active management in riparian areas that mimics desirable future disturbance patterns.

Promote a diversity of vegetation treatments and replanting practices that vary tree density and species, reduce above-ground biomass on drier sites, and maintain a range of seral conditions to increase resilience to the uncertain effects of climate change and better provide a full range of wildlife and habitat conditions.

B2. Promote strategic, landscape level treatments

Work with federal agencies to launch large-scale forest restoration demonstration projects in eastern Oregon.

Continue to work with federal land managers to address a wide range of policy changes needed to accommodate ecosystem dynamics, including acceleration of fuels management on dry sites on federal lands, increased use of natural and prescribed fire, limiting fire suppression expenditures, and creation of variances for air quality standards and legal liability to allow needed fire and fuel management.



B3. Continue to develop biomass technology and markets that will utilize forestland fuels.



B4. Rethink suppression strategies and prepare wildland fire use plans.



X

IC, SC  
This recommendation is judged to be appropriate for federal lands, but there are significant constraints on changes to status quo policies on state and private lands—fire exclusion is strongly preferred by owners.

B5. Promote increased use of prescribed fire.



X

IC, SC  
This recommendation is judged to be appropriate for federal lands, but there are significant constraints on changes to status quo policies on state and private lands—prescribed fire is already used to the degree desired on private lands.

B6. Create finer scale information about forest and fuel distribution.

Work with different land management agencies to create integrated risk assessments that cover fire, drought, insects and other threats.



X

IC  
These threats are judged to be most relevant to federal land management; it is unlikely that comprehensive risk assessment for private and state lands will be a budget priority.

B7. Create integrated risk assessments that cover fire, drought and insect threats.

B8. Create legal variances for smoke production during prescribed fire and wildland fire use.

B9. Create liability limits and insurance programs for escaped fire and wildland fire use.



IC, SC

This recommendation may be relevant for federal lands, but there is little optimism among policy summit participants that lower summer air quality standards will be tolerated. This recommendation should be pursued in other forums, for instance in the ODF's Federal Forest Advisory Committee.

IC, SC

This recommendation may be relevant for federal lands, but there is little optimism among policy summit participants that there will be social support for increased legal tolerance for escaped fire on private lands. This recommendation should be pursued in other forums, for instance in the ODF's Federal Forest Advisory Committee.

B10. Amend Forest Practices Act to require lower tree density and greater spatial heterogeneity in planted forest stands.



B11. Require community-based fire protection plans.



IC  
This recommendation is deemed to be a low priority regulation without identified sources of funding.

C. Climate change adaptation recommendations

C1. Develop models for threshold change.

Develop new reforestation and silviculture strategies and requirements to promote less forest density and greater species diversity. Continue research into threshold changes and prepare assisted migration strategies.



C2. Conduct research on the effects of climate change on insect dynamics.



C3. Require better weatherized roads, including an emphasis on temporary roads.



C4. Develop a regional carbon sequestration market.



C5. Develop collaborative land use and rural conservation plans.



D. Habitat protection recommendations

D1. Design flexible reserve systems that span environmental gradients.



D2. Promote active management of existing reserves to increase system resiliency.

Promote active management of reserves in fire prone forests and other habitats that historically experienced frequent disturbance.



UC  
This recommendation deserves further scientific study; it is unclear exactly how such reserve systems could be designed or whether additional reserve systems on the landscape are desirable.

IC  
Participants believe that this recommendation has the most relevance for federal forests, and that appropriate efforts are already underway to urge federal managers to

D3. Manage for ecological processes instead of single species conservation.

Forego regulatory action for maintenance dependent species on private lands and devote resources to collaborative conservation planning.



actively manage reserves.

NA  
This recommendation is felt to have the most relevance to federal regulatory agencies such as the U.S. Fish and Wildlife Service and is not discussed in detail in this final report.

D4. Improve coordination between agencies.



IC  
There is an acknowledged need for closer cooperation between agencies, but participants in the policy summit did not identify an overwhelming need to create new mechanisms for collaboration and cooperation at this time.

D5. Promote wolf, beaver and other animal populations that have beneficial effects on aquatic system functions.



NA  
There are appropriate management plans for wolves and beaver in place.

E. Overarching recommendations

E1. Develop ecosystem services markets in Oregon.



E2. Establish formal collaborative mechanisms for interagency communication and cooperation in managing and regulating water quality.



E3. Develop a comprehensive adaptive management strategy for state agencies.



IC  
There is an acknowledged need for closer cooperation between agencies, but participants in the policy summit did not identify an overwhelming need to create new mechanisms for collaboration and cooperation at this time.



IC  
Adaptive management is built into the state forest plans. Adaptive management is acknowledged to be an important mechanism for ecosystem dynamics management, but is unclear how to improve existing policies or create new policies.

E4. Develop alternative vehicles for implementing policy in addition to administrative rules and regulations.