

# Chapter 5 Coordination, Monitoring, and Use of the Plan



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Chapter 5 describes the public participation and interagency coordination that occurred during the preparation of this Environmental Impact Statement. It also includes a list of staff involved in the Western Oregon Plan Revision. Finally, the chapter describes the monitoring plan for the Proposed Resource Management Plan and the role of adaptive management in the land use planning process.

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## Introduction

An interdisciplinary team of resource specialists and managers from the BLM Western Oregon districts and the BLM Oregon State Office, and contract personnel, prepared the Western Oregon plan revision. Initial preparation and planning for the plan revisions began in August 2003 when the Secretary of Interior, the American Forest Resource Council, and the Association of O&C Counties entered into the Settlement Agreement. Plan evaluations conducted in 2004 showed that the timber harvest decisions in the 1995 Oregon resource management plans (RMPs) were not being met. A Notice of Intent, published in the Federal Register on September 7, 2005, initiated the public scoping process and notified the public of the intent to revise the 1995 Oregon RMPs with a single Environmental Impact Statement (EIS). The Analysis of the Management Situation was published in October 2005. The Planning Criteria was published in February 2006. The Draft EIS was published in August 2007. The planning process has involved many steps with public participation, as well as consultation and coordination with many agencies and organizations throughout the process.

## Public Contact, Scoping, and Review of the DEIS

Public contact and scoping was conducted with direct mailings, public meetings, and internet websites. The current mailing list includes approximately 1,600 individuals and organizations. Public meetings were held in the six BLM district offices and other locations across the planning area. District and State Office personnel met with many different partnerships including: the Applegate Partnership, soil and water conservation districts and councils; watershed associations; forest protective associations; wildlife groups including Ducks Unlimited and the Rocky Mountain Elk Foundation; the Native Plant Society; environmental education groups; recreation groups including horsemen, all terrain vehicle users, and trail associations; and environmental groups including Audubon and the Nature Conservancy.

Some of the public contact and scoping activities that occurred just prior to and following the initiation of the planning process by the publication of the Notice of Intent in September 2005 include the following:

- Newsletter #1 – Scoping – Introduction to Western Oregon Planning Revision – August 2005
- Public web page available – August 2005
- County fair booths, August 2005
- Notice of Intent in Federal Register and news release – September 7, 2005
- Scoping meetings – September/October 2005
- Scoping key contact meetings – September/October 2005
- State Director editorial boards – September/October 2005
- Economic Profile System Workshops, September/November 2005
- ACEC nomination process – Mailed to mailing list, October 5, 2005
- Analysis of the Management Situation printed – October 2005
- Newsletter #2 - Summary of the Analysis of the Management Situation, December 2005
- State Director and Governor sign Memorandum of Understanding - December 1, 2005
- Proposed Planning Criteria and State Director Guidance published - February 2006
- Scoping Report issued - February 2006
- Newsletter #3 - Scoping Report, Planning Criteria, and ACEC Nominations - February 2006
- Planning Criteria/Alternatives – Public Meetings - March 2006
- Public Interest Environmental Law Conference – March 3-4, 2006
- Newsletter #4 - Planning criteria & use of science in plan revisions - April 2006
- State-of-the-Science Forum held in Corvallis - June 15, 2006
- Newsletter #5 – Summary of alternatives to be analyzed in the EIS - October 2006
- Newsletter #6 – Pre-draft Environmental Impact Statement update - April 2007



- The Draft EIS published - August 2007
- Release of Draft EIS and start of public comment period - August 10, 2007
- Launch of online web forum - August 20, 2007
- Formal public meetings; open house at district offices and on request from interested organizations and groups. – September/October 2007
- Newsletter #8 – Comment period extended to January 11, December 2007
- Public comment period ended – January 11, 2008

The five-month public comment period of the Draft Environmental Impact Statement (DEIS) ended on January 11, 2008. In response to the DEIS, the Bureau of Land Management (BLM) received almost 29,500 submissions through the web forum and through e-mail or postal mail. Comments came from across the country from private citizens, organized groups, government officials, Indian tribes, and cooperating agencies. The BLM reviewed the comments received, and with this input and in close coordination with federal regulatory agencies and other cooperators, prepared the Proposed Resource Management Plan and Final Environmental Impact Statement. Responses to substantive comments received from the public are included in *Appendix T* of this Final Environmental Impact Statement.

## Protest Process

The Assistant Secretary of Land and Minerals Management in the Department of Interior is the responsible official for this RMP revision. The Federal Land Policy and Management Act and its implementing regulations provide land use planning authority to the Secretary, as delegated to this Assistant Secretary. Because this decision is being made by the Assistant Secretary, Land and Minerals Management, it is the final decision for the Department of the Interior. This decision is not subject to administrative review (protest) under the BLM or Departmental regulations (43 CFR 1610.5-2). Because there is no administrative review, the Record of Decision will not be signed until at least 30 days after the Notice of Availability for the Final EIS appears in the Federal Register (see 40 CFR 1506.10[b]).

## Relationship of the Proposed Resource Management Plan to Other Agency Plans and Programs

In addition to the plan and program coordination described above, the BLM collaborates with many other agencies in the development and coordination of their plans for areas that are within and surrounding the planning area. The BLM planning regulations call for resource management plans to be “. . . consistent with officially approved or adopted resource-related plans and the policies and procedures contained therein, of other federal agencies, state and local governments, and Indian tribes, so long as the guidance and resource management plans are also consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands...” (43 CFR 1610.3-2). These planning regulations promulgate the Federal Land Management and Policy Act. That Act, however, specifically provides that “insofar as they relate to management of timber resources, . . ., the [O&C Act] shall prevail.” 43 U.S.C. § 1701. Thus, to the extent that there is a conflict between being consistent with other agency plans and programs and the statutory direction for managing the timber resources under the O&C Act, the latter will prevail. Prior to the approval of the Proposed Resource Management Plan, the State Director will submit this plan to the Governor of the State of Oregon and request the Governor to identify any known inconsistencies with the state or local plans, policies, or programs.



Table 5-1 (Plan and program coordination opportunities) identifies other federal, state, and local plans and programs considered in the analysis of effects and/or used in addressing potential cumulative effects. Because the BLM collaborates with a wide variety of federal, state, and local agencies to varying degrees, this table is not exhaustive.

**TABLE 5-1. PLAN AND PROGRAM COORDINATION OPPORTUNITIES**

Entity	Plan/Program	Common Resources or Dependencies
<b>County/City</b>		
Counties	<ul style="list-style-type: none"> <li>Land use plans</li> <li>Wildfire plans</li> </ul>	Timber, fuels management, and payments in lieu of taxes
Cities	<ul style="list-style-type: none"> <li>Land use plans</li> <li>Community wildfire protection plans</li> </ul>	Fuels management and communities at risk
<b>State</b>		
Office of the Governor	Statewide planning goals	Soil, timber, water, fish, wildlife, habitat, economic development, recreation, and energy
Department of Environmental Quality	<ul style="list-style-type: none"> <li>BLM water quality restoration plans</li> <li>Water quality management plans</li> <li>Total maximum daily loads (TMDLs)</li> <li>Smoke management plans</li> </ul>	Streams, watersheds, air and water quality standards, beneficial uses, and BLM water quality restoration plans
Department of Forestry	<ul style="list-style-type: none"> <li>State forest management plans</li> <li>Forestry program for Oregon</li> <li>Fire plans</li> <li>Rules of the Oregon Forest Practices Act</li> </ul>	Watersheds, timber, economic outputs, and soils
Department of Fish and Wildlife	<ul style="list-style-type: none"> <li>Comprehensive Wildlife Conservation Strategy (Oregon Conservation Strategy)</li> <li>Oregon Plan for Salmon and Watersheds</li> </ul>	Wildlife, habitat, and fisheries
Division of State Lands, Natural Heritage Program	<ul style="list-style-type: none"> <li>Rare and Endangered Invertebrate Program (Oregon)</li> <li>Oregon Natural Heritage Program</li> </ul>	Special status species and natural areas
Department of Human Resources	Public water system standards	Surface water
Department of Agriculture	State-listed endangered species; noxious weeds	Botanical species, noxious weed list and control
Department of Geology and Mineral Industries	Development of oil; gas; geothermal energy; metallic and industrial minerals; and sand, gravel, and crushed stone.	Lease and sales on public lands
Department of Parks and Recreation	<ul style="list-style-type: none"> <li>Off-highway vehicle (OHV) plans</li> <li>Comprehensive Outdoor Recreation Plan</li> <li>State Historic Preservation Office</li> </ul>	Off-highway vehicle (OHV) trails and recreation; protection of historic properties and cultural resources.
<b>Federal</b>		
United States Forest Service	Land and resource management plans	Wildlife, fisheries, habitat, streams, watersheds, timber, fuels management, and communities at risk
National Marine Fisheries Service	<ul style="list-style-type: none"> <li>Recovery plans for threatened and endangered species</li> <li>Endangered Species Act, Section 7 (Consultation)</li> </ul>	Federal threatened and endangered fish species and habitat
United States Fish and Wildlife Service	<ul style="list-style-type: none"> <li>Recovery plans for threatened and endangered species</li> <li>ESA, Section 7 (Consultation)</li> </ul>	Federal threatened and endangered wildlife and botanical species and habitat
Environmental Protection Agency	Clean Water Act	Streams, watersheds, and total maximum daily loads (TMDLs)
Natural Resources Conservation Service	Watershed plans	Streams and watersheds
Animal and Plant Inspection Service	Pest management	Noxious weeds, invasives
National Park Service	National rivers inventory and review	National Landscape Conservation System
Bonneville Power Administration	Energy	Energy, transmission corridors, and rights-of-way
Northwest Power Planning Council	Columbia River Basin	Wildlife, fisheries, and watersheds



## Water Quality Management Planning

Section 304 of the Clean Water Act directs federal agencies to “maximize utilization of other Federal laws and programs for the purpose of achieving and maintaining water quality through appropriate implementation of plans.”

Pursuant to the Clean Water Act, states are required to develop water quality standards for point and non-point sources of pollution and for developing a list of impaired waters for subsequent restoration and recovery. In Oregon, the Department of Environmental Quality is responsible for addressing water quality criteria and standards for waters of the state, and water quality limited water bodies. The Department of Environmental Quality accomplishes this, in part, through rulemaking and development of total maximum daily loads.

Pursuant to Oregon State law, the BLM is a Designated Management Agency responsible for protecting and maintaining water quality on BLM-administered lands. Designated Management Agencies are expected to implement and revise their plans as needed and to keep Department of Environmental Quality advised of their efforts. Although guidance for the resource management plan would be revised, the BLM would continue to maintain water quality in compliance with the Clean Water Act. The BLM’s revised resource management plans would include the following elements to maintain water quality:

### Land Use Allocations

Under the Proposed Resource Management Plan, the Riparian Management Area land use allocation would:

- provide for riparian buffers of between one half and one site potential tree, including a limited management area, on each side of stream channels.

### Management Objectives

Under the Proposed Resource Management Plan, the following management objectives pertaining to water quality would be applied within the Riparian Management Areas:

- provide for the riparian and aquatic conditions that supply stream channels with shade, sediment filtering, leaf litter and large wood, and stream bank stability.
- maintain and restore water quality

### Management Direction

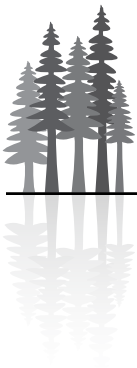
See the Proposed Resource Management Plan in *Chapter 2* for a complete description of the land use allocations and management direction that would be implemented to achieve the management objectives. The management direction applicable to the Riparian Management Areas includes:

- limits on management activity, including a near stream zone of 35 feet (intermittent streams) or 60 feet (perennial and fish-bearing streams ) where thinning harvests would not occur, and a secondary stream zone where 50% canopy would be retained
- implementation of riparian restoration and road improvement activities
- a requirement to implement Best Management Practices, as needed, to maintain or restore water quality

### Best Management Practices

The application of Best Management Practices is required; however, selection of individual Best Management Practices are made by BLM soil, water, fisheries, geology and other professionals during project-level analyses. Not all of the Best Management Practices will be applicable for any specific management action. Each activity is unique and Best Management Practices would be selected based on site-specific conditions.

The Oregon Department of Environmental Quality recognizes that the Designated Management Agencies already have plans in place that help prevent or control water pollution in impaired waters. Total maximum



daily loads build on these efforts and do not duplicate them (ODEQ 2007). The BLM resource management plans serve as overall guidance documents for watershed-scale natural resource management and establish sideboards for management activities that have potential to affect water quality. Water quality restoration plans specify how restoration in a particular watershed or basin contributes to overall total maximum daily load implementation. Water quality restoration plans are used by the Department of Environmental Quality in creating an overall water quality management plan covering all lands within the area of a designated total maximum daily load.

The State of Oregon Division 42 Total Maximum Daily Load Rule (February 13, 2004) requires Designated Management Agencies to participate in developing total maximum daily loads and in preparing and implementing total maximum daily loads implementation plans. The BLM participates in total maximum daily load development and develops water quality restoration plans as a vehicle for achieving total maximum daily load compliance objectives on BLM administered lands.

The Department of Environmental Quality advises that in most instances, it will be adequate to wait for the next 5-year review of the total maximum daily load implementation plan to revise it to reflect changes (ODEQ 2007). Previously completed total maximum daily loads that include BLM-administered lands would be updated to reflect the Western Oregon Plan Revision according to Department of Environmental Quality's total maximum daily load review schedule.

The 2007 Oregon Department of Environmental Quality total maximum daily load implementation plan guidance identifies the components of an implementation plan. *Table 5-2 (BLM plans and components of a total maximum daily load implementation plan)* identifies the components and corresponding BLM documents that contain them.

**TABLE 5-2. BLM PLANS AND COMPONENTS OF A TOTAL MAXIMUM DAILY LOAD IMPLEMENTATION PLAN**

Element <sup>a</sup>	Resource Management Plan	Water Quality Restoration Plan <sup>a</sup>
<b>Management Strategies</b>	<ul style="list-style-type: none"> <li>• Riparian Management Area (RMA) Land Use Allocation</li> <li>• RMA Objectives</li> <li>• RMA Actions</li> <li>• Best Management Practices</li> </ul>	<ul style="list-style-type: none"> <li>• Goals and Objectives</li> <li>• Proposed Management Measures</li> </ul>
<b>Implementation Timeline</b>	N/A (Typical plans last 10 to 15 years.)	Timeline for Implementation
<b>Performance Monitoring</b>	Monitoring Plan ( <i>Chapter 5</i> of this RMP/FEIS)	Monitoring, Evaluation, and Adaptive Management
<b>Compliance with Statewide Land Use Requirements</b>	N/A	N/A
<b>Analyses and Information</b>	<ul style="list-style-type: none"> <li>• Affected Environment (<i>Chapter 3</i> of this RMP/FEIS)</li> <li>• Environmental Consequences (<i>Chapter 4</i> of this RMP/FEIS)</li> </ul>	Condition Assessment

<sup>a</sup>Source: State of Oregon Department of Environmental Quality. TMDL Implementation Plan Guidance for State and Local Government Designated Management Agencies, May 2007.



## Regional Interagency Executive Committee

The 1994 Northwest Forest Plan, Record of Decision, and Standards and Guidelines provide for coordination and review by the Regional Interagency Executive Committee of proposed changes to standards and guidelines and land allocations established under the Northwest Forest Plan and incorporated into BLM's 1995 resource management plans. With respect to plan revisions, the Northwest Forest Plan states: "Decisions to change land allocations, or standards and guidelines will be made only through the adoption, revision, or amendment of these documents following appropriate public participation, National Environmental Policy Act procedures, and coordination with the Regional Interagency Executive Committee." Although proposed revisions will be coordinated with the Regional Interagency Executive Committee, the authority to change plans remains with the individual agency in accordance with the applicable agency regulations.

The BLM coordinated with the Regional Interagency Executive Committee during preparation of the proposed resource management plan through numerous briefings, updates, and discussion opportunities. In addition, Federal agencies were invited to participate in the planning effort as members of a broader group of cooperators. The U.S. Forest Service, National Oceanic and Atmospheric Administration – Fisheries, U. S. Fish and Wildlife Service, and the Environmental Protection Agency chose to participate as formal cooperators. The Regional Interagency Executive Committee provided a memorandum (dated March 26, 2008) acknowledging BLM's completion of coordination under the above provisions.

## Section 7 Consultation Under the Endangered Species Act

### ENDANGERED SPECIES ACT SECTION 7 REQUIREMENTS

Section 7 of the Endangered Species Act provides statutory direction for interagency cooperation for furthering the purposes of the Act. Federal agencies achieve this cooperation both by reviewing their programs in consultation with the listing agencies for how these programs can be utilized to conserve endangered or threatened species,<sup>1</sup> and by consulting with either the Fish and Wildlife Service or National Marine Fisheries Service (hereafter referenced as the "Services"), whichever is appropriate for the affected species, to ensure that actions authorized, funded, or carried out under their programs do not jeopardize a species or adversely modify its critical habitat.<sup>2</sup> While both Section 7(a)(1) and (2) make reference to "consultation," the regulations promulgating the ESA provide direction for consultation under Section 7(a)(2), but are explicitly silent as to how to consult under Section 7(a)(1).

Under Section 7(a)(2) of the ESA, those agencies that authorize, fund, or carry out federal actions are commonly known as "action agencies." If an action agency determines that its federal action "may affect" listed species or critical habitat, it must consult with the Service(s). See 50 CFR 402.2, 402.13-14. If an action agency determines that the federal action will have no effect on listed species or critical habitat, the agency will make a "no effect" determination. In that case, the action agency does not initiate consultation with the Service(s), and its obligations under Section 7(a)(2) for that agency action are complete.

<sup>1</sup>See Endangered Species Act, Sec 7(a)(1): "All other Federal agencies shall, in consultation with and with the assistance of the Secretary utilize their authorities in furtherance of the purposes of this chapter by carrying out programs for the conservation of endangered species...". Codified in 16 U.S.C. §1536(a)(1)

<sup>2</sup>See Endangered Species Act, Sec. 7(a)(2): "Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency... is not likely to jeopardize the continued existence of any endangered species..." Codified in 16 U.S.C. §1536(a)(2)



The BLM has coordinated with the Services in developing the revised Resource Management Plans. As encouraged by both CEQ regulations for preparation of NEPA documents and ESA regulations,<sup>3</sup> the agencies have reduced redundancy in paperwork by conducting this ESA coordination work integrated with their role as cooperating agencies under NEPA. Both Services were identified as cooperating agencies under CEQ regulations<sup>4</sup> near the outset of planning for the revision of BLM's western Oregon plans. In fact, one of the express purposes for the revision of the BLM Western Oregon Resource Management Plans is for BLM to use its authorities for managing the lands it administers under the revised plans to conserve habitat needed on those lands for listed species.<sup>5</sup> Through their coordination efforts, the agencies have met and communicated regularly and often. The development of the PRMP has been greatly influenced by these efforts. For example, the BLM increased the Riparian Management Area widths and modified the Late-Successional Management Area locations from those in the preferred alternative in the Draft EIS, and added the Deferred Timber Management Area land use allocation to the PRMP to address input from the Services.

The BLM has satisfied its Section 7 obligations by coordinating with the Services and determining that there are no effects on a listed species or its critical habitat that would require consultation under Section 7(a)(2) of the Endangered Species Act. The BLM has examined the potential effects on listed species and designated critical habitat of revising resource management plans in western Oregon in which lands are allocated to various categories of use, each with its own management directions for planning future activities on those lands. As a result of this examination, the BLM has determined that its proposed action of revising resource management plans would have no effect for purposes of Section 7(a)(2) on these species or on critical habitat. This determination is based on the following:

- The revision of resource management plans to allocate lands to various categories of use, with associated management direction for planning future activities on those lands, would have no impact on listed species or critical habitat. The actual timing, place, and design of future site-specific projects that would occur on these lands is not identified in the plans, and adoption of the revised plans does not alter the environmental baseline or provide a basis for a determination of “incidental take.”
- The revision of resource management plans for such purpose does not create any legal right that would allow or authorize ground-disturbing activities without further agency decision-making and compliance with applicable statutes, including the ESA and NEPA. In the future when a specific project is proposed, sufficiently detailed information will be available for analyzing the effect of the project on listed species or critical habitat under Section 7(a)(2) before the BLM issues a contract, or any other form of a legal right, or otherwise approves any ground-disturbing activity. Compliance with Section 7(a)(2) may take the form of preparation of a Biological Assessment by the BLM that can result in a “no effect” determination by the BLM, a “may affect, not likely to adversely affect” determination with the Service(s) concurrence through “informal” consultation, or a “likely to adversely affect” determination followed by “formal consultation” with the Service(s) and issuance of a Biological Opinion.
- The expertise and counsel of the regulating agencies on how the plan revisions can contribute to the survival and recovery of listed species through the direction that the revisions provide for designing future actions has already been obtained through the NEPA process, in which both Services were cooperators. Since no on-the-ground activity would be authorized in the revised plans, no incidental take could possibly take place from the act of revising the resource management plans. Requests for authorization of any incidental take permits would be made only when actual projects are proposed in the future.

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<sup>3</sup>40 CFR §1502.25(a) and 50 CFR §402.06

<sup>4</sup>40 CFR §1501.6

<sup>5</sup>In Chapter 1 of this EIS, one of the purposes and needs is stated to be as follows: *In accord with the Endangered Species Act, the plans will use the BLM's authorities for managing the lands it administers in the planning area to conserve habitat needed from these lands for the survival and recovery of species listed as threatened or endangered under the Endangered Species Act.*





The BLM will follow the closely coordinated two-step process suggested in the ESA Consultation Handbook<sup>6</sup> of first consulting with the Services on how to utilize the authorities for its programs to further the purposes of the Endangered Species Act in conserving listed species and their critical habitat, and then consulting under Section 7(a)(2) on any future project-level actions “authorized, funded, or carried out” under those programs that “may affect” a listed species or critical habitat. Following this process will provide the assurance envisioned by Congress that the BLM will not be likely to jeopardize a species or adversely modify critical habitat listed for protection under the Endangered Species Act.

## Preparers

### Steering Committee

The nine-member Steering Committee is comprised of management staff from the BLM Oregon/Washington State Office in Portland, the six BLM districts represented in the Western Oregon Plan Revisions, and the Coquille Indian Tribe. This committee provides leadership and direction to the resource management plan revisions process.

Members of the Steering Committee are listed below:

Edward W. Shepard	BLM - Oregon/Washington State Director
Mike Mottice	BLM - Deputy State Director, Division of Resources
Tim Vredenberg	Coquille Indian Tribe of Oregon
Aaron Horton	BLM District Manager, Salem
Ginnie Grilley	BLM District Manager, Eugene
Jay Carlson	BLM District Manager, Roseburg
Tim Reuwsaat	BLM District Manager, Medford
Shirley Gammon	BLM District Manager, Lakeview
Mark E. Johnson	BLM District Manager, Coos Bay

### Key Project Staff

Table 5-3 lists the staff who prepared the Proposed RMP/Final EIS, their specific area of responsibility, and the organization for which they work. Biographies for each staff member are included below the table.

### Interdisciplinary Team and EIS Team

**Tim Barnes - Geologist.** Tim has a B.S. in Natural Science with Geology Emphasis from Western Oregon University and completed graduate work in geology at Portland State University. Tim has worked in the field of geology since 1994. Before joining the BLM in 2001, Tim was a Senior Geologist in private industry, completing Resource and Engineering Geology projects, resource planning, and permitting. Tim is a Registered Geologist in both Oregon and Idaho. His expertise is in oil and gas development, resource geology, and engineering geology, including landslide investigation and mitigation. Recent projects include an aggregate values study for BLM and Forest Service lands within the states of Oregon and Washington, coalbed natural gas evaluations and planning, abandoned mine drilling investigations, oceanic and dune

<sup>6</sup>USFWS and NMFS, *Endangered Species Consultation Handbook: Procedures For Conducting Consultation and Conference Activities Under Section 7 of the Endangered Species Act* (March 1998).



**TABLE 5-3. KEY PROJECT STAFF FOR THE PROPOSED RESOURCE MANAGEMENT PLAN AND FINAL ENVIRONMENTAL IMPACT STATEMENT**

Responsibility	Name	Organization
Project Manager	Richard Prather	Oregon State Office BLM
Lead Planner, Interdisciplinary Team Leader	Philip Hall	Mason, Bruce and Girard Inc.
Planner	Anne Boeder	Oregon State Office BLM
Forester/Planner	Alan Wood	Oregon State Office BLM
Writer-Editor	Kathleen Helm	Mason, Bruce and Girard, Inc.
GIS/Data Analysis	Duane Dippon	Oregon State Office BLM
Administrative Record Coordinator	Mary Cecilian	Oregon State Office BLM
Logistics Coordinator	Jerry Hubbard	Oregon State Office BLM
Public Involvement Coordinator	Alan Hoffmeister	Oregon State Office BLM
Vegetation/Land Use Allocation Mapping	Chris Cadwell	Oregon State Office BLM
Areas of Critical Environmental Concern	Susan Carter	Roseburg BLM
Cartographer	Paul Fyfield	Oregon State Office BLM
Cultural	Fran Philipek	Salem BLM
Ecology	Richard Hardt	Eugene BLM
Energy/Minerals	Tim Barnes	Coos Bay BLM
Energy/Minerals	Eric Hoffman	Oregon State Office BLM
Fire/Air	John Dinwiddie	Medford BLM
Fisheries	Nikki Moore	Coos Bay BLM
Fisheries	Bill Hudson	Coos Bay BLM
Grazing	Kim Hackett	Medford BLM
Hydrology	Dan Carpenter	Coos Bay BLM
Recreation	David Wash	Coos Bay BLM
Roads, Lands	John Styduhar	Oregon State Office BLM
Silviculture	Craig Kintop	Roseburg BLM
Socioeconomic	Mark Rasmussen	Mason, Bruce and Girard, Inc.
Soils	Clif Fanning	Oregon State Office BLM
Timber	Dave DeMoss	Eugene BLM
Vegetation/Botany	Doug Kendig	Medford BLM
Vegetation/Botany	Claire Hibler	Salem BLM
Wildlife	Chris Foster	Roseburg BLM
Wildlife	Rex McGraw	Roseburg BLM
Wildlife	Eric Greenquist	Eugene BLM

sand movements studies, and numerous landslide evaluations and mitigations. Tim is currently employed as the District Geologist and Western Oregon Zone Fluids Geologist, in the Coos Bay BLM District.

**Anne Boeder - Planner.** Anne holds a B.A. in Cartography and Geography from the University of Wisconsin and a Master of Public Administration from the University of Utah. Anne has 24 years of government service, including 13 years with the U.S. Forest Service and 9 years with the BLM. She most recently served in various leadership roles on the interagency team for the 2004 Survey and Manage Environmental Impact Statement and Record of Decision. She has also worked on both the Roseburg and Coos Bay BLM Districts.

**Chris Cadwell - Forester/Resource Analyst.** Chris holds a B.S. in Forest Management from Humboldt State University. Chris served on the Forest Ecosystem Management Assessment Team in the estimation of probable sale quantities. He has coordinated probable sale quantities estimations and geographic information system analysis supporting development and implementation of the BLM resource management plans in western Oregon. He is co-author of the implementation guidance for the 15 percent standard and guideline. Chris served as co-lead in developing interagency vegetation standards and served on the team that developed interagency land allocation standards for the Northwest Forest Plan area.



He participated in the Survey and Manage Final Supplemental Environmental Impact Statements in the assessment of timber effects and development of late-successional forest. He is the state data steward for the forest operations inventory, timber production capability classifications, and land use allocations for the BLM. Chris has 25 years experience with the BLM in western Oregon and currently is employed by the BLM Oregon/Washington State Office.

**Dan Carpenter - Hydrologist.** Dan has a B.S. in Soil Science, from Washington State University. He has worked as a professional hydrologist for the past 25 years (12 with the U.S. Forest Service and 13 with the BLM) on the Oregon Coast, Western Cascades, and Great Basin in Nevada. His area of expertise includes watershed planning, modeling, and watershed restoration. His most recent assignments included working on an interagency Port-Orford-Cedar Environmental Impact Statement and environmental planning roles in the permitting of the Coos County Natural Gas Pipeline. Dan is currently employed as a hydrologist on the Coos Bay BLM District.

**Susan Carter - Botanist.** Susan has a B.A. in Botany and Environmental Biology from Humboldt State University. Since 2002, she has served as the District Botanist and District Weed Coordinator for the BLM Roseburg District. Previously she worked for the BLM in Bakersfield, California. Of her 19 years of botanical work experience, 18 are with the BLM.

**Mary Ceciliani - Program Assistant.** Mary has served as coordinator for the Administrative Record of the Western Oregon Plan Revision of the Northwest Forest Plan since October 2005. Her previous positions include working at the Oregon Federal Executive Board, where she managed all the training, coordinated health fairs for agencies during the open season, and assisted in preparation for numerous committee meetings. Mary started her career in the BLM Division of Minerals. Her BLM employment totals approximately 23 years.

**David DeMoss - Forester.** Dave is currently the district staff forester and district silviculturist for the Eugene BLM District. He holds a B.S. in Forestry from the University of California - Berkeley, and has 29 years experience on the Eugene BLM District in timber sales and silviculture. He served as the silviculturist on the Late Successional Reserve # 267 Restoration Environmental Impact Statement and has experience in stand dynamics and modeling.

**John Dinwiddie - Fire/Fuels/Air Quality.** John's forestry education includes two years at Central Oregon Community College and completion of Technical Fire Management in 1989. John worked in private industry for two years and for the U.S. Forest Service for five years. His BLM employment totals 25 years.

**Duane Dippon - Geographic Information System/Data Team Leader.** Duane earned a B.S. and M.S in Forestry and Forest Economics at Purdue University and a Ph.D. in Forest Management, with a Minor in Operations Research, from Oregon State University. He served as the Forest Ecosystem Management Assessment Team co-Geographic Information System /Data Team Leader, building the geospatial database covering over 24 million acres of federal lands across the Pacific Northwest and used by the Forest Ecosystem Management Assessment Team scientists in the development of the Northwest Forest Plan. Duane began working for the BLM in 1988 to integrate the use of geospatial data, modeling, and geographic information system technology in support of federal land planning. He served as the chair or co-chair of the Interagency Resources Information Coordination Council from 1994-98 and 2003-04. He currently serves on the Oregon Geographic Information Council. Prior to joining the BLM, Duane was an Associate Professor at the University of Florida teaching Forest Management, Forest Economics, and Quantitative Methods in Natural Resources Management.

**Clif Fanning - Soil Scientist.** Clif holds a B.S. in Soil Science from California Polytechnic State University. He has 32 years of federal service and has been working with the BLM since 1977. Cliff previously worked in Dillon and Butte, Montana; and in Cheyenne, Wyoming. He has served on numerous planning efforts over the years and has been the Oregon/Washington state soil scientist since 1991.



**Paul Fyfield** - *Cartographer*. Paul has been a cartographer in the BLM Oregon State Office in Portland since 2001. He earned a Master's degree in Geography from Portland State University in 2003.

**Chris Foster** - *Wildlife Biologist*. Chris is currently the District Wildlife Biologist for the Roseburg BLM District. He holds a B.S. in Forest and Wildlife Management from the University of Maine, and an M.S. in Wildlife Management from West Virginia University. Chris has more than 15 years experience working for the U.S. Forest Service and the BLM. Chris has held positions as a wildlife biologist and as a forester specializing in watershed analysis and planning.

**Eric Greenquist** - *Wildlife Biologist*. Eric is the lead wildlife biologist in the Eugene BLM District. He has a B.A. in Biology from the University of Missouri and an M.S. in Wildlife Ecology from Ohio University. During his 28 years with the BLM, Eric has worked (both in the United States and throughout the Americas) for the conservation of a variety of threatened and endangered species.

**Kimberly Hackett** - *Rangeland Management Specialist*. Kimberly Hackett has a B.S. in Wildlife Science with a Range Science Emphasis from New Mexico State University. She has worked for the BLM for 17 years. Kimberly is currently the Medford BLM District Rangeland Management Specialist. She previously worked as a Rangeland Management Specialist for 11 years in Idaho and 5 years in Nevada.

**Phil Hall** - *Planner*. Phil holds a B.S. in Forestry and a B.S. in Conservation from North Carolina State University. Phil served on the interdisciplinary team for the Northwest Forest Plan Supplemental Environmental Impact Statement (1994) and was a lead planner in developing the western Oregon resource management plans tiered to the Northwest Forest Plan. He has served on regional teams for the development of watershed analysis guides and monitoring and research. Phil has provided national level training for the National Environmental Policy Act and Resource Management Planning. Phil has a broad understanding and familiarity of BLM programs and plans, including the Northwest Forest Plan and environmental impact statements. He has 33 years of federal service, including 30 years with the BLM (1976-2006) on two BLM districts and in several resource areas. He served on special assignments to BLM's national office in Washington, D.C. and to other BLM districts in the western United States. He is now employed by a contractor to the BLM.

**Richard Hardt** - *Ecologist*. Richard has a B.A. in Natural Sciences from John Hopkins University, an M.L.A. in Landscape Architecture from Harvard University, and a Ph.D. in Forest Resources from the University of Georgia. He has 11 years of experience working for the BLM and is currently employed at the Eugene BLM District. Richard's expertise is in forest ecology, planning, and the National Environmental Policy Act.

**Kathleen Helm** - *Writer-Editor*. Kathleen attended Macon Jr. College, Southern Oregon State College, and Southwestern Oregon Community College. She has 27 years experience with the BLM in reviewing, editing, and preparing environmental analysis documents, including many major complex ones: a regional Vegetative Management EIS, a land tenure adjustment in eastern Oregon, the Interior Columbia Basin Ecosystem Management Plan/EIS, the Northwest Forest Plan, and the Coos Bay BLM Resource Management Plan. She also served on the interagency Public Comment Analysis Team for the Northwest Forest Plan. Kathleen served as writer/editor preparing environmental assessments for various land management activities in western Oregon for both the Medford and Coos Bay BLM Districts. In the mid-90s, she was on the interagency team preparing the Oregon Salmon Plan. From 1997 to 1999, she served as the environmental planner for the BLM Klamath Falls Resource Area, and then District Environmental Planner for the Spokane, Washington BLM Office until 2006. In both the Klamath Falls and Spokane BLM offices, she also served as a public affairs specialist. Kathleen is now employed by a contractor to the BLM.

**Claire Hibler** - *Botanist*. Claire has served as the Lead Botanist for the Salem BLM District since 2001. She holds a B.S. in Forest Management from Oregon State University and a B.A. in General Biology from Humboldt State University. Claire was a founding member of, and participates on, the steering committee for the Northwest Oregon Invasive Weed Management Partnership, which spans the northwest corner of



Oregon and part of southwest Washington. She has worked in the Salem BLM District for more than 15 years in the botany and invasive plant programs, at both the resource area and district level.

**Eric Hoffman** - *Mining Engineer*: Eric holds a B.S. in Geology from Washington State University with additional hours in environmental geology and engineering from Eastern Washington State University and George Washington University in D.C.. He has completed 37 years of government service, including 8 years with the former U.S. Bureau of Mines in Washington state and at headquarters in Washington, D.C.; 9 years with the U.S. Geological Survey at Grand Junction, Colorado; and 20 years with BLM in Oregon/Washington. Eric's career has encompassed work on mineral resource evaluation, mined land reclamation, and Federal/Indian mineral program management. Eric is currently serving as the Acting Section Chief for the OR/WA State Office Minerals Section.

**R. Alan Hoffmeister** - *Public Involvement Coordinator*. Alan was assigned to the planning staff to coordinate and support all public involvement activities for the plan revision effort through the Draft RMP/EIS. He holds a B.S. in Forest Science from the University of Illinois. He began his government career with the U.S. Forest Service and Soil Conservation Service and has worked for the BLM as a public affairs specialist for 27 years in California, New Mexico, and Oregon. Most recently he served as the Public Affairs Officer for the BLM's Coos Bay District.

**Jerry Hubbard** - *Logistics Coordinator*. In addition to logistics duties, Jerry is coordinating public involvement activities for the PRMP/Final Environmental Impact Statement. Jerry has a B.S. in Forest Sciences from the University of Washington and an M.S. in forestry (Silviculture) from Pennsylvania State University. Jerry has held a variety of positions in BLM in Oregon: Forester on the Roseburg District, Soils/Watershed Specialist on the Medford District, Public Affairs Specialist on the Vale District, and Management Analyst in the Oregon State Office. Additionally, as part of a management development curriculum, he produced a regional economic analysis of western Oregon's timber and recreation economies for the period 1972-1986.

**William F. Hudson** - *Fishery Biologist*. Bill has a B.S. in Wildlife Management and an M.S. in Biology (Fisheries) from Tennessee Technological University. He has worked for the BLM for 25 years in the Coos Bay District. Early in his career he worked as a Resource Area Biologist, assisting in fisheries and wildlife management. Currently, Bill is the Coos Bay BLM District Fisheries Biologist and has spent the last seven years working on various Endangered Species Act consultations with National Oceanic and Atmospheric Administration-Fisheries, including local project consultations and regional consultations at the plan level for the Interior Columbia Basin and the Northwest Forest Plan. Recently, Bill chaired an interstate and interagency team that developed an Analytical Process for Developing Biological Assessments for Federal Actions Affecting Fish within the Northwest Forest Plan Area.

**Douglas Kendig** - *Botanist/District Native Plant Coordinator*. Doug has 21 years experience with the BLM and 3 years with the Peace Corps in Guatemala. He has served as Area and District Botanist and Resource Specialist for the last 11 years, representing botany, native plants, and restoration. Doug has been a resource area team member on numerous environmental assessments and watershed analysis. He holds a B.A. in International Studies from Southern Oregon University and graduate class work in Botany from Southern Oregon University and the University of Washington.

**Craig Kintop** - *Forester*. Craig is currently the District Silviculturist for the Roseburg BLM District. He holds a B.S. in Forest Resources Management from the University of Minnesota. Craig has more than 29 years experience working for the U.S. Forest Service and the BLM. He was a member of the silviculture and inventory team that developed silvicultural prescriptions and growth and yield information for the 1995 resource management plans.



**Rex McGraw** - *Planner/Wildlife Biologist*. Rex is currently the Environmental Coordinator for the Swiftwater Field Office, Roseburg District, BLM. He earned a B.S. and an M.S. in Wildlife Biology in 1995 and 1997, respectively, from the University of Montana in Missoula, Montana. Rex has more than 10 years of experience working for the BLM. Prior to becoming the Environmental Coordinator in 2006, Rex worked in both the Coos Bay and Roseburg Districts as a wildlife biologist.

**Nikki M. Moore** - *Fishery Biologist*. Nikki is currently a fisheries biologist for the Coos Bay District BLM. She holds a B.S. in Fisheries Biology from Oregon State University. She has worked for the BLM and U.S. Forest Service for about 8 years. Nikki also worked for the National Oceanic and Atmospheric Administration-Fisheries where she completed Endangered Species Act biological opinions for local and regional projects.

**Frances Philipek** - *Archeologist*. Fran holds a B.S. and an M.A. in Anthropology from Portland State University. Fran has 28 years of government service, including 7 years with the U.S. Forest Service in Lakeview and Klamath Falls and 21 years with BLM in Idaho, North Dakota, and Oregon. Fran currently is the District Archeologist for the Salem BLM District. She is the state-wide lead for the Heritage Education and project archeology programs.

**Dick Prather** - *Project Manager*. Dick is a graduate of the Northern Arizona University School of Forestry in Flagstaff, Arizona. He served as team leader for the Final Supplemental Environmental Impact Statement for Survey and Manage in 2001 and 2004. He is a 34-year veteran of the BLM. Prior to his assignments on EIS teams, he was Field Manager in the Salem District for 18 years. He previously worked in Coeur d'Alene, Idaho and Coos Bay, Oregon as a forester.

**Mark Rasmussen** - *Economist*. Mark has a B.S. in Environmental Studies and an M.S. in Forest Economics. Since 1997, he has been a principal at Mason, Bruce, and Girard where he leads the Forest Economics and Planning Group. For 25 years, Mark's work has focused on land management planning, including economic analysis of land management policy, for federal, state, private, and tribal landowners.

**John Styduhar** - *Senior Realty Specialist*. John has a B.S. in Forestry Science from Penn State University. He has worked for the BLM as a forester, area engineer, and realty specialist for 27 years: 10 years in timber sale planning and administration, 5 years in forest road engineering and transportation management, and 12 years as senior realty specialist at the BLM Oregon/Washington State Office specializing in public land law administration and O&C lands.

**Dave Wash** - *Recreation, Visual Resources, Wilderness, Wild & Scenic Rivers*. Dave has a B.S. in Recreation and Park Management from Penn State University and did post baccalaureate studies in public policy and wilderness management at Colorado State University. He has 28 years experience in planning and managing outdoor recreation resources on federal lands for the Bureau of Land Management, Corps of Engineers, and U.S. Forest Service. Previous positions have involved off-highway vehicle planning and management in the California Desert Conservation Area; wilderness and National Scenic Trails management in the Sierra Nevada and Mojave Desert; visual resource analysis for large-scale mining and energy development projects; plan development and management of recreation sites; and wild and scenic river eligibility analysis. Dave currently works as the Lead Outdoor Recreation Planner for the Coos Bay BLM District.

**Alan Wood** - *Planner/Forester*. Alan holds a B.S. in Forestry from the University of Minnesota. He is a 30-year veteran of the BLM and has worked in both Idaho and Oregon. Alan was a forester and Operations Chief in Salmon, Idaho, and worked extensively on fire and fuels issues. He served for 10 years as a Field Manager in the Roseburg BLM District, and most recently as a forester in the BLM Oregon/Washington State Office.



## The Science Program Supporting the RMP Revision

In support of the RMP revision, the interdisciplinary team worked with agency scientists and natural resource specialists, including three components:

- “state-of-the science” review for selected major issues and questions
- informal discussions between interdisciplinary team members and scientists
- a Science Team to review the planning criteria and draft EIS

During initial scoping, the steering committee and interdisciplinary team identified a number of issues and questions they considered relevant to the RMP revision process and that would benefit from research to synthesize current scientific knowledge. The BLM established cooperative agreements with scientists who had recognized expertise in the relevant fields to conduct “state-of-the science” reviews for these issues.

“State-of-the science” review topics were:

- wildlife use of dead wood
- forest management effects on peak stream flows
- aquatic habitat management strategies
- human community resiliency
- application of landscape dynamics concepts
- young stand management

Each “state-of-the science” review synthesized published, peer-reviewed empirical and model-based studies relevant to forest management in the planning area. The “state-of-the-science” reports are available on the BLM’s website at: [http://www.blm.gov/or/plans/wopr/science\\_spring\\_2008.php](http://www.blm.gov/or/plans/wopr/science_spring_2008.php) (accessed April 2008).

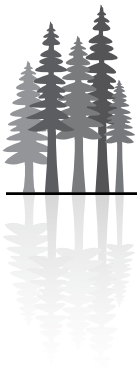
In addition to having discussions with Science Team members described below, individual interdisciplinary team members conducted numerous informal discussions with other agency scientists in developing planning criteria (the analytical assumptions and analytical methodology) for the draft and final EIS. Some of the discussions are detailed here, but other informal discussions occurred throughout the development of the planning criteria and the draft and final EIS.

Scientists with the U.S. Forest Service, Pacific Northwest Research Station, assisted in developing the analytical methodology for the analysis of effects on fish. The Earth Systems Institute was contracted by Pacific Northwest Research Station to develop a wood delivery model and assist the BLM in the application of the wood delivery model to compare the potential wood contribution for fish-bearing and non-fish-bearing stream channels over time between alternatives on BLM-administered lands and non-BLM-administered lands. The wood delivery model in the analysis of effects is based on research by Pacific Northwest Research Station and Earth Systems Institute scientists. The BLM was responsible for model inputs, quality control of model inputs, and interpretation of the modeling results.

Wildlife biologists with the U.S. Fish and Wildlife Service assisted in developing the analysis of effects on the northern spotted owl. These discussions provided input to development of the analytical methodology, including the habitat classification for northern spotted owls.

A Science Team consisting of scientists and natural resource specialists led by a BLM Science Team Coordinator was formed in 2005 to provide advice to the BLM about the planning criteria and draft EIS. The Science Team included:

- *Doug Drake* - Oregon Department of Environmental Quality  
Focus: Invasive plants, fish, water, fire, and soils



- *Joan Hagar* – U.S. Geological Survey  
Forest and Rangeland Ecosystem Science Center  
Focus: Wildlife
- *Chris Jordan* – National Oceanic and Atmospheric Administration  
Northwest Fisheries Science Center  
Focus: Fish and water
- *Gary Lettman* - Oregon Department of Forestry  
Focus: Socioeconomics and timber
- *Thomas Spies* - Pacific Northwest Research Station  
Focus: Ecology, Wildlife, fire, and timber
- *Fred Swanson* - Pacific Northwest Research Station  
Focus: Ecology, fish, water, soils, and areas of critical environmental concern
- *Chris Sheridan* - Western Oregon BLM Science Coordinator  
Focus: Technical coordination, compilation, and contribution

The Science Team provided input to development of the planning criteria through meetings and informal discussions with the interdisciplinary team.

The Science Team review consisted of comments to the BLM on the draft Environmental Impact Statement by the individual team members. The scientists' comments did not represent an official position of the team members' parent agencies. The Science Team review document and further background information about the Science Team is available on the BLM's website at <http://www.blm.gov/or/plans/wopr/science.php> (accessed April 2008). See *Appendix T (Response to Comments)* for further discussion of the comments provided by the Science Team.

## Vegetation Modeling Team Members

In addition, there were numerous individuals working on teams to provide the data, modeling, and geographic information that support the analysis in the document. Those individuals are:

### OPTIONS Team

Kristine Allen	D. R. Systems Inc.
Chris Cadwell	BLM Oregon State Office
Joe Graham	BLM Oregon State Office
Mark Perdue	D. R. Systems Inc.
Don Reimer	CEO, D. R. Systems Inc.





**Growth and Yield Team**

Mark Hanus	FORsight Resources, Vancouver, Washington
Michael Oxford	BLM - Coos Bay District
Alan Bergstrom	BLM - Medford District
Frank Hoeper	
Robert Pierle	
Douglas Stewart	
Steve Brownfield	BLM – Salem District
Carolina Hooper	
Walter Kastner	
Daniel Schlottmann	
Kevin Carson	BLM – Roseburg District
Craig Kintop	
Art Emmons	BLM – Eugene District
Richard Kelly	
Robert Ohrn	
Mark Stephen	
William Johnson	BLM - Klamath Falls Resource Area
Gregory Reddell	

**Current Vegetation Survey (CVS)/Statistical Team**

Jim Alegria, BLM Oregon State Office  
 Carol Apple, Forest Service, Pacific Northwest Regional Office

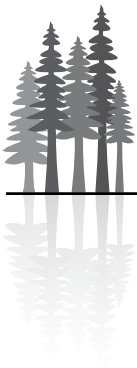
**GIS Team**

*Northrop Grumman (contractor), Oregon State Office*

Eric Brewster	Jeanne Keyes
Maria Fiorella	Bron MacDougall
Ryan Good	Bryant Mecklem
Eric Hiebenthal	Shelley Moore
Jeremy Hruska	Steve Salas
Ryan Kelley	

*Bureau of Land Management*

Duane Dippon	Oregon State Office
Craig Ducey	Oregon State Office
Jay Flora	Coos Bay District
Paul Fyfield	Oregon State Office
Dennis Glover	Medford District
Dale Gough	Roseburg District
John Guetterman	Coos Bay District
Thomas Jackson	Eugene District
Mark Koski	Salem District
Mike Limb	Klamath Falls Resource Area
Arthur Miller	Oregon State Office
Kiet Nguyen	Oregon State Office
Jeff Nighbert	Oregon State Office
Annette Parsons	Medford District
Jay Ruegger	Eugene District
Alan Ward	Coos Bay District



**Ten-Year Scenario Quality Control Team**

BLM Salem District

Lisa Ball  
Michael Barger  
Cory Geisler  
Randy Herrin  
Carolina Hooper  
Mark Koski  
Phil Sjoding  
Keith Walto

BLM Eugene District

Tom Jackson  
Jay Ruegger  
Dave DeMoss  
Jack Zwiesler  
Gary Wilkinson

BLM Coos Bay District

Terry Evans  
Paul Fontaine  
Paul Leman  
Chris Schumacher  
Alan Ward

BLM Medford District

Sarah Bickford  
John Bergin  
Jeff Brown  
Jim Brown  
Dave Caulfield  
Bill Freeland  
Terry Garner  
Dennis Glover

BLM Medford District

Mike Korn  
John McGlothlin  
Vince Randall  
Phil Ritter  
John Samuelson  
Laura Schaefer  
John Schneider  
Steve Timmons

BLM Roseburg District

Bruce Baumann  
Mark Beardsley  
Jay Besson  
Dale Gough  
Jim Schwab

Klamath Falls Resource Area.

Mike Angell  
Mike Bechdolt  
Mike Limb  
Rob McEnroe

# Monitoring

## Monitoring Plan for the Proposed Resource Management Plan

The monitoring plan for the proposed resource management plan is carefully designed to avoid prohibitive costs and effectively answer monitoring questions and reporting levels of activities. It is not necessary or desirable to monitor every activity and management action or objective of a resource management plan.

Monitoring for the resource management plans would examine if activities are in accordance with management directions (implementation monitoring), if management objectives are being met or are likely to be met (effectiveness monitoring), and if management objectives and management actions are based on correct assumptions (validation monitoring). Most monitoring would be designed to provide information as to whether activities are in accordance with management direction.

Some management objectives and management directions in the Proposed Resource Management Plan are not measurable or quantifiable, or do not have a standard or threshold of acceptability, and therefore would not lend themselves to being addressed through monitoring questions which are almost always dependent on a quantifiable basis of measurement. The level of activity for certain management directions that do not have standards or thresholds of acceptability would be monitored in the form of a program reporting item.

In some cases, where monitoring indicates very high compliance with the plan, the frequency or interval of monitoring would subsequently be adjusted for cost and time efficiency.

Sampling or evaluation of a subset of actions would be employed to avoid unnecessary detail and unacceptable costs. Projects to be monitored would be selected on the basis of those that would yield a greater amount of information or be more beneficial. For example, a random sample may result in



monitoring of a relatively small straightforward project that would yield limited information, whereas a more sophisticated or complex project might be available for monitoring that would yield more information or be more effective. Sampling would be done at the level of the entire administrative unit to which the resource management applies (e.g., Eugene District or Klamath Falls Resource Area).

The monitoring questions would be evaluated at each monitoring interval to ascertain if the questions, reporting, methods, sample size, or intervals need to be changed. Such changes to the monitoring plan would be accomplished through plan maintenance.

Monitoring results would be reported annually in a Monitoring Report and published as part of the Annual Program Summary. The Monitoring Report would report, track, and assess the progress of plan implementation; state the findings and conclusions made through monitoring; and serve as a report to managers and the public. Monitoring reports would also include any discussions and analysis of non-compliance and recommendations for corrective action.

The use of this monitoring plan by all BLM offices in the planning area would provide a basis for consistent and coordinated monitoring, and allow district information to be compiled and considered at the scale of the entire western Oregon planning area.

## Other Monitoring

The monitoring plan for the Proposed Resource Management Plan is designed to focus specifically on monitoring the resource management plan itself and is not intended as an overarching plan that addresses all ongoing monitoring and research efforts. This monitoring plan does not attempt to address science questions or issues of a regional or interagency scale. There are many ongoing regional, interagency, and research (science-based) efforts in which the BLM participates that address these broader issues. Although these other efforts in which the BLM participates often have important implications for BLM administered lands and resources in western Oregon, they would be addressed externally from this monitoring plan.

## Plan Evaluations

Plan evaluations would occur at five-year intervals. In addition to the monitoring results, many of the underlying assumptions regarding levels of activities and anticipated environmental consequences would be examined at the time of the five-year plan evaluation to determine if the plan objectives are being met or are likely to be met. The evaluation would also assess whether changed circumstances or new information have created a situation in which the expected impacts or environmental consequences of the plan are significantly different than those anticipated in the FEIS. The plan evaluation would make a finding of whether or not a plan amendment or plan revision is warranted.

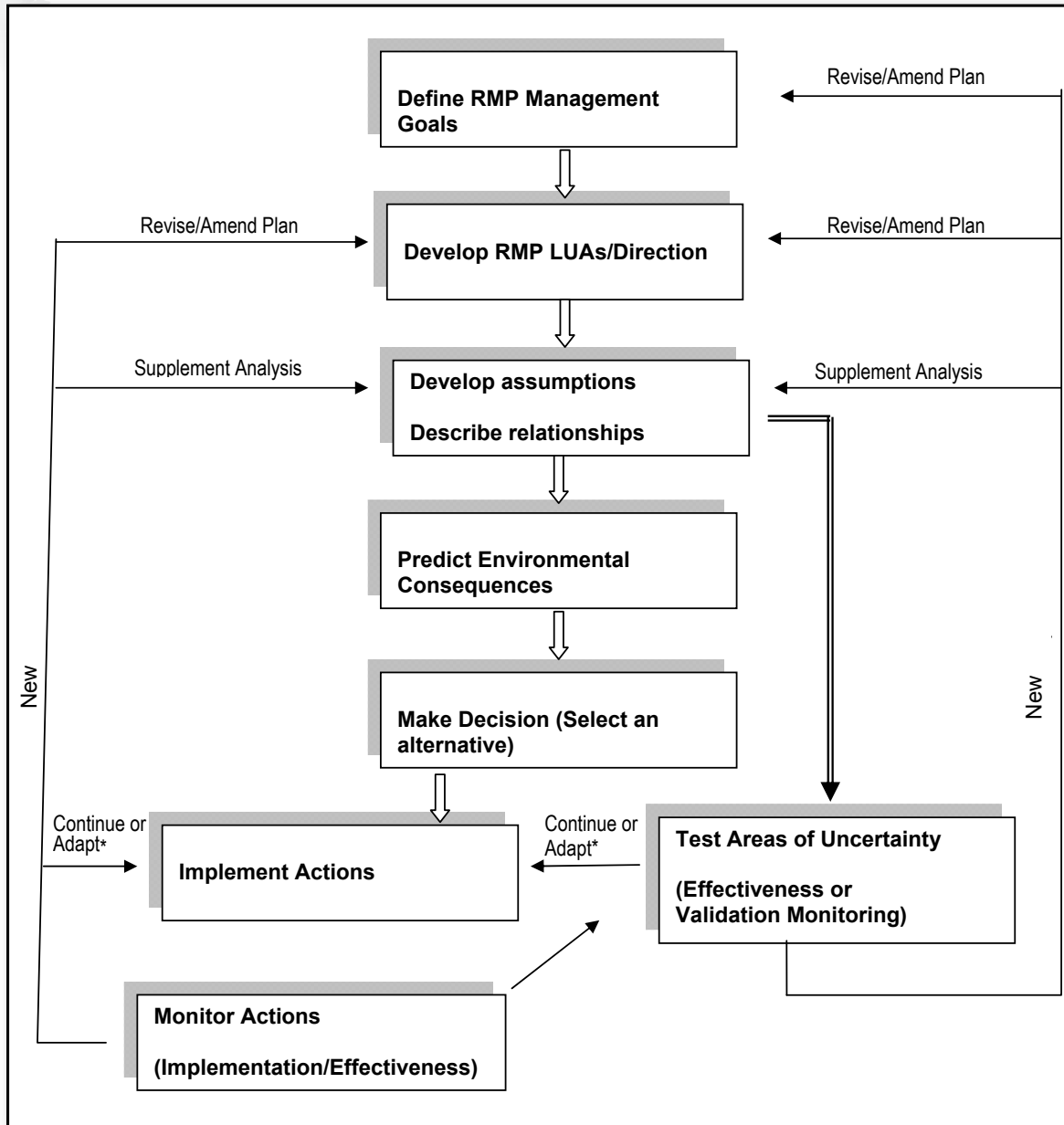
## Adaptive Management

Adaptive management is not a stand-alone program or process. Adaptive management for the resource management plans would be integrated into NEPA and land use planning processes. See *Figure 5-1 (Land use planning, monitoring, and adaptive management)*. Identified outcomes for the resource management plan are described in the plan's management objectives. Resource management plan monitoring would determine if the objectives are being met or are likely to be met.

In addition to monitoring results, new information or changed circumstances would be evaluated as to whether changes in resource management plan decisions or changes in supporting NEPA analyses were warranted. Adaptive management tools and procedures that would be used to make changes in the plan in response to monitoring information, new information, or changed circumstances include: plan maintenance, plan evaluations, plan amendments and plan revisions. In addition to these planning instruments, NEPA documentation may be necessary. The NEPA procedures relevant to adaptive



FIGURE 5-1. LAND USE PLANNING, MONITORING, AND ADAPTIVE MANAGEMENT



*\*When monitoring shows the plan is being implemented as written, continue to implement. Where management direction specifically describes the conditions where adaptation is allowable without supplementing, revising, or amending the plan, then adapt the actions. Additionally, the monitoring plan should consider the areas of uncertainty and the sensitivity of assumptions and relationships.*

management would include the use of categorical exclusions, determination of NEPA adequacy reviews, environmental assessments, and environmental impact statements. Unscheduled plan evaluations could be conducted to address certain unanticipated events or new information that would call into question the underlying analysis and decisions of the plan.

In some instances, management direction contained in the alternatives provides for a range of activities or resource uses. In these cases, levels of activities or resource uses would vary within the range prescribed by the management action without the use of planning steps or NEPA analyses. The level of activities would



be adapted within the range given by management action, depending on variation in resource needs or organizational capability.

In addition to the constraints or latitude provided by management direction for the alternatives, the ability to adapt or change management without the use of planning steps or NEPA analyses would be restricted by how much of a departure would be from analytical assumptions in the environmental impact statement. This is because the conclusions regarding environmental consequences are derived from analytical assumptions. Analytical assumptions include such things as levels or methods of activities, number of acres treated, and miles of roads maintained.

If, as a result of the need for adaptive management changes, implementation of the resource management plan would so alter the methods or levels of activities to the degree that the environmental consequences might be substantively different than those anticipated in the environmental impact statement, then formal planning steps and NEPA procedures would be required. The determination as to when formal planning steps and NEPA procedures would be required would be made through the plan evaluation process. Plan evaluations could include an overall resource management plan evaluation such as occurs at five-year intervals or a narrowly focused evaluation of a specific aspect of the resource management plan. Plan evaluations would be scheduled at five-year intervals. Unscheduled plan evaluations could be conducted to address certain unanticipated events or new information, such as a very large wildfire.

Adaptive management would also be applied by acting on information found through the monitoring questions. Adaptive management associated with monitoring would include corrective actions precipitated by findings of non-compliance. Corrective action precipitated by monitoring could range from simple changes in administrative procedures, refinements of the plan through plan maintenance, or more substantive changes through plan amendments.

## Monitoring Questions

Monitoring of certain questions would not take place in the early years of implementation, because projects would not yet have been completed and, therefore, would not be ready for monitoring. Although incomplete projects may be informally examined by managers to assess progress towards implementing management actions and achieving objectives, the evaluation of incomplete projects would not be part of formal plan monitoring. Not all programs or resources have monitoring questions.

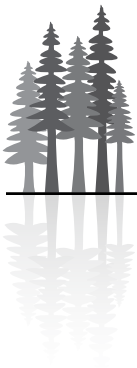
### Late-Successional Management Area

**M1. Monitoring Question:** Has the level of northern spotted owl habitat and marbled murrelet habitat in the Late-Successional Management Areas (LSMAs) been maintained or increased?

Monitoring Requirement: Report acres of management activities and natural disturbance that have reduced the level of habitat in the Late-Successional Management Areas. Report acres of density management designed to promote development of habitat in the Late-Successional Management Areas.

Monitoring Interval: Five years.

**M2. Monitoring Question:** Are snags and coarse woody debris retained during thinning harvest in the Late-Successional Management Areas in accordance with the resource management plan?



Monitoring Requirement: At least one completed thinning project in a Late-Successional Management Area. Projects must have been thinned at least five years prior to monitoring.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

- M3. Monitoring Question:** Is timber salvaged after stand-replacing disturbance to recover economic value in the Late-Successional Management Areas?

Monitoring Requirement: 100% of stand-replacing disturbances over 10 acres.

Monitoring Interval: Annual.

- M4. Monitoring Question:** Are snags and coarse woody debris retained during salvage in Late-Successional Management Areas in accordance with the resource management plan?

Monitoring Requirement: 100% of natural disturbance events. The entire disturbed area would not necessarily need to be evaluated. A sample or subset of the disturbed area may be evaluated.

Monitoring Interval: Annual.

## Riparian Management Area

**Water Quality:** Surrogates for water quality would be evaluated (e.g., shade – Riparian Management Area width). In addition, water quality would be monitored through Water Quality Management Plans. Although monitoring through Water Quality Management Plans would apply to only those stream miles listed as 303(d) waters, these streams are the among the higher priority waters to be monitored.

**Note:** Monitoring questions M5 - M9 *do not* apply to Eastside non-forest lands of the Klamath Falls Resource Area; see M10-M11 for monitoring questions for Eastside non-forest lands.

- M5. Monitoring Question:** Is the width of the riparian management areas established adjacent to regeneration timber harvest areas in accordance with the resource management plan?

Monitoring Requirement: All streams within at least one completed timber sale.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

- M6. Monitoring Question:** When thinning treatments are applied in riparian management areas along perennial and intermittent fish-bearing streams, is a minimum of 50% canopy closure retained? Are thinning treatments excluded within 60 feet on either side of the edge of the stream channel as measured from the ordinary high water line?

Monitoring Requirement: All streams treated within at least one completed thinning timber sale.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

- M7. Monitoring Question:** Are thinning treatments excluded within 35 feet on either side of the edge of the stream channel as measured from the ordinary high water line of intermittent non-fish bearing streams?



Monitoring Requirement: Up to 0.25 mile of stream within thinning projects completed within the past year would be evaluated.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

**M8. Monitoring Question:** Were Best Management Practices that were identified as applicable (as indicated through NEPA decision record or contract stipulations) applied during project implementation?

Monitoring Requirement: At least three projects with identified Best Management Practices would be evaluated. Projects from any land use allocation may be selected for evaluation.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

**M9: Monitoring Question:** For streams with ESA-listed or anadromous fish species, is livestock restricted from riparian areas until 30 days following the emergence of salmonids from spawning beds?

Monitoring Requirement: 100% of streams with ESA-listed or anadromous fish species within grazing allotments.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

**Note:** Monitoring questions M10 and M11 apply to Eastside Non-Forest Lands of the Klamath Falls Resource Area.

**M10. Monitoring Question:** Has the amount of streams in proper functioning condition been maintained or increased?

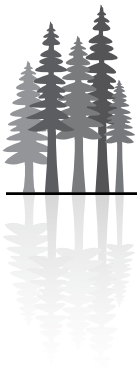
Monitoring Requirement and Monitoring Interval: Monitoring and reporting would be through the use of the statewide report, *Table 1* from USDI TR-1737-9 1993 (or similar), of lotic and lentic water bodies in properly functioning; functioning at risk with trend up, down or not apparent; and not properly functioning. (*Note:* Table 1 is available online, with instructions, at <http://www.blm.gov/nstc/library/techref.htm> and is also provided below for reference purposes.)

**TABLE 1. FUNCTIONING CONDITION STATUS**

State: \_\_\_\_\_

Habitat Types	Proper Functioning Condition	Functional – At Risk			Non-functional	Unknown	Total
		Trend Up	Trend Not Apparent	Trend Down			
Riverine Miles (Lotic)							
Nonriverine Acres (Lentic)*							

\*Report only acres associated with lentic riparian-wetland areas. Do not include acres associated with lotic riparian-wetland areas.



**M11. Monitoring Question:** For streams with ESA-listed or anadromous fish species, are livestock restricted from riparian areas until 30 days following the emergence of salmonids from spawning beds?

Monitoring Requirement: 100% of streams with ESA-listed or anadromous fish species within grazing allotments.

Monitoring Interval: Annually for first three years of RMP implementation, and then every three years if results show 100% compliance.

## Eastside Forest Management Area

**M12. Monitoring Question:** Are snags and coarse woody debris retained in accordance with resource management plan requirements?

Monitoring Requirement: At least one completed timber sale would be evaluated.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

## Uneven-Age Management Area

**M13. Monitoring Question:** Is a relative density (Curtis) of 25 and 55 (for Eastside Forest Management Area a relative density of 15 to 55) inclusive of any group selections maintained during group selection, commercial thinning, or density management conducted for the removal and sale of timber and biomass? (The overstory component of the stand would be used to measure relative density.)

Monitoring Requirement: One completed timber sale would be evaluated.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

## Deferred Timber Management Area

**M14. Monitoring Question:** Has the level of older, more structurally complex, multi-layered conifer forests been maintained until the year 2023?

Monitoring Requirement: Report acres of management activities and natural disturbance that has reduced the acres of forest 160 years old or older. (The use of 160-year old stands is a surrogate for older, more structurally complex, multi-layered conifer forests.)

Monitoring Interval: Every five years.

## Timber Management Area and Uneven-Age Management Area

**M15. Monitoring Question:** Has the allowable sale quantity been offered for sale within the variation provided for in the plan?

Monitoring Requirement: Report annual sale quantity offered for sale and the cumulative total since approval of the plan.

Monitoring Interval: Annual.





## Timber Management Area

**M16. Monitoring Question:** Has timber volume from regeneration harvest and commercial thinning been offered for sale in the quantities specified in the resource management plan?

Monitoring Requirement: Report volume of regeneration harvest and volume of commercial thinning offered for sale.

Monitoring Interval: Annual.

## Air

**M17. Monitoring Question:** Have smoke intrusions occurred in areas designated as Class I for air quality and non-attainment occurred as a result of BLM prescribed fire?

Monitoring Requirement: Report intrusions through Oregon Department of Forestry data.

Monitoring interval: Annual.

## Areas of Critical Environmental Concern and Research Natural Areas

**M18. Monitoring Question:** Are important and relevant values being maintained or restored?

Monitoring Requirement: Report 20% of the Areas of Critical Environmental Concern and Research Natural Areas.

Monitoring Interval: The monitoring of Areas of Critical Environmental Concern and Research Natural Areas would be rotated, providing for 100% of the areas to be monitored over a 5-year period.

## Botany

**M19. Monitoring Question:** Is management of species that are listed under the Endangered Species Act consistent with recovery plans and designated critical habitat?

Monitoring Requirement: At least five completed projects that “may affect” listed species would be reviewed after completion.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

**M20. Monitoring Question:** Have protection measures maintained populations of BLM special status plant and fungi species?

Monitoring Requirement: At least five completed projects in which protection measures were implemented to accommodate BLM special status plant and fungi species.

Monitoring Interval: Annual.



## Cultural and Paleontological Resources Including American Indian Traditional Uses

**M21. Monitoring Question:** Were sites located within project areas after the commencement of ground-disturbing activities?

Monitoring Requirement: At least 20% of management activities that involve ground disturbance that have been completed within the past year would be evaluated.

Monitoring Interval: Annual.

**M22. Monitoring Question:** Have ground-disturbing actions avoided sites that are listed (or eligible for listing) on the National Register of Historic Places?

Monitoring Requirement: 100 percent of avoided listed or eligible sites that lie within the boundaries of a ground-disturbing project after the project is completed.

Monitoring Interval: Annually when listed or eligible sites are present and avoidance prescribed.

**M23. Monitoring Question:** Are sites with scientific value salvaged prior to disturbance (when disturbance cannot be practically avoided) through practices such as data recovery, including excavation, relocation, or documentation?

Monitoring Requirement: 100 percent of data recovery actions undertaken to salvage site data at risk of loss from ground disturbing management activities that have been completed within the past year.

Monitoring Interval: Annual.

**M24. Monitoring Question:** Are cultural and paleontological resources that are threatened by natural processes or human activity excavated and the data recovered where warranted by the scientific importance of the site?

Monitoring Requirement: 100 percent of management activities that have been completed within the past year.

Monitoring Interval: Annual.

## Energy and Minerals

**M25. Monitoring Question:** Has the level of opportunities for the exploration and development of locatable, leasable, and salable energy and mineral resources, and for casual mineral prospecting, been maintained?

Monitoring Requirement: Report new withdrawals.

Monitoring Interval: Five years.



## Fire and Fuels Management

**M26. Monitoring Question:** What is the net change in fire hazard to communities at risk, and risk of uncharacteristic wildfires as indicated by changes in fire regime condition class caused by fuel treatments and timber harvest?

Monitoring Requirement: Report total acres and wildland urban interface acres of positive and negative change in fire regime condition class resulting from fuel treatments and timber harvest.

Monitoring Interval: Annual for Medford District and Klamath Falls Resource Area; semi-annual for Roseburg, Coos Bay, Eugene and Salem Districts.

## Grazing

**Note:** Monitoring questions M27 and M28 apply only to the Medford District and the Klamath Falls Resource Area of the Lakeview District.

**M27. Monitoring Question:** Has the condition of public rangelands been maintained or improved compared to the baseline year of 2008?

Monitoring Requirement and Monitoring Interval: Grazing allotments are assigned to one of three management categories: (I) Improve (M) Maintain, and (C) Custodial. In “I” category allotments, examine trend plots every five years, determine condition every 10 years, and record utilization data every other year. In “M” allotments, determine trend and condition every 5-10 years, and utilization every 5 years. Monitoring in “C” allotments is limited to periodic inventories and observations to measure long-term resource condition changes.

**M28. Monitoring Question:** Are areas disturbed by natural and human-induced events (including wildland fire, prescribed burns, timber-management treatments, and juniper cuts) rested from livestock grazing and resumed after soil and vegetation has recovered sufficient to support livestock grazing (except where grazing would either not impede site recovery, or where grazing could be used as a tool to aid in achieving recovery objectives)?

Monitoring Requirement: Ten percent of disturbance events.

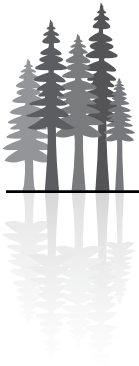
Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

## Hazardous Materials

**M29. Monitoring Question:** Has the response to hazardous material incidents included cleanup, proper notifications, criminal investigations, and site assessments as applicable?

Monitoring Requirement: 100 percent of hazardous material incidents.

Monitoring Interval: Annual.



**M30. Monitoring Question:** Are hazardous materials stored, treated, and disposed of in accordance with applicable laws and regulations?

Monitoring Requirement: 100 percent of District-stored, treated and disposed hazardous materials.

Monitoring Interval: Annual.

## Lands, Realty, Access, and Transportation

**M31. Monitoring Question:** Have the acres of O&C lands of all classifications and the acres of O&C and public domain lands that are available for harvesting been reduced through disposal, exchange, or purchase?

Monitoring Requirement: Review of all O&C lands records through the Oregon State Office. Total net change in land tenure of O&C lands in the planning area would be evaluated at 10-year intervals keyed from 1998, the date of the legislation that provides for no net loss of O&C lands.

Monitoring Interval: Three years.

## Recreation

**M32. Monitoring Question:** Are special recreation management areas managed in accordance with their planning frameworks?

Monitoring Requirement: Report on 20% of the special recreation management areas.

Monitoring Interval: Annual. The monitoring of special recreation management areas would be rotated so that over a five-year period 100% of the areas would be monitored.

## Visual Resource Management

**M33. Monitoring Question:** Is the level of change in character for the areas designated to be managed as VRM I, II, and III consistent with resource management plan requirements?

Monitoring Requirements: Twenty percent of activities that have the potential to affect the existing character in VRM I, II, and III.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

## Wild Horses

**M34. Monitoring Question:** Is the population of wild horses maintained at the appropriate management level of 30 to 50 head?

Monitoring Requirement: Population survey or census.

Monitoring Interval: Five years.



**M35. Monitoring Question:** Are horses from other herd areas periodically introduced to the Pokegama herd to maintain the genetic diversity of the herd?

Monitoring Requirement: Report all introductions.

Monitoring Interval: Five years.

**M36. Monitoring Question:** Are water developments maintained or established to provide season-long water for wild horses within the herd management area?

Monitoring Requirement: 100 percent of water developments.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

## Wilderness Characteristics

**M37. Monitoring Question:** Are wilderness characteristics maintained in accordance with resource management plan requirements?

Monitoring Requirements: Report all management activities that would adversely affect wilderness characteristics to be maintained under the RMP, Wilderness Study Areas and Wilderness Areas.

Monitoring Interval: Three years.

## Wild and Scenic Rivers

**M38. Monitoring Question:** Are the outstandingly remarkable values of designated wild and scenic river corridors (including those classified as wild, scenic, or recreational) being maintained?

Monitoring Requirements: 100 percent of BLM-authorized activities that have the potential to affect the outstandingly remarkable values of wild and scenic rivers.

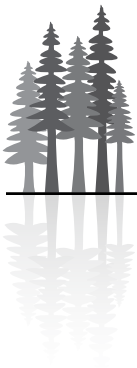
Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

## Wildlife

**M39. Monitoring Question:** Is management of species that are listed under the Endangered Species Act consistent with recovery plans and designated critical habitat?

Monitoring Requirement: At least five completed projects that “may affect” listed species would be evaluated.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.



**M40. Monitoring Question:** Has seasonal motor vehicle use been restricted for deer and elk in areas identified in the RMP?

Monitoring Requirements: Review of district records.

Monitoring Interval: Annual. Every three years if three consecutive years of monitoring show 100% compliance.

## Program Reporting Items

Program reporting items involve activities that are either related to: (1) certain analytical assumptions that are pertinent to non-specific management actions; or (2) analytical assumptions pertinent to the analysis of environmental consequences in the PRMP/FEIS. Not all programs or resources have reporting items.

### Late-Successional Management Area

**R1. Program Reporting Item:** Report the acres of thinning harvest applied to promote mature or structurally complex forests in the Late-Successional Management Areas. Reporting would be annual.

### Riparian Management Area

Note: Program Reporting Items R2-R5 *do not* apply to Eastside non-forest lands of the Klamath Falls Resource Area; see Program Reporting Items R6-8 for Eastside non-forest lands.

**R2. Program Reporting Item:** Report the number of fish-passage blockages that have been corrected and the number of resulting miles of stream habitat that are newly accessed. Reporting would be annual.

**R3. Program Reporting Item:** Report the acres of thinning and other silvicultural treatments to promote development of large trees. Reporting would be annual.

**R4. Program Reporting Item:** Report the miles of permanent road construction, road renovation, road improvement, and road decommissioning. Reporting would be annual.

**R5. Program Reporting Item:** Report the overall level of stream and riparian restoration activities (such as placement of large wood and boulders in streams, planting, thinning, etc.). Report the level of stream restoration activities in high intrinsic potential streams, or streams with high priority fish populations. Reporting would be annual.

Note: Program Reporting Items R6-R8 apply to Eastside Non-Forest lands of the Klamath Falls Resource Area.

**R6. Program Reporting Item:** Report the number of fish-passage blockages that have been corrected and the number of resulting miles of stream habitat that are newly accessed. Reporting would be annual.

**R7. Program Reporting Item:** Report miles of road restoration and road decommissioning. Reporting would be annual.

**R8. Program Reporting Item:** Report the overall level of stream and riparian restoration activities such as placement of large wood and boulders in streams. Report the level of stream restoration activities in high intrinsic potential streams or streams with high priority fish populations. Reporting would be annual.



## Eastside Forest Management Area

**R9. Program Reporting Item:** Report the acres of group selection, commercial thinning, density management, and regeneration harvest. Reporting would be annual.

## Uneven-Age Management Area

**R10. Program Reporting Item:** Report the acres of group selection, commercial thinning, density management, and regeneration harvest. Reporting would be annual.

## Timber Management Area

**R11. Program Reporting Item:** Report the acres of stand conversion from undesirable tree species or an inadequate stocking of commercially desirable tree species. Reporting would be annual.

**R12. Program Reporting Item:** Report the acres of precommercial thinning, fertilization and pruning. Reporting would be annual.

**R13. Program Reporting Item:** Report the acres of regeneration harvest and commercial thinning offered for sale. Reporting would be annual.

**R14. Program Reporting Item:** Report the volume of non-ASQ timber offered for sale. Reporting would be annual.

## Botany

**R15. Program Reporting Item:** Report the acres of activities designed to maintain or restore natural plant communities on non-forest and non-commercial lands. Reporting would be annual.

## Invasive Plants

**R16. Program Reporting Item:** Report the acres of manual, mechanical, cultural, chemical, and biological treatments used to manage invasive plant infestations. Reporting would be annual.

## Energy and Minerals

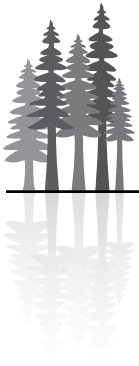
**R17. Program Reporting Item:** Report number of biomass utilization projects. Reporting would be annual.

## Fire and Fuels Management

**R18. Program Reporting Item:** Report number of acres of hazardous fuels treatments.

## Grazing

**R19. Program Reporting Item:** Report the findings of grazing allotments towards meeting the *Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the States of Oregon and Washington*. Reporting would be annual.



**R20. Program Reporting Item:** Report the acres of prescribed livestock grazing used to control invasive plants, reduce fire danger, or accomplish other management objective. Reporting would be annual.

**R21. Program Reporting Item:** Report the acres or number of range improvements. Reporting would be annual.

## Socioeconomic

**R22. Program Reporting Item:** Report the payments to counties associated with BLM-administered lands including O&C, Coos Bay Wagon Roads, and Public Domain lands. Reporting would be annual.

**R23. Program Reporting Item:** Report receipts from timber sales, special forest products, recreation and permits. Reporting would be annual.

**R24. Program Reporting Item:** Report appropriations; number of full time and temporary employees; and major new facility developments or improvements. Reporting would be annual.

## Recreation

**R25. Program Reporting Item:** Report the number of service-oriented and outreach programs, including interpretation and education provided to visitors.

**R26. Program Reporting Item:** Report the status of development of comprehensive travel management plans for off-highway vehicle areas and off-highway vehicle emphasis areas.

## Research

**R27. Program Reporting Item:** Provide a narrative update on status, goals, and findings of research projects in support of the management of lands and resources administered by the BLM.

## Special Forest Products

**R28. Program Reporting Item:** Report the number of permits for harvest and collection of special forest products. Reporting would be annual.

## Soils

**R29. Program Reporting Item:** Report the number of projects and acres in which there was greater than 15 percent of the acres treated that had detrimental soil disturbance resulting from ground-based timber harvest. Reporting would be based on evaluation of at least 20% of the total ground based timber harvest acres. Reporting would be annual. Fifteen percent detrimental soil disturbance is not a plan decision (management direction), but rather an approximate level used as analytical assumption in the FEIS. Detrimental soil disturbance in this context means areas in which the top soil has been removed, the subsoil structure severely altered and the slash deeply incorporated into the soil and which have not been or will not be ameliorated.





## Wildlife

**R30. Program Reporting Item:** Report number of deer and elk forage planting projects. Reporting would be annual.

**R31. Program Reporting Item** (pertinent to Klamath Falls Resource Area): Report acres of thinning or removal of encroaching western juniper to maintain and improve forage for big game. Reporting would be annual.

# Guidance for Use of the Completed Resource Management Plans

This section provides guidance on how the plans will be implemented, evaluated, and changed by the districts.

## Requirement for Further Environmental Analysis

The BLM makes many types of decisions. It is important to distinguish between land use plan decisions and implementation decisions because: (1) the administrative remedies and the timing of those remedies differ; (2) the NEPA analysis necessary to support implementation decisions is generally more site specific than the analysis necessary to support land use plan decisions; (3) the authority to make these types of decisions varies; and (4) the scope and effect of each type of decisions would be considered during the compliance and consultation proceedings required under various environmental laws.

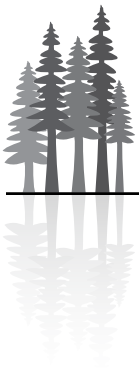
- Land use plan decisions consist of desired outcomes (goals, standards, objectives), allowable uses (land use allocations, levels of use, restrictions on uses), and management direction necessary to achieve the outcomes.
- Implementation decisions are actions to implement land use plans. These types of decisions are based on site-specific planning and NEPA analyses. Examples of implementation decisions include: offering a specific tract of timber for sale, applying a vegetation treatment, offering a specific oil or gas lease for sale, application for a permit to drill (APDs), selling an individual grazing lease or processing a specific permit application, designating specific roads and trails as open or closed to motorized travel, or completing a specific land exchange.

These revised resource management plans only provide direction for the management of natural resources on BLM-administered lands. These plans do not authorize the implementation of any specific project-level actions. Decisions on which projects, including specific on-the-ground locations and timing of a project, will be made subsequent to the adoption of this revision to the Resource Management Plans. Decisions on specific projects will be made by BLM employees delegated to make those decisions after compliance with National Environmental Policy Act and Endangered Species Act consultation has been completed.

## Plan Evaluation

Evaluation is the process of reviewing the land use plan to determine whether plan decisions are being implemented as expected, and whether the associated NEPA analyses are still valid. Based on this evaluation, a determination is made whether a plan amendment or revision is warranted. Land use plans are evaluated to determine if:

1. decisions remain relevant to current issues
2. decisions are effective in achieving (or making progress toward achieving) desired objectives



3. any decisions need to be revised
4. any decisions need to be dropped from further consideration
5. any areas require new decisions

The plan would be formally evaluated every 5 years, or as necessitated by changed circumstances or significant new information. These evaluations would be focused on issues resulting from monitoring or new information.

The evaluation would also review major assumptions regarding the level of management activities used in the analysis of effects for the Final EIS. Much of the data needed for evaluating these assumptions related to anticipated levels of activity will have been collected through program reporting associated with the RMP monitoring plan.

Unscheduled plan evaluations could be conducted to address certain unanticipated events or new information that would call into question the underlying analysis and decisions of the plan. These unscheduled plan evaluations may examine a single or relatively narrow aspect of the RMP.

## **Plan Maintenance**

Land use plan decisions can be maintained to reflect minor changes in data. Maintenance is limited to further refining, documenting, or clarifying a previously approved decision. Plan maintenance would not expand the scope of resource uses or restrictions or change the terms, conditions, and decisions of the approved plan. Plan maintenance may be used to adjust the annual sustained yield capacity base on updated operations inventory data.

## **Plan Amendments**

New information, updated analyses, or new resource use or protection proposals may require amending or revising land use plans and updating implementation decisions. Re-examining existing plan decisions or the PRMP/FEIS analysis would be appropriate if new information becomes available or circumstances occur that could significantly alter the underlying conclusions of the FEIS regarding environmental consequences or the ability to achieve management objectives.

Plan amendments change one or more of the terms, conditions, or decisions of an approved land use plan. Plan amendments are most often prompted by the need to:

- consider a proposal or action that does not conform to the plan
- implement new or revised policy that changes land use plan decisions, such as an approved conservation agreement between the BLM and the USFWS
- respond to new, intensified, or changed uses on public land
- consider significant new information from resource assessments, plan evaluations, monitoring, or scientific studies

Plan amendments would follow BLM planning regulations and can be accompanied by either an environmental assessment or environmental impact statement.

## **Plan Revisions**

Resource management plan revisions involve preparation of a new plan to replace an existing one. An RMP revision would be necessary if monitoring and evaluation findings, new data, new or revised policy, or changes in circumstances indicate that decisions for an entire plan or a major portion of the plan would no longer serve as a useful guide for resource management. Plan revisions are accomplished through the BLM planning regulations and are accompanied by an environmental impact statement.



## Valid Existing Rights

Considering the intermingled nature of the O&C lands in the planning area, an immense number of rights-of-way, leases, corridors, and other established legal rights have been granted over the years in establishing an effective cooperative management framework among a variety of owners. Perhaps the most extensive and unique rights are the reciprocal rights-of-way agreements with dozens of adjacent landowners established to provide for the logical, effective, and efficient development of access on the intermingled lands. Mining claims, water rights, and county roads are other examples. When implementing resource management plans, it is recognized there are some instances when actions that may occur on public lands are subject to these valid existing rights. In those cases, authorization for implementing an action may be subject to approval by the holders of valid existing rights and may not be discretionary to BLM.

## Management of Newly Acquired Lands

Lands may come under BLM administration after completion of the RMP/ROD through exchange, donation, purchase, revocation of withdrawals to other federal agencies or relinquishment of Recreation and Public Purpose leases. Discretionary acquisitions (such as exchanges) would be guided by RMP/ROD “lands acquisition criteria” based on resource values of high public interest.

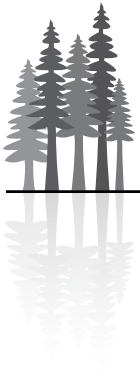
Newly acquired or administered lands or interests in lands would be managed for their highest potential or for the purposes for which they are acquired. For example, lands acquired within the boundary of a “special management area” with Congressional or RMP allocations/direction would be managed in conformance with management objectives and guidelines for that area. Lands acquired outside of designated special management areas would be managed in the same manner as comparable or adjacent BLM-administered lands. In western Oregon, this implies forest management activities, including timber harvest, management of the mineral estate, and standard operating procedures and pre-committed mitigation measures.

If lands with unique or fragile resource values are acquired outside of special management areas, it may be appropriate to protect those values until the next plan revision. Lands acquired adjacent to or within existing or proposed withdrawals identified in this plan that possess similar critical resource values would be proposed for withdrawal. Newly acquired lands, regardless of status, would be subject to non-discretionary access rights provided for under the terms and conditions of most reciprocal right-of-way agreements and permits.

In accordance with Section 205 (e) of FLPMA (P.L. 99-632), lands acquired by the BLM in exchange for O&C or Coos Bay Wagon Road (CBWR) lands would have the same status and be administered in accordance with the same provisions of law applicable to those lands disposed of; and those newly acquired lands would be designated as O&C or CBWR lands, as appropriate, and managed under the sustained yield principles as prescribed in the Act of August 28, 1937 and other laws applicable to the O&C or CBWR lands. Additionally, lands acquired using proceeds generated from the disposal of O&C or CBWR lands under the authority of the Federal Land Transaction Facilitation Act (Public Law 106-248) would also take on the same status as the lands from which the funds were generated (O&C or CBWR) and would likewise be managed in accordance with the Act of August 28, 1937 and other applicable laws.

Lands acquired by the BLM that take on the status of either O&C or CBWR would require classification in accordance with the Act of June 9, 1916 as to power-site, timberlands, or agricultural lands. Lands classified as timberland or agriculture would be open to exploration, location, entry and disposition under the general mining laws in accordance with the Act of April 8, 1948. Lands acquired by the BLM under Section 205 or 206 of FLPMA take on the status of “acquired lands,” and therefore would not be available for location, lease, or sale until the land is formally opened to such entry.

Land acquisitions resulting in net adjustments in the commercial forestland base may be made without adjusting the allowable sale quantity or amending the resource management plan.



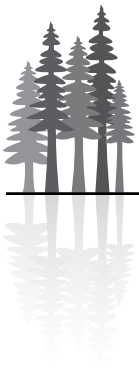


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# Acronyms

This chapter provides the main acronyms used in the document. Acronyms are used for brevity purposes and appear primarily in tables and figures.

ACEC	area of critical environmental concern
ASQ	allowable sale quantity
AUM	animal unit month
bf	board foot or board feet
BLM	Bureau of Land Management
CBWR	Coos Bay Wagon Road
CFR	Code of Federal Regulations
CHU	critical habitat unit
CWD	coarse woody debris
cfs	cubic feet per second
dbh	diameter at breast height
DEM	Digital elevation model
EIS	environmental impact statement
EPA	Environmental Protection Agency
ERMA	extensive recreation management area
FEMAT	Forest Ecosystem Management Assessment Team
FLPMA	Federal Land Policy and Management Act
FLTFA	Federal Land Transaction Facilitation Act
GIS	geographical information system
HLB	harvest land base
HMA	herd management area
IVMP	Interagency vegetation mapping project



km	kilometer
LSMA	late-successional management area
LSR	late-successional reserve
LUA	land use allocation
Mbf	thousand board feet
mmbf	million board feet
NLCS	National Landscape Conservation System
NSO	northern spotted owl
NWFP	Northwest Forest Plan
O&C	Oregon and California Lands Act
OHV	off-highway vehicle
ONA	Outstanding natural area
PRMP	Proposed resource management plan
R&PP	recreation and public purpose
RMP	resource management plan
RNA	research natural area
ROD	record of decision
SRMA	special recreation management area
USFS	United States Forest Service
VRM	visual resource management
WOPR	western Oregon plan revisions