United States Department of the Interior
Bureau of Land Management

Roseburg District Office
777 N.W. Garden Valley Blvd
Roseburg, Oregon 97470

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Roseburg District
Annual Program Summary

and

Monitoring Report

FISCAL YEAR 2002

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interest of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.

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ROSEBURG DISTRICT

ANNUAL PROGRAM SUMMARY

AND

MONITORING REPORT

FISCAL YEAR 2002

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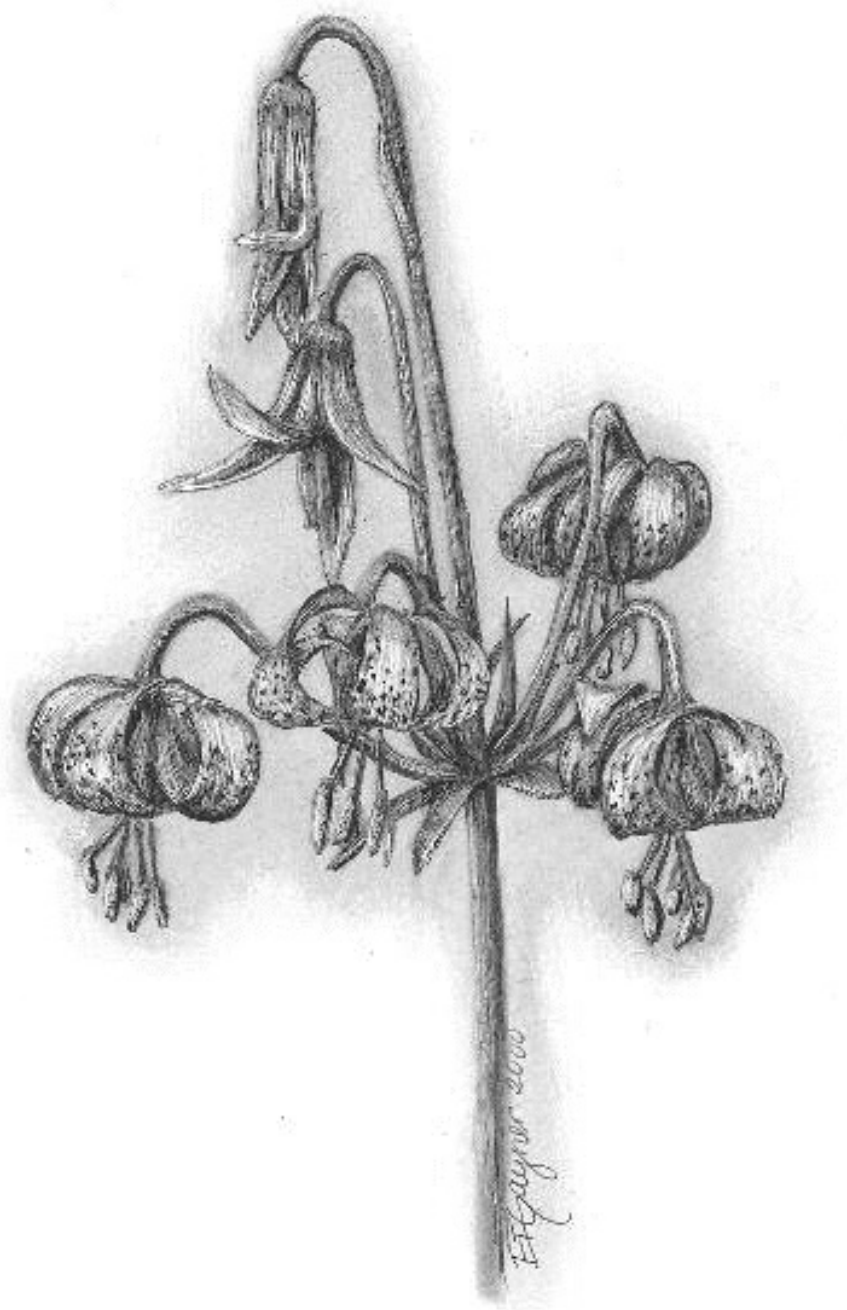


Executive Summary

This document combines the Roseburg District Annual Program Summary and Monitoring Report for fiscal year 2002. These reports are a requirement of the Roseburg District Record of Decision and Resource Management Plan. The Annual Program Summary addresses the accomplishments of the Roseburg District in such areas as watershed analysis, Jobs-in-the-Woods, forestry, recreation, fire, and other programs. It also provides information concerning the Roseburg District budget, timber receipt collections, and payments to Douglas County. The results of the fiscal year 2002 Annual Program Summary show that the Roseburg District is implementing the Northwest Forest Plan, however, the ability to fully implement some programs or program elements such as restoration, recreation and particularly timber has been affected by factors such as the challenge of implementing the Survey and Manage standard and guildelines and ongoing litigation.

The Monitoring Report compiles the results and findings of implementation monitoring for fiscal year 2002. The Monitoring Report, which is basically a "stand alone" document with a separate executive summary follows the Annual Program Summary in this document.

Although the Annual Program Summary gives only a very basic and very brief description of the programs, resources and activities in which the Roseburg District is involved, the report does give the reader a sense of the enormous scope, complexity and diversity involved in management of the Roseburg District public lands and resources. Although there are and will continue to be challenges which will require us to adapt and to give our best, the managers and employees of Roseburg District take pride in the accomplishments described in this report.

Table 1 - Roseburg RMP, Summary of Renewable Resource Management Actions, Directions and Accomplishments Cumulative

RMP Resource Allocation or Management Practice or Activity	Fiscal Year 2002 Accomplishments	Accomplishments 1995-2002 Timber 1996-2002 Others	Projected Decadal Practices
Regeneration harvest (acres sold)	0	3,052	11,900
Commercial thinning/density management (acres sold)	457-179	2,600-1,219	2,500-0
Site preparation (acres)	63	2,591	8,400
Vegetation control, fire (acres)	0	0	-
Prescribed burning (hazard reduction acres)	0	0	-
Prescribed burning (wildlife habitat and forage reduction acres)	0	0	-
Natural or artificial ignition prescribed fire for ecosystem enhancement (acres)	0	0	-
Plantation Maintenance/Animal damage control (acres)	720	9,005	8,300
Pre-commercial thinning (acres)	4,283	28,700	39,000
Brush field/hardwood conversion (acres)	0	0	150
Planting/ regular stock (acres)	102	4,151	2,900
Planting/ genetically selected (acres)	149	1,497	11,400
Fertilization (acres)	0	5,338	11,400
Pruning (acres)	1,387	4,244	4,600
New permanent road const. (miles/acres*)	1.7	20.9	65
Roads fully decommissioned/ obliterated (miles*)	10.9	39.4	-
Roads closed/ gated (miles**)	0	12.3	-
Open road density (per square mile*)	4.59	4.59	-
Timber sale quantity sold (m board feet)	11,755	186,211	495,000
Timber sale quantity sold (mm cubic feet)	2.15	30.9	77
Noxious weed control, chemical (acres)	571	902	-
Noxious weed control, other (acres)	289	1,927	

* Bureau managed lands only: ** Roads closed to the general public, but retained for administrative or legal access

Table 2 - Roseburg RMP, Summary of Non-Biological Resource or Land Use Management Actions, Directions and Accomplishments Cumulative

RMP Resource Allocation or Management Practice	Activity Units	Fiscal Year 2002 Accomplishments	Accomplishments 1995-2002
Realty, land sales	(actions/acres)	0	0
Realty, land exchanges	(actions/acres acquired/disposed)	0	0
Realty, R&PP leases/patents	(actions/acres)	0	0
Realty, road rights-of-way acquired for public/agency use	(actions/miles)	0	8
Realty, road rights-of-way, permits or leases granted	(actions/miles)	7	78
Realty, utility rights-of-way granted (linear/areal)	(actions/miles/acres)	0	13
Realty, withdrawals completed	(actions/acres)	0	0
Realty, withdrawals revoked	(actions/acres)	0	0
Mineral/energy, total oil and gas leases	(actions/acres)	0	0
Mineral/energy, total other leases	(actions/acres)	0	0
Mining plans approved	(actions/acres)	0	1
Mining claims patented	(actions/acres)	0	0
Mineral material sites opened	(actions/acres)	0	0
Mineral material sites, closed	(actions/acres)	0	0
Recreation, maintained off highway vehicle trails	(units/miles)	0	0
Recreation, maintained hiking trails	(units/miles)	8/14	48/84
Recreation, maintained sites	(units/acres)	14/405	70/2025
Cultural resource inventories	(sites/acres)	17/1563	100/5,820
Cultural/historic sites nominated	(sites/acres)	0	0
Hazardous material sites	(incidents)	2	18

ANNUAL PROGRAM SUMMARY

Introduction

This Annual Program Summary is a review of the programs on the Roseburg District Bureau of Land Management for the period of October 2001 through September 2002. The program summary is designed to report to the public, local, state and federal agencies a broad overview of activities and accomplishments for fiscal year 2002. This report addresses the accomplishments of the Roseburg District in such areas as watershed analysis, Jobs-in-the-Woods, forestry, recreation, and other programs. It also provides information concerning the Roseburg District budget, timber receipt collections, and payments to Douglas County. Included in the Annual Program Summary is the Monitoring Report for the Roseburg District.

Implementation of the Northwest Forest Plan began in April 1994 with the signing of the Northwest Forest Plan Record of Decision. Subsequently, the Roseburg District began implementation of the Resource Management Plan (RMP), which incorporates all aspects of the Northwest Forest Plan, in June 1995 with the signing of the RMP Record of Decision. Fiscal year 2002 represents the seventh full fiscal year of implementation of the Resource Management Plan.

There are 20 land use allocations and resource programs under the Roseburg District Resource Management Plan. Not all land use allocations and resource programs are discussed individually in a detailed manner in this Annual Program Summary because of the overlap of programs and projects. A detailed background of various land use allocations or resource programs is not given in this Annual Program Summary in order to keep this document relatively concise. Additional information can be found in the Resource Management Plan Record of Decision and supporting Environmental Impact Statement. These documents are available at the Roseburg District office.

The manner of reporting the activities differs among the various programs. Some resource programs lend themselves well to a statistical summary of activities while others are best summarized in short narratives. Further details concerning individual programs on the Roseburg District may be obtained by contacting the Roseburg District office.

Budget

In Fiscal Year 2002, Roseburg District had a total appropriation of $19,397,449.

This appropriation breaks out as follows:

- $13,234,000 Oregon & California Railroad Lands (O&C)
- $903,000 Jobs-in-the-Woods Program
- $860,000Timber Pipeline
- $507,000 Recreation Pipeline
- $1,984,449 Title II, Secure Rural Schools
- $267,000 Deferred Maintenance
- $633,000 Management of Lands and Resources (MLR)
- $444,000 Infrastructure Improvement
- $440,000 Fire related programs
- $5,000 Acquisition Management
- $120,000 Forest Pest Control

In Fiscal Year 2002, there were 157 full-time employees. An average of 45 term, temp, or cooperative student employees were on board at various times throughout the year.

Appropriations for the five previous years 1997 thru 2001 are:

1997	$12,463,000
1998	$12,487,000
1999	$13,376,000
2000	$16,060,000
2001	$21,226,000

Land Use Allocations

There have been no changes to land use allocations during fiscal year 2002

Aquatic Conservation Strategy Implementation

Riparian Reserves

Restoration projects, density management, culvert and road upgrade are described under the programs of Water and Soil, Jobs-in-the-Woods, and road maintenance.

Watershed Analyses

Watershed analysis is required by the Northwest Forest Plan (NFP) Record of Decision (ROD). The primary purpose is to provide decision makers with information about the natural resources and human uses in an area. This information will be utilized in National Environmental Policy Act (NEPA) documentation for specific projects and to facilitate compliance with the Endangered Species Act (ESA) and Clean Water Act (CWA) by providing additional information for consultation with other agencies.

Watershed analyses include:

- Analysis of at-risk fish species and stocks, their presence, habitat conditions and restoration needs;
- Descriptions of the landscape over time, including the impacts of humans, their role in shaping the landscape, and the effects of fire;
- The distribution and abundance of species and populations throughout the watershed;
- Characterization of the geologic and hydrologic conditions.

This information was obtained from a variety of sources, including field inventory and observation, history books, agency records and old maps and survey records.

As of the end of fiscal year 2002, thirty-six watershed analyses had been completed through at least the first iteration. These watershed analyses included Old Fairview (Middle North Umpqua), Calapooya Divide (Calapooya), Tom Folley (Elk Creek, near Drain), Hubbard Creek (Upper Umpqua), Upper South Myrtle (Myrtle Creek), Days Creek (South Umpqua), St. John Creek (South Umpqua), Coffee Creek (South Umpqua), Middle Umpqua Frontal (Upper Umpqua), Upper Smith River, Brush Creek/Hayhurst (Elk Creek, near Drain), Canton Creek, Rock Creek, Little River Adaptive Management Area, Stouts Creek (South Umpqua), Poole Creek (South Umpqua), Shively-O'Shea (South Umpqua), East Elk Creek (Elk Creek, near Drain), Umpqua Frontal (Upper Umpqua), Radar/Wolf (Upper Umpqua), North Bank Ranch, Myrtle Creek, Deadman Creek, Dompier Creek (Upper South Umpqua), Cow Creek, Olalla-Lookingglass, Elkton-Umpqua, Canyonville/Canyon Creek, Upper Middle Fork Coquille and Middle South Umpqua, Lower South Umpqua, Calapooya, Middle North Umpqua, Lower Cow Creek, South Umpqua River, Upper Umpqua River. These watershed analyses involved over 1,000,000 acres, including 403,824 acres of public land administered by the BLM. This watershed analysis effort has encompassed 96% of the Roseburg District by the end of fiscal year 2002.

Watershed analysis ongoing or proposed in fiscal year 2003 or beyond include: Myrtle Creek.

Watershed Restoration Projects

The District completed a variety of restoration projects in fiscal year 2002 using Jobs-In-The-Woods and other sources of appropriated funding, and County Payments Title II funds. Work occurred in many areas of the District. Table xx lists the projects accomplished in 2002.

As shown in Table 4, the District emphasized culvert replacement in 2002, completing 18 of these projects and improving access to over 30 miles of fish habitat. Several of these projects occurred as part of the Upper Smith River and Cavitt Creek restoration efforts, both of which involve multiple partners and have been going on for several years.

Table 3 - Watershed Analysis Status

	Watershed Analysis Areas	Number of key watersheds	BLM Acres	Percent of total acres
Completed through FY02	36	11	409,697	96%
Ongoing FY03	1	0	15,303	4%
Total	37	11	425,000	100%

Table 4. Watershed Restoration Projects accomplished on the Roseburg District in 2002.

Project Name	Funding Type	Project Description
Union and Live Oak Creek Culverts	JITW[1]	Culvert replacement to restore fish passage
Holmes Creek Culvert	JITW	Culvert replacement to restore fish passage
Weasel Flats Pond Maintenance	JITW	Maintenance of a pond for wetland habitat and as a source of water for fire protection
Little Canyon Creek Culverts	JITW	Culvert replacement to restore fish passage
Andrews Creek Culverts	JITW	Culvert replacement to restore fish passage
Gassey/Field Creek Culverts	JITW	Culvert replacement to restore fish passage
Lees Creek Culvert	JITW	Culvert replacement to restore fish passage
Little Wolf Creek Culvert	JITW	Culvert replacement to restore fish passage
Thompson Creek Large Wood	JITW	Wood placement to restore stream habitat
Weaver Creek Culvert	Title II[2]	Culvert replacement to restore fish passage
Ringtail Creek Culvert	Title II	Culvert replacement to restore fish passage
Woodstock Creek Culvert	Title II	Culvert replacement to restore fish passage
Upper Smith River LWD	Title II	Wood placement to restore stream habitat
Copperhead Culvert	DEQ319[3]	Culvert replacement to reduce sediment risk
Buckshot Culvert	OWEB[4]	Culvert replacement to reduce sediment risk
Evarts Culvert	Title II	Culvert replacement to reduce sediment risk

[1]Jobs-in-the-Woods Funding
[2]Title II funds from the Secure Rural Schools and Community Self-Determination Act (Payments to Counties)
[3]Funding from an Oregon Department of Environmental Quality grant
[4]Funding from an Oregon Watershed Enhancement Board Grant

Jobs-in-the-Woods

The Jobs-in-the-Woods program was established to mitigate the economic and social impacts of reduced timber harvesting under the Northwest Forest Plan while investing in the ecosystem. Budgets for Jobs-in-the-Woods on the Roseburg District have been as follows:

FY 1996	$1,075,000
FY 1997	$1,000,000
FY 1998	$1,200,000
FY 1999	$768,000
FY 2000	$890,000
FY 2001	$876,000
FY 2002	$903,000
Total	$6,721,000

Sixty-four projects were funded through contracts on the district under this program from 1996 through 2002. These projects include work such as road restoration and renovation to reduce sedimentation, culvert replacement to restore fish passage, and placement of trees in streams to improve fish habitat. In FY 2002 culvert replacement projects were emphasized. The district continues to work closely with private industry and watershed councils to accomplish this work and provide displaced workers with the opportunity to have jobs in the forest environment.

Specific projects completed with Jobs-in-the-Woods funding in fiscal year 2002 include the following:

- Union and Live Oak creek culvert replacements
- Little Canyon Creek culvert replacement
- Andrews Creek culvert replacement
- Gassey/Field Creek culvert replacements
- Holmes Creek culvert replacement
- Weasel Flats pond repair
- Pond dredging
- Thompson Creek habitat improvement
- Aggregate supply
- Little Wolf Creek culvert replacement (Contract awarded in FY 2001 but completed in FY 2002)
- Lees Creek culvert replacement (Contract awarded in FY 2001 but completed in FY 2002)
- Bingham/Holmes Creek culvert replacements (Contract awarded in FY 2001 but completed in FY 2002)

Watershed Councils and Soil and Water Conservation Districts

Most of the district's lands are interspersed with privately-owned lands in a checkerboard pattern of alternating square mile sections. This ownership patterns forces us to work with our neighbors in order to accomplish meaningful watershed restoration. The Umpqua Watershed Council and Douglas Soil and Water Conservation District serve as coordinating organizations, bringing many other partners together to work jointly on projects. The Roseburg District's Restoration Coordinator attends all watershed council meetings. In addition, the district's lead Fisheries Biologist attends the meetings of the watershed council's Technical Advisory Committee. The district contributes to specific projects in a couple of ways: (1) it conducts projects on district lands that contribute to restoration goals in areas with multiple land owners. (2) It transfers funds to the watershed council for restoration projects. In return, not only does the district gain many partners, but it leverages money from other sources. The Watershed Council and Soil and Water Conservation Districts have successfully applied for and received numerous grants from organizations such as the Oregon Watershed Enhancement Board, the Department of Environmental Quality's 319 program, the US Fish and Wildlife Service, the Soil Conservation

Service, and the Umpqua Fisherman's Derby. The money contributed by the District serves as matching funds needed for these grants.

Late-Successional Reserves and Assessments

Late-Successional Reserve Assessments have been completed and reviewed by the Regional Ecosystem Office for Late-Successional Reserves RO 151, 222, 223, 251, 257, 259, 260, 261, 2663, 254, 265, 266 and 268. All large LSRs on the Roseburg District are now covered by a completed and REO reviewed LSR assessment. Many of the LSR assessments were joint efforts involving the US Forest Service and other BLM districts.

During fiscal year 2002, 119 acres of density management occurred in Late-Successional Reserves. During the period of 1995 through 2002, there were 620 acres of density management and 188 acres of salvage (includes right of way harvests) that took place in Late-Successional Reserves. This represents 0.04% of Late-Successional Reserve acreage on the Roseburg District. Other forestry activities that have occurred in LSRs include planting and precommercial thinning. All of these activities were accomplished under either initial LSR assessments completed prior to fiscal year 1997 or subsequent LSR assessments which met applicable standards and guidelines.

Little River Adaptive Management Area

Little River Adaptive Management Area is one of ten AMAs designated under the Northwest Forest Plan for ecosystem management innovation including community collaboration and management applications. The management emphasis of Little River AMA as set forth in the Northwest Forest Plan is the development and testing of approaches to the integration of intensive timber production with restoration and maintenance of high quality riparian habitat. Working with other agencies, organizations, and the public are other areas of learning.

In January 1997, the Roseburg District BLM and the Umpqua National Forest released a draft of the Little River Adaptive Management Area (AMA) Plan. A requirement of the Northwest Forest Plan, the AMA document frames a direction for adaptive management on the Federally managed experimental area. Both Roseburg BLM and the Umpqua National Forest are currently managing the Little River AMA under the draft AMA plan and in accordance with the Northwest Forest Plan. There is currently no strategy for completing the Little River Adaptive Management Area Plan.

In 1998, the major landholders in the Cavitt Creek area (BLM, USFS, and Seneca Jones Timber Company) along with the Umpqua Basin Watershed Council (UBWC) initiated an effort to inventory and prioritize road-related risks. This process identified the roads that are high risk to aquatic resources and in need of restoration. This cooperative effort was intended to more effectively addresses water quality and fisheries concerns in areas with intermingled private and public lands. Surveys of 204 miles of roads were completed in February, 2001.

A total of five stream crossing culverts that restrict or impede fish passage were replaced in 2002. Three of these were accomplished by the BLM and two by Seneca Jones Timber Company.

Water quality monitoring continues to be a major emphasis for the Little River AMA. The monitoring program is an interagency effort that includes temperature stations, multi-parameter grab sample measurement by volunteers and the Glide School students, and continuous monitoring. All water quality data will be linked to an interagency GIS.

Timber harvest related to the Roseburg District ASQ from the Little River Adaptive Management Area is at 16% of the RMP assumed level.

Other projects already developed or still under development include research that investigates the endangered mariposa lily, and fertilization effects on water quality. More information about projects in Little River can be obtained on the AMA web site, www.teleport.com/~lrama.

Air Quality

All prescribed fire activities conformed to the Oregon Smoke Management and Visibility Plans. No intrusions occurred into designated areas as a result of prescribed burning on the district. There are no Class I airsheds within the district. Air quality standards for the district prescribed fire and fuels program are monitored and controlled by the Oregon Department of Forestry

Water and Soils

Water temperature was monitored at 120 streams on the Roseburg District. These data will be used in watershed analysis, water quality management plans, and will be provided to DEQ for basin assessment.

A water quality study was completed in cooperation with the US Geological Survey on trace elements in the South River resource area of the district. These data will be used as baseline data for watershed analysis, water quality management plans, and for abandoned mine use inventory.

Methods taught at Rosgen training courses were used by BLM personnel to survey 12 stream gauging sites in the ongoing effort to develop regional curves of channel geomorphology used for improved accuracy of flow predictions, better design of instream structures, improve our ability to assess changes in peak flow as a result of management activities, monitor changes over time, and classify streams.

Turbidity and sediment data were collected and analyzed through the cooperative study with the Umpqua National Forest.

Stream water quality was monitored and published for the North Umpqua River Wild and Scenic Section in the U.S. Geological Survey water-data report through the cooperative study (an ongoing annual effort) with Douglas County Water Resources Survey.

Stream flow was monitored at selected sites through the cooperative study (an ongoing annual effort) with the Douglas County Water Resources Survey.

Watershed activity information for fiscal year 1996-2002

The Roseburg District:

- Surveyed 555 miles of streams for proper functioning condition;
- Operated 6 gauging stations;
- Five studies for sediment;
- Water temperature was monitored for 120 streams;
- 45 sites for water chemistry;
- Cooperatively monitored water quality on the North Umpqua Wild and Scenic River;
- Completed a cooperative study with the USGS;
- Continued to cooperatively develop a study with USGS for timber fertilization in the Little River Adaptive Management Area;
- Over 500 acres of brushed conifer reestablishment;
- 500 acres of density management in riparian reserves to attain aquatic conservation strategy objectives;
- Re-established a cooperative gage with USGS, Forest Service and Douglas County;
- Established a district macro-invertebrate monitoring program; completed 44 water rights

applications with Oregon Water Resources
- Completed densification of GIS stream layer and began ARIMS streamflow routing of stream layer;
- Prepared five Water Quality Restoration Plans for submittal to ODEQ;
- Completed watershed analysis on 96% of BLM-administered lands of Roseburg District
- Numerous hydromulching projects to reduce sediment.

State-listed Clean Water Act 303d streams

The Roseburg District has 54 state-listed streams identified by the Department of Environmental Quality (DEQ). See Table 5.

Municipal Watersheds

There are 26 community water systems with BLM-administered lands within the Roseburg District. The district has entered into memorandums of understanding with the cities of Drain, Riddle, and Canyonville. The objective of these agreements is to maintain the best water quality through Best Management Practices. A Special Land Use Permit has been issued to the City of Myrtle Creek for watershed protection which includes the city intake and the adjoining 190 acres. There have been no reports of contamination or water quality violations from BLM-administered lands.

Best Management Practices

Best Management Practices are identified and required by the Clean Water Act as amended by the Water Quality Act of 1987. Best Management Practices are defined as methods, measures, or practices to protect water quality or soil properties. Best Management Practices are selected during the NEPA interdisciplinary process on a site specific basis to meet overall ecosystem management goals. The Roseburg District Record of Decision and Resource Management Plan lists Best Management Practices for various projects or activities that may be considered during the design of a project. Monitoring of the RMP during 1996-2002 has shown that Best Management Practices have been appropriately implemented with a high degree of success.

Wildlife Habitat

Green tree retention

The RMP management direction is to retain six to eight green conifers trees per acre in the General Forest Management Area and 12 to 18 green conifer trees per acre in the Connectivity/Diversity Blocks. The retained trees are to be distributed in variable patterns to contribute to stand diversity. The implementation of this management direction has been complex due to the many variables involved including ecological objectives and operational feasibility. Monitoring has shown no instances in which this RMP management direction was not implemented successfully.

Snag and snag recruitment

Approximately two snags per acre are being left on each regeneration harvest unit. As many existing snags as possible that are not safety hazards are attempted to be retained. In areas where adequate number of snags are not present or are not retained due to operational limitations, additional green trees are being reserved during project design and layout. The implementation of this management direction, similar to green tree retention, has been complex due to the many variables involved including ecological objectives and operational feasibility. Monitoring has shown no instances in which this RMP management direction was not implemented successfully.

Table 5. 1998 303(d) Listed Waterbodies in the Roseburg District.

Stream or Waterbody Name	Basin/Sub Basin	Criteria for listing	Resource Area
Beals Creek	Umpqua/South Umpqua	Habitat Modification	South River
Cattle Creek	Umpqua/South Umpqua	Temperature-Summer	South River
Coquille River, Middle Fork	South Coast/Coquille	Temperature-Summer	South River
Cow Creek	Umpqua/South Umpqua	Toxics, pH-Summer, Temperature-Summer, Habitat Modification	South River
Days Creek	Umpqua/South Umpqua	Habitat Modification	South River
Deadman Creek, West Fork	Umpqua/South Umpqua	Temperature-Summer	South River
Deadman Creek, Middle Fork	Umpqua/South Umpqua	Temperature-Summer	South River
Deadman Creek	Umpqua/South Umpqua	Temperature-Summer	South River
Fate Creek	Umpqua/South Umpqua	Temperature-Summer	South River
Iron Mountain Creek	Umpqua/South Umpqua	Temperature-Summer	South River
Kent Creek	Umpqua/South Umpqua	Habitat Modification	South River
Lane Creek	Umpqua/South Umpqua	Habitat Modification	South River
Lookingglass Creek	Umpqua/South Umpqua	Flow Modification	South River
Martin Creek	Umpqua/South Umpqua	Temperature-Summer	South River
Middle Creek	Umpqua/South Umpqua	Temperature-Summer, Habitat Modification	South River
Middle Creek, South Fork	Umpqua/South Umpqua	Temperature Summer	South River
Myrtle Creek, North	Umpqua/South Umpqua	Habitat Modification	South River
Myrtle Creek, South	Umpqua/South Umpqua	Flow Modification, Temperature-Summer	South River
Olalla Creek	Umpqua/South Umpqua	Temperature-Summer, Biological Criteria	South River
Panther Creek	Umpqua/South Umpqua	Temperature-Summer, Habitat Modification	South River
Rice Creek	Umpqua/South Umpqua	Habitat Modification	South River
Riser Creek	Umpqua/South Umpqua	Temperature-Summer	South River
Shively Creek	Umpqua/South Umpqua	Habitat Modification	South River
Stouts Creek, East Fork	Umpqua/South Umpqua	Temperature-Summer	South River
Stouts Creek, West Fork	Umpqua/South Umpqua	Temperature-Summer	South River
Thompson Creek	Umpqua/South Umpqua	Habitat Modification	South River
Umpqua River, South	Umpqua/South Umpqua	Aquatic Weeds or Algae, Bacteria, Biological Criteria, Dissolved Oxygen, Flow and Habitat Modification, pH-Summer, Sediment, Temperature-Summer, Toxics	South River
Big Tom Folley Creek	Umpqua/Umpqua	Temperature-Summer	Swiftwater
Brush Creek	Umpqua/Umpqua	Temperature-Summer	Swiftwater
Buck Creek	Umpqua/Umpqua	Temperature-Summer	Swiftwater
Calapooya Creek	Umpqua/Umpqua	Bacteria, Dissolved Oxygen-Cold Water Aquatics, Dissolved Oxygen-Salmonid Spawning: September though December, Flow and Habitat Modification, pH-Summer, Temperature-	

Table 5. 1998 303(d) Listed Waterbodies in the Roseburg District. (continued)

Stream or Waterbody Name	Basin/Sub Basin	Criteria for listing	Resource Area
		Summer	Swiftwater
Canton Creek	Umpqua/North Umpqua	Habitat Modification, Sediment, Temperature - Summer and Spawning	Swiftwater
Cavitt Creek	Umpqua/North Umpqua	Habitat Modification, Sediment, Temperature and pH-Summer	Swiftwater
Cleghorn Creek (Smith River)	Umpqua/Umpqua	Temperature-Summer	Swiftwater
Elk Creek	Umpqua/Umpqua	Bacteria, Dissolved Oxygen-Salmonid Spawning: September through March, Flow Modification, Temperature-Summer	Swiftwater
Emile Creek	Umpqua/North Umpqua	Temperature and pH-Summer	Swiftwater
Harrington Creek	Umpqua/North Umpqua	Temperature-Summer	Swiftwater
Hubbard Creek	Umpqua/Umpqua	Habitat Modification	Swiftwater
Jim Creek	Umpqua/North Umpqua	Temperature-Summer	Swiftwater
Little River	Umpqua/North Umpqua	Habitat Modification, pH-Summer, Sediment, Temperature-Summer	Swiftwater
Little Wolf Creek	Umpqua/Umpqua	Temperature Summer	Swiftwater
Miner Creek	Umpqua/Umpqua	Temperature Summer	Swiftwater
Rader Creek	Umpqua/Umpqua	Temperature Summer	Swiftwater
Rock Creek, Northeast Fork	Umpqua/North Umpqua	Temperature-Summer	Swiftwater
Rock Creek	Umpqua/North Umpqua	Temperature-Summer	Swiftwater
Scaredman Creek	Umpqua/North Umpqua	Temperature-Summer	Swiftwater
Smith River	Umpqua/Umpqua	Temperature-Summer	Swiftwater
Squaw Creek	Umpqua/Umpqua	Temperature Summer	Swiftwater
Thistleburn Creek	Umpqua/Umpqua	Temperature Summer	Swiftwater
Umpqua River	Umpqua/Umpqua	Flow Modification, Temperature-Summer, Water Contact Recreation (Fecal Coliform)- Fall through Spring	Swiftwater
Umpqua River, North	Umpqua/North Umpqua	Flow Modification, Temperature-Summer, Temperature-Spawning	Swiftwater
Wolf Creek	Umpqua/North Umpqua	pH-Summer, Temperature-Summer	Swiftwater
Wolf Creek	Umpqua/Umpqua	Temperature Summer, Habitat Modification	Swiftwater
Yellow Creek	Umpqua/Umpqua	Temperature Summer	Swiftwater

Coarse woody debris retention and recruitment

RMP management direction is to leave 120 linear feet of logs per acre greater than or equal to 16 inches in diameter and 16 inches long. Where this management direction cannot be met with existing coarse woody debris, merchantable material is used to make up the deficit. Monitoring has shown no instances in which this RMP management direction was not implemented successfully.

Connectivity/Diversity Blocks

There was no regeneration harvest in Connectivity/Diversity Blocks in fiscal year 2002. Commercially thinning treatments were applied to 173 acres of Connectivity/Diversity Blocks. There were 382 acres of regeneration harvest, 1125 acres of commercial thinning, and 163 acres of salvage (includes right of way harvests) in Connectivity/Diversity Blocks cumulative during fiscal years 1995-2002. Twenty-five percent of Connectivity/Diversity Blocks are maintained in late-successional forest at any point in time.

Special habitats

Special habitats are forested or non-forested habitat which contributes to overall biological diversity with the district. Special habitats may include: ponds, bogs, springs, sups, marshes, swamps, dunes, meadows, balds, cliffs, salt licks, and mineral springs. Interdisciplinary teams identify special habitat areas and determine relevance for values protection or management on a case by case basis. Special habitats have not been a frequently used management tool because of overlapping management action/direction for streams, wetlands, survey and manage species, and protection buffer species. For example, wetlands are frequently identified and protected as riparian reserves during project design and layout.

Nest site, activity centers and rookeries

Golden Eagle

Six golden eagle nest sites are known to occur on the district. No regular monitoring of these nest sites is conducted. It is not known how many of the sites are active. Since 1995, no timber sales or other projects were initiated which would have disturbed active golden eagle nest sites.

Osprey

No active management or mitigation was required for osprey in fiscal year 2002.

Late-Successional Reserve habitat improvement

Habitat improvement in Late-Successional Reserves for Fiscal Year 2002 consisted of 1972 acres of density management in precommercial stands. There was no active habitat improvement in Late-Successional Reserve habitat through commercial density management or prescribed burning in fiscal year 2002.

Special Status and Special Attention Species, Wildlife

Survey and Manage

The 2001 Annual Species Review was released in June 2002, as provided for in the 2001 Survey and Manage SEIS. Effects to the wildlife program include: removing Del Norte Salamander from

the Survey and Manage list and changing the management status of the red tree vole from category C to D, and change the management status of Helminthoglypta hertleini from category B to E.

Threatened/Endangered Species

A large portion of the District wildlife program's resources are directed toward gathering and interpreting information to ensure compliance with the Endangered Species Act and the land use plan. Consultation under Section 7 of the Endangered Species Act occurs on all activities proposed within habitat of listed species. Consultation was completed for all fiscal year 2001-2002 activities that were not likely to adversely affect threatened and endangered species May 31, 2001. Consultation for the fiscal year 2001-2002 timber sale program, and other activities that may likely adversely affect threatened and endangered species was completed April 4, 2002. Consultation on District activities for fiscal years 2003-2008 was initiated..

Northern Spotted Owl

The Roseburg District currently contains 192,990 acres of suitable owl habitat. An additional 215,426 acres are considered "habitat - capable". A total of 110,665 acres are considered Critical Habitat suitable for nesting, roosting, or foraging. One hundred acre retention areas of best northern spotted owl habitat were established around all owl activity centers that were known as of January 1, 1994. A total of 142 owl activity centers covering 134,421 acres were established.

Annual monitoring is conducted to determine owl nesting activity on the District. Detailed information is gathered on spotted owl sites on federal land as well as some sites on private land adjacent to federal land. Much of the monitoring information is used to assist in evaluating the success of the Forest Plan for supporting viable owl populations; this is part of the larger monitoring plan for the Northwest Forest Plan (Lint, et al. 1999). Results of these efforts are shown in Table 6.

Columbia White-tailed Deer

The Roseburg District acquired the former Dunning Ranch through a land exchange in 1994. This area contains 6,581 acres of Columbia white-tailed deer habitat. The area was designated the North Bank Habitat Management Area/Area of Critical Environmental Concern. In FY 2002 four water developments were constructed, two miles of interior fencing were removed, 0.75 mile of fence was constructed, 1 acre of native shrubs and trees plants was planted, and one structure was removed.

Table 6. Northern Spotted Owl Survey Results for Roseburg District.

Survey Year	Sites Surveyed[1]	No. Pairs Observed[2]	Proportion of Sites[3] Occupied
1996	332	146	50%
1997	303	125	48%
1998	303	130	47%
1999	279	122	52%
2000	253	124	54%
2001	252	135	56%
2002	264	141	55%

[1] Sites which had one or more visits. May include some sites which did not receive 4 visits
[2] Includes only pairs. Does not include single birds or 2 bird pairs of unknown status.
[3] Proportion of sites surveyed with either a resident pair or resident single.

The U.S. Fish and Wildlife Service published a revised proposal to delist this species in Douglas County. If delisted, the BLM will continue to coordinate with the Fish and Wildlife Service and the Oregon Department of Fish and Wildlife in the management of this species.

Marbled Murrelet

Surveys have been conducted for marbled murrelet on the Roseburg District since 1992. Of the 189,499 acres of public land within the zones of potential habitat for the murrelet, 83,285 acres have been classified as suitable habitat. In fiscal year 2002, 2193 acres were surveyed for marbled murrelet. One of five historically occupied sites were occupied in fiscal year 2002. Marbled murrelets were detected at no other historically occupied sites. Two additional sites were determined to be occupied. Murrelets were detected at three additional sites.

Bald Eagle

Seven bald eagle nest sites have been located on public land in the district. Six of the sites have management plans. Seasonal restrictions and distance buffers are applied to proposed activities in the vicinity of bald eagle nest sites. No winter roosts or concentration sites have been located on public land in the district.

Other Species of Concern

This category includes other species which have received special tracking emphasis on the district.
Townsend's Big-eared Bat

The Pacific Townsend's big-eared bat is a former Federal Candidate species. It remains listed as a candidate species by the state of Oregon, is on list two of the Oregon Natural Heritage Program and is listed as a BLM sensitive species for Oregon. In the summer of 1999 a maternity colony of Townsend's big-eared bats was located on the Roseburg District. The district staff and ODFW are working together to monitor the site and develop plans for protection.

Northern Goshawk

The northern goshawk is a former candidate species. It is a Bureau sensitive species, as state of Oregon candidate species and an Oregon Natural Heritage Program List three species. There are six known goshawk sites on the District. Northern goshawk surveys are conducted as part of the timber sale planning process on a portion of the District. A total of 1150 acres were surveyed for goshawks in fiscal year 2002. Juvenile goshawks were detected at no known sites. No new sites were located.

Peregrine Falcon

Peregrine falcon inventory efforts began in 1996. Potential peregrine falcon habitat on the district was mapped and habitats evaluated for their potential to support nest sites. Intensive field surveys were conducted in high potential habitat in an attempt to document nesting activity. There are four known nest sites within the boundaries of the Roseburg District. One site is on public land. The others are on private land adjacent to public land. In fiscal year 2002, three site fledged young. During fiscal year 2002, there were no proposed projects within buffer zones around the sites.

Special Status and SEIS Special Attention Species, Botany

Surveys, Monitoring, Consultation, and Restoration

Surveys for Special Status (SS) and Special Attention (SA) species are being conducted in compliance with RMP management direction prior to all ground disturbing activities. Roughly

between 1500 and 2000 acres of pre-disturbance clearance surveys have been completed annually since publication of the RMP with approximately 1780 acres completed in 2002. Baseline fungi, lichen, and bryophyte inventories have been completed on approximately 2100 acres in District ACECs and ACEC/RNAs. Three SS plants have been monitored on an annual basis to determine population trends (Aster vialis, Calochortus umpquaensis, and Calochortus coxii). A fourth species (Cimicifuga elata) will be monitored in intervals of three to five years because the population has remained stable or increasing since 1996. A population enhancement project initiated in 2001for one SS species (Arabis koehleri var. koehleri) continued in 2002. A population of another SS species (Perideridia erythrorhiza) that was created in suitable habitat in fiscal year 1999 was augmented with additional greenhouse-grown plants in fiscal year 2002. In cooperation with the Oregon Department of Agriculture, a new site in the North Bank Habitat Management Area ACEC was planted with the federally endangered Plagiobothrys hirtus. This newly created population will be monitored in fiscal year 2003. Monitoring continued on the two other populations of Plagiobothrys hirtus that were established in 1998 and 1999. The number of SS plant sites known to occur on public lands within the District at the end of fiscal year 2002 are presented by status category in Table 7. The number of SA plant sites are presented by status category in Table 8. The total number of SS sites at the end of fiscal year 2002 was 355 and the total number of SA sites was 754.

Table 7. Number of Sites by Species Group for Special Status Plant Species.

	Status[1]						
Species Group	**FE**	**FT**	**FP**	**FC**	**BS**	**AS**	**TR**
Fungi	--	--	--	--	–	–	--
Lichens	--	--	--	--	–	–	1
Bryophytes	--	--	--	--	--	3	3
Vascular Plants	3	6	0	0	97	28	222

[1] Status: FE=Federal Endangered
FT=Federal Threatened
FP=Federal Proposed
FC=Federal Candidate
BS=Bureau Sensitive
AS=Assessment Species
TR=Tracking Species

Table 8. Number of Sites by Species Group for Special Attention Plant Species.

	Category					
Species Group	**A**	**B**	**C**	**D**	**E**	**F**
Fungi	--	204	--	95	--	140
Lichens	26	45	--	0	11	90
Bryophytes	--	--	--	129	--	--
Vascular Plants	10	--	4	--	–	--

Three Conservation Strategies have been completed since publication of the RMP (Calochortus umpquaensis, Calochortus coxii, and Cimicifuga elata). One Conservation Agreement with the U.S. Fish & Wildlife Service has been completed since publication of the RMP. Preparation of a second Conservation Agreement was initiated in Fiscal year 2001. Completion of this Conservation Agreement is expected in Fiscal year 2003. Endowments have been created for three SS plant species with the Berry Botanic Garden to support long term storage of seed. This seed will be used as an emergency safeguard against extinction and for future habitat restoration projects.

A land acquisition of approximately 39 acres was completed at the end of Fiscal year 2001 for the Umpqua mariposa lily (Calochortus umpquaensis).

Survey & Manage Process Overview

A Supplemental Environmental Impact Statement and Record of Decision with supplemental standard and guidelines for Survey & Manage species were completed in Fiscal year 2001. An annual species review is required at the regional level under the new standard and guidelines to assess species status. The first annual species review was initiated in Fiscal year 2001 on 347 species and completed in Fiscal year 2002. As a result, 317 species remain on the Survey and Manage list. The 2002 annual species review will be completed in 2003.

Fish Habitat

There was continued district effort during fiscal year 2002 to address fisheries issues related to planning, implementation, and monitoring efforts. Major duties were divided between district support, consultation, restoration, data collection and monitoring, and outreach activities.

District Support

ID Teams - NEPA Analysis - District fisheries personnel participated as an Interdisciplinary Team (IDT) member for several projects during fiscal year 2002 including several Rights-of-way assessments, one on-going land exchange, two Watershed Analysis, nine Environmental Assessments, and twelve Categorical Exclusions.

Consultation

District fisheries continued their involvement as an active member of two Level 1 teams. Both formal and informal consultation was completed for actions included in the Programmatic Biological Assessment for the Southwest Oregon Province. The District fisheries consultation lead participated in several meetings with the Umpqua, Coos-Blanco, and the SW Oregon Provincial Level 1 consultation teams.

Restoration

In-stream – Two restoration projects were implemented and completed during fiscal year 2002. One project was implemented and is currently on-going.

Riparian - One project was implemented during fiscal year 2002 with its focus being conifer re-establishment. Riparian road related activities to improve watershed health and fish habitat continued to receive focus on the district.

Fish Passage Restoration - District fisheries personnel continued to identify sites that have historically been barriers and/or impediments to Pacific salmonid migration. In fiscal year 2002, the district replaced fish barrier culverts to facilitate upstream fish migration in sixteen streams.

Overall, these projects resulted in restoring passage to approximately 25+ miles of fish spawning and/or rearing habitat.

Data Collection

Physical Habitat Surveys - Approximately 45 miles of summer and winter stream habitat was inventoried during fiscal year 2002 on the District. District fisheries personnel contracted with ODFW for 90 percent of these miles. Additionally, two miles of effectiveness monitoring surveys were completed to assess the value of in-channel log placements. Data gathered was used to assess the affects of stream restoration projects on local habitat conditions and provide information necessary for Environmental Assessment and Watershed Analysis documents.

Fish Distribution Surveys - Sixteen streams were assessed using snorkel, electrofishing, and minnow trapping methods to determine juvenile fish presence or absence. These methods assist biologists in determining fish distribution and relative abundance used for project-specific needs.

Two streams were also surveyed for coho spawning presence by district fisheries personnel. This data assists biologists with determining effectiveness of specific projects. Information was coordinated with the ODFW to help estimate numbers of coho salmon returning to various watersheds within the Umpqua River basin.

Fish Passage Assessments – A combined effort of district fisheries and engineering personnel assessed fish passage at approximately 25 culvert locations to better evaluate current fish passage needs. Information is used to establish culvert replacement priorities that will provide maximum benefits for local fish species and improve the district road infrastructure.

Fish Trapping - District fisheries personnel participated in a multi-agency, Umpqua Basin-wide effort to assess the anadromous fish population in the basin. Tasks included operating rotary-screw fish traps in two sub-watersheds. The purpose of this work was to collect information on the movements of juvenile migratory salmonids out of their natal streams.

The Roseburg District hopes to learn more about the differences in life histories, population densities, relative abundances, and how our actions affect local fish communities. Various on-going cooperative work with the Umpqua National Forest, Oregon Department of Fish and Wildlife (ODFW), Oregon State University, Umpqua Basin Watershed Council, USFWS, and NMFS helps with this effort.

Outreach Activities

District fisheries personnel continued participation in several district programs designed to educate local school students on fisheries and watershed issues. Several field trips were conducted to show local students how smolt traps operate and techniques for handling, measuring, and marking captured Pacific salmonids. In addition, district fisheries personnel volunteered their time and presented information at the Douglas County Fair, Melrose Elementary School field trip, the Forestry Tour, and National Public Lands Day.

Special Areas

The Roseburg District has 12 special areas that total 11,323 acres. Defensibility monitoring has been conducted annually on all ACEC/RNAs since publication of the RMP. The OHV barriers constructed at the North Myrtle Creek ACEC/RNA in fiscal year 2001 appear to have been effective in controlling unauthorized use by OHVs. No unauthorized vehicle use was detected at North Myrtle Creek in fiscal year 2002. Noxious weeds were controlled at the Myrtle Island, Bear Gulch, and North Myrtle Creek ACEC/RNAs. Defensibility monitoring will continue in fiscal year 2003.

Permanent vegetation monitoring plots were established in the North Myrtle Creek ACEC/RNA and baseline data was collected. This information is used to characterize existing vegetation and to monitor long-term vegetation change within the RNA. The data was entered into a regional database for vegetation occurring within Research natural Areas throughout the Pacific Northwest. This database is maintained by the Pacific Northwest Research Station, USDA Forest Service, in Corvallis, Oregon.

A land exchange to expand the Beatty Creek ACEC/RNA was initiated in fiscal year 2001 and an Environmental Assessment was prepared in fiscal year 2002 on the proposal.

Port-Orford Cedar

Port-Orford cedar trees growing adjacent to roads and streams can become infected with a water mold *Phytophthora lateralis*. If the pathogen is present in mud on vehicles that are dispersed into ditches and water courses crossing roads, Port-Orford cedar trees growing in their vicinity can become exposed and eventually die.

The Roseburg District is working to prevent not introducing the disease into watersheds that presently contain healthy Port-Orford cedar. A series of efforts, such as washing vehicles and seasonal-use restrictions on certain roads, as well as prohibiting such activities as bough collecting at certain times of the year are on-going mitigative actions.

Other associated District programs include an active program of mapping new locations of the disease, removal of the hosts next to roads, identification of individual wild trees that are potentially resistant genetically to the disease, and pursuing a proposed land exchange that would protect its serpentine plant community that includes Port Orford cedar are also being undertaken.

In 1997, a 10-acre Port-Orford cedar experimental site was planted on the District to study its range-wide silvicultural and genetic characteristics. Originating from varying locales from Oregon and California, preliminary results indicate that low elevation, coastal Oregon sources have grown 30 percent taller, but also exhibit a 30 percent lower survival rate as compared to high-elevation, inland California sources. Fifth-year growth and survival data were collected from this site in FY 2002.

North Umpqua Wild & Scenic River

Wild and Scenic River Managed: North Umpqua Wild & Scenic River.
Designation: Recreational Length: 8.4 miles on BLM lands. (33.8 miles total)
Designation Act/Date: Omnibus Oregon Wild & Scenic Rivers Act of 1988.
Outstanding Remarkable Values: Fish, Water, Recreation, Scenery and Cultural Resources.

Monitoring of recreation use in the North Umpqua River was conducted between May 20 and Sept 20, 2002 through a Cooperative Management Agreement between the Roseburg District BLM and the Umpqua National Forest, North Umpqua Ranger District. BLM had the lead on monitoring in the entire river corridor; USFS had the lead on issuing Special Recreation Permits to commercial river outfitters. Employees engaged in monitoring included one full time BLM River Manager and one temporary USFS person. BLM provided funds for the salary of the USFS temporary employee.

Objectives of the river survey were to:

a. Monitor the five outstanding remarkable values on the North Umpqua W&SR, as listed above.
b. Provide a BLM/USFS presence on the river to contact, inform, and educate users.

c. Document and monitor visitor use including commercial and public use.
d. Coordinate management of the river between the BLM and Umpqua National Forest.
e. Identify, minimize and manage safety hazards and user conflicts on the North Umpqua River.

2002 Use:
- Boating use (visits) for entire W&SR:
  Commercial (40% of use) 2,102 visits (vs. 1,704 in 2001).
  Non-commercial (60% of use) 3,354 visits (vs. 3,378 in 2001).
  No figures available for BLM segment only
- Fishing Use: No information was gathered during the 2002 season.
- Conflict between users: No major incidents were reported on the BLM segment of the Wild & Scenic River in FY-2002. Groups monitored included boaters, campers along the river, anglers, fly-fishermen.
- Major issues in 2002:
  1. BLM River Manager Laura took six weeks of maternity leave. During her absence, field monitoring along the North Umpqua River was performed primarily by the joint BLM/USFS temporary position.
  2. The Apple Fire on the Umpqua National Forest burned down to the North Umpqua River between Panther Creek and Calf Creek. Due to safety concerns relative to the fire, the U.S. Forest Service closed public activities from Boulder Flat to Gravel Bin after August 16, 2002 ignition. Bogus to the BLM boundary was closed on August 30-31. The temporary river ranger was assigned to help with emergency fire related coverage.

Cultural Resources

In fiscal year 2002, the cultural resources program accomplished considerable work under the two major directives of the National Historic Preservation Act. Compliance inventory and evaluation work was accomplished in support of the timber and recreation programs under authority of Section 106. Cultural resource program initiatives, including evaluations and public projects, were undertaken under Section 110. Seventeen archeological sites were evaluated and 1,563 acres were inventoried.

Public projects included an Oregon Archeology Celebration session (in conjunction with the Forest Service), participation in the School Forestry Tour, approximately 500 people, mostly elementary school students, attended the programs and heritage day activities for two elementary school classes and a day camp.

Visual Resources

Preservation or retention of the existing character of landscapes on BLM-administered lands allocated for Visual Resource Management Class I and II management; partial retention of the

Table 9. Visitor Use for Boating on the North Umpqua River

	1996	1997	1998	1999	2000	2001	2002
Private Boating Visits	3,605	4,405	4,343	4,313	4,311	3,378	3,354
Commercial Boating Visits	2,541	2,360	2,270	2,490	2,019	1,704	2,102
Boating Visits on BLM section	800	790	680	750	650	420	*

*No figures available.

existing character on lands allocated for VRM Class III lands, and major modification of the existing character of some lands allocated for VRM Class IV lands.

There were no timber sales in Class II and III areas which required VRM analysis in fiscal year 2002. There were two environmental assessments with VRM input in 2002.

Rural Interface Areas

There were no projects in the Rural Interface Areas during fiscal years 1997-2002.

Socioeconomic

Employment Trends

Douglas County has continued to be a slow growing economic region of the state during 2002.

Payments to Counties

Payments in Lieu of Taxes, O&C Payments, and Coos Bay Wagon Road (CBWR) Payments were made in FY 2002 as directed in current legislation. The specific amounts paid to the counties under each revenue sharing program in FY 2002 are displayed in Table 10.

Fiscal Year 2002 was the second year that payments were made to counties under the Secure Rural Schools and Community Self-Determination Act of 2000 (P.L. 106-393). Counties made elections to receive the standard O&C and CBWR payment as calculated under the Act of August 28, 1937 or the Act of May 24, 1939, or the calculated full payment amount as determined under P.L. 106-393. All counties in the Roseburg District elected to receive payments under the new legislation. Beginning last Fiscal Year (2002) and continuing through 2006 payments are to be made based on historic O&C and CBWR payments to the counties. Table 10 displays the statewide payments made under each Title of P.L. 106-393 as well as the grand total and Table 11 displays the Title II payments for this District. Actual payments for 2002 were made November 1, 2002.

Title I payments are made to the eligible counties based on the three highest payments to each county between the years 1986 and 1999. These payments may be used by the counties in the manner as previous 50-percent and "safety net" payments.

Title II payments are reserved by the counties in special account in the Treasury of the United States for funding projects providing protection, restoration and enhancement of fish and wildlife habitat, and other natural resource objectives as outlined in P.L. 106-3983. BLM is directed to obligate these funds for projects selected by local Resource Advisory Committees and approved by the Secretary of Interior or her designee.

Title III payments are made to the counties for uses authorized in P.L. 106-393. These include: 1)search, rescue, and emergency services on Federal land, 2) community service work camps, 3) easement purchases, 4) forest-related educational opportunities, 5) fire prevention and county planning, and 6) community forestry.

Environmental Justice

Executive Order 12898 of February 11, 1994, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" directs all federal agencies to "…make achieving environmental justice part of its mission by identifying and addressing

…disproportionately high and adverse human health or environmental effects of it's programs, policies and activities."

New projects with possible effects on minority populations and/or low-income populations will incorporate an analysis of Environmental Justice impacts to ensure any disproportionately high and adverse human health or environmental effects are identified, and reduced to acceptable levels if possible.

Jobs-in-the-Woods

The Jobs-in-the-Woods program was established to mitigate the economic and social impacts of reduced timber harvesting under the Northwest Forest Plan while investing in the ecosystem. Budget for Jobs-in-the-Woods on the Roseburg District was $903,000 in fiscal year 2002. Sixty-four projects were funded through contracts on the district under this program from 1996 to 2002. These projects include work such as road restoration, renovation and road decommissioning to lessen adverse impacts to water quality from our transportation system; culvert replacements to aid fish passage and to better accommodate water flows associated with large storms; and placement of trees in creeks to enhance spawning gravel and resting ponds for fish. The Roseburg District continues to work closely with private industry and watershed councils to accomplish this work and provide displaced workers with the opportunity to have jobs in the forest environment.

Table 10. FY 2002 O&C Payments to Counties (Payments were made November 1, 2002)

County	Title I Paid to County	Title III Paid to County	Total Paid to County	Title II Retained by BLM	Grand Total
Benton	$2,617,839.01	$230,985.80	$2,848,824.81	$230,985.80	$3,079,810.61
Clackamas	$5,170,464.96	$793,818.44	$5,964,283.40	$118,616.55	$6,082,899.95
Columbia	$1,919,127.53	$226,908.61	$2,146,036.14	$111,760.96	$2,257,797.10
Coos	$5,496,530.32	$126,096.87	$5,622,627.19	$843,879.07	$6,466,506.26
Coos (CBWR)	$688,125.83	$15,786.42	$703,912.25	$105,647.56	$809,559.81
Curry	$3,400,395.87	$432,050.30	$3,832,446.17	$168,019.56	$4,000,465.73
Douglas	$23,336,963.46	$1,029,571.92	$24,366,535.38	$3,088,715.75	$27,455,251.13
Douglas (CBWR)	$124,397.28	$5,488.12	$129,885.40	$16,464.35	$146,349.75
Jackson	$14,598,411.87	$1,288,095.17	$15,886,507.04	$1,288,095.17	$17,174,602.21
Josephine	$11,253,912.92	$1,469,628.63	$12,723,541.55	$516,356.00	$13,239,897.55
Klamath	$2,179,979.82	$192,351.16	$2,372,330.98	$192,351.16	$2,564,682.14
Lane	$14,225,765.75	$1,280,318.92	$15,506,084.67	$1,230,110.33	$16,736,195.00
Lincoln	$335,381.51	$19,531.04	$354,912.55	$39,653.93	$394,566.48
Linn	$2,459,464.40	$217,011.57	$2,676,475.97	$217,011.57	$2,893,487.54
Marion	$1,360,158.35	$204,023.75	$1,564,182.10	$36,004.19	$1,600,186.29
Multnomah	$1,015,460.69	$179,198.94	$1,194,659.63	$0.00	$1,194,659.63
Polk	$2,012,289.06	$355,109.84	$2,367,398.90	$0.00	$2,367,398.90
Tillamook	$521,704.58	$30,381.62	$552,086.20	$61,683.89	$613,770.09
Washington	$586,917.64	$77,680.28	$664,597.92	$25,893.43	$690,491.35
Yamhill	$670,763.02	$118,369.95	$789,132.97	$0.00	$789,132.97
TOTAL	$93,974,053.87	$8,292,407.35	$102,266,461.22	$8,291,249.27	$110,557,710.49
				CBWR	$955,909.56
				O&C	$109,601,800.93
					$110,557,710.49

Table 11. Title II Roseburg District RAC (Payments were made November 1, 2002)

Douglas	$1,976,78.08
Douglas (CBWR)	$10,537.18
Jackson	$13,009.76
Total	$2,000,325.03

Recreation

Recreation Areas Managed:

Swiftwater Resource Area

Swiftwater ERMA	219,243 acres
North Umpqua River SRMA	1,722 acres
Umpqua River SRMA	2,240 acres

South River Resource Area

South River ERMA	200,673 acres
Cow Creek SRMA	1,710 acres

Extensive Recreation Management Area (ERMA)
Special Recreation Management Areas (SRMA)

Visitor Use

Recreation visits to Roseburg District BLM lands in FY-2002: 409,037.
(2% increase from FY-2001)

Recreation Trails Managed

8 Trails - 14.4 miles.

Permits Issued / Fees Collected

Recreation Use Permits (Campground Permits): 3,913
Fees Collected: $60,274

Recreation Use Permits (Pavilion Rentals): 47
Fees Collected: $3,330

Special Recreation Permits managed - 15
Fees Collected $1,710 (Thirteen commercial outfitter guide permits on North Umpqua River (through cooperative management agreement with the Umpqua National), one permit for a car show at Millpond Recreation Site and one permit for a commercial bobcat hunting guide service.

Off-highway Vehicle Designations Managed

Limited:	422,464 acres
Closed:	3,124 acres
Open:	0 acres

Inventory and management efforts were focused on the Hubbard Creek OHV area, Sugar Pine Ridge, and South Deer Creek areas. A variety of management efforts were made to patrol, clean, sign, and inventory the use areas. No citations were issued in 2002 for OHV related violations. Patrols were made and users were talked to by BLM law enforcement officers and recreation specialists.

Table 12. Recreation Visits to Roseburg District.

Breakdown of visits:	
Developed Recreation Areas/Sites:	No. of Visits
Susan Cr. Campground	12,000
Susan Cr. Day-Use Area	13,500
Susan Cr. Falls Trail	6,800
Rock Cr. Recreation Site	4,000
Millpond Recreation Site	7,000
Cavitt Cr. Recreation Site	4,400
Tyee Recreation Site	7,000
Scaredman Recreation Site	2,000
Swiftwater Day-use Area	72,000
Wolf Cr. Trail	2,400
Swiftwater Trailhead (No.Umpqua Tr)	12,000
North Bank Ranch	1,700
Lone Rock Boat Launch	1,200
E-mile Recreation Site	2,300
Osprey Boat Ramp	3,500
Miner-Wolf WW Site	900
Cow Cr. Rec. Gold Panning Area	525
Cow Cr. Back Country Byway	21,114
Island Day-Use Area	2,652
North Kiosk, Cow Creek BCB	816
Undeveloped Areas:	
Dispersed No. Umpqua SRMA	4,500
Dispersed Umpqua River SRMA	11,500
Dispersed Cow Cr. SRMA	1,122
Swiftwater ERMA	64,000
South River ERMA	49,470

Partnerships and Volunteer Work Managed

Seventeen volunteer groups volunteered for BLM at recreation sites in 2002, including: Eagle Scout Candidates, Boy Scout Troops, Church Groups, Individuals, Phoenix School students, Wolf Creek Job Corps, and Campground Hosts.

Volunteer Work Completed:

- Brushing and limbing trails.
- Revegetating recreation sites.
- Cleaning recreation sites and river frontage along the North Umpqua River.

Table 13. Volunteer Work Related to Recreation.

Group	Hours volunteered	Value of work
All groups (excluding hosts)	3,706	$34,579
Campground hosts	16,640	$166,600
All groups total:	20,346	$201,197

Building and installing benches, picnic tables and a volleyball court.
Cutting and stacking firewood.
Improving access to recreation sites.
Repairing bridges and puncheons.
Placing crushed rock in rec. pads and along campground roads.
Performing duties assigned to campground hosts.

Byways Managed

North Umpqua Scenic Byway - 8.4 of 80 miles – Joint coordination with the Umpqua Natl. Forest
Cow Creek Back Country Byway - 20 of 45 miles – Joint coordination with Medford BLM

Recreation Projects Completed

Campsite improvements and revegetation projects at four campgrounds.
New well drilled at Swiftwater day-use area
Trail rehabilitation project on Swiftwater end of North Umpqua Trail
Fence replacement project at Wolf Creek Falls
Started construction of Eagleview and Lone Pine group reservation campgrounds
Construction of Cow Creek Watchable Wildlife Site.

Hazard Tree Assessments Completed

Inventory and treatment of hazard trees was conducted at Susan Creek Campground, Susan Creek Day-Use Area/ Falls Trail, Rock Creek Recreation Site, Millpond Recreation Site, Cavitt Creek Recreation Site, Scaredman Recreation Site, Tyee Recreation Site, North Umpqua Trail at Swiftwater, Lone Pine and Eagleview Recreation sites.. Treatment consisted of limbing trees, removing tree tops, or felling trees.

Public Fatalities or Serious Injuries at BLM Recreation Sites.

No fatalities or serious injuries reported. Only incident of significance: 57 year old male slipped off log and fell 8 feet at Susan Creek Falls. Extricated by Glide Rural Fire Dept. EMS personnel. Non-life threatening injuries sustained. Treated and released at Mercy Medical Center in Roseburg.

Status of Recreation Plans

North Umpqua Wild and Scenic River Management Plan - Completed June 1992.
North Umpqua SRMA Recreation Area Management Plan - Completed 1988.
Roseburg District Off-Highway Vehicle Implementation Plan - Completed 1997
Cow Creek SRMA Recreation Area Management Plan - Completed 2001
Umpqua River SRMA Recreation Area Management Plan - Not started.

Recreation Fee Demonstration Project

In March 1998, the Roseburg District received approval for its Recreation Pilot Fee Demonstration Project under the authority of Public Law 104-134, Section 315. This authority allows the retention and expenditure of recreation fees for operations and maintenance of recreation sites. The pilot program has been extended through FY-2004 with expenditure of funds required by end of FY-2007. An account was established for deposit of fees for camping fees and pavilion rentals at Susan Creek, Millpond, Rock Creek, Cavitt Creek, and Tyee Recreation Sites. The program also includes fees generated from special recreation permits and passport fees.

In FY 2002, $66,800 was collected and deposited from campground fees (93%), pavilion rentals (5%), special recreation permits (1%), and passport fees (1%). $123,000 was carried over in this account from fees collected in prior years. 2002 accomplishments and expenditures included:

$131,850	Millpond expansion: Lone Pine group reservation campsite.
$350	Susan Creek Recreation site septic system upgrade

Timber Sale Pipeline Restoration Funds

The recreation portion of these funds is directed toward backlog recreation projects in six western Oregon BLM Districts.

Total expenditure of recreation pipeline dollars in 2002 was $482,000 for the construction contract of Eagleview Campground. $370,000 was from carryover from prior year allocations and $112,000 was allocated in 2002. Construction of the campground is scheduled for the summers of 2002 and 2003, with a proposed opening date in the late spring of 2004.

Forest Management and Timber Resources

The Roseburg District manages approximately 425,000 acres of land located mostly in Douglas County and in the Umpqua River Basin. Under the Northwest Forest Plan (NFP) and the Roseburg District Resource Management Plan (RMP), approximately 81,800 acres (or 19% of the Roseburg District land base) are available for scheduled timber harvest. The NFP and the RMP provide for a sustainable timber harvest, known as the Allowable Sale Quantity (ASQ), from Roseburg District administered public lands of 45 million board feet (MMBF) annually.

To meet the ASQ commitment, the Roseburg District does timber sale planning including preparing an environmental analysis, and conducts timber sale preparation which includes cruising, appraising and contract preparation. Timber sales are then advertised and auctioned at oral auctions. When timber sales become active, contract administration is conducted to ensure contract compliance. Importantly, the Roseburg District is investing in the future of the forests through forest development and reforestation activities.

Under Section 15 of the Small Business Act (15 U.S.C. 631) BLM is required sell a certain percent of advertised timber sale volume to businesses with less than 500 employees. That percent is currently calculated at 56% for the Roseburg District. When the requisite percent is not achieved through the normal bidding process, a requirement is “triggered” to set aside timber sales to offer exclusively to small businesses. The Roseburg District was triggered for all of fiscal year 2002. Four of seven sales sold at auction were set-aside for small business, with a combined volume of 5.2 MMBF. The remaining three sales, with a combined volume of 6.7 MMBF, sold to large business concerns. The district did not meet the 56% requirement and will be required to set aside timber sales for small business in fiscal 2003.

Several factors have continued to cause the Roseburg District to fall short of producing the ASQ set forth in the Roseburg District RMP. The 9th Circuit Court of Appeals upheld Judge Rothstein’s ruling in Pacific Coast Federation v. National Marine Fisheries Service (NMFS). This lawsuit invalidated numerous biological opinions written by NMFS for timber sales throughout the range of the NFP. The Roseburg District was heavily impacted by this ruling and has been unable to offer regeneration harvest timber sales. BLM and the US Forest Service are currently preparing a supplemental EIS to clarify language in the NFP to address the issues raised in the litigation.

The survey and manage (S&M) requirements of the NFP and the Roseburg District RMP have also proven difficult to implement. Species that were thought to be rare and primarily present in late successional forest habitat have been found in many of the managed commercial thinning age stands that the district has been focusing on in response to Pacific Coast Federation v. National Marine Fisheries Service. It is expected that as more is learned about some of these S&M species, they will be determined to no longer need protection. Currently their presence has caused many of the planned thinning sales on the Roseburg District to be reduced in acreage, delayed or canceled. BLM and the US Forest Service are currently preparing a supplemental EIS which may modify the S&M program.

Additional litigation concerning the impacts of forest management on the spread of the introduced pathogen *Phytophthora lateralis*, which infects Port-Orford cedar trees, also caused a number of

Table 14. Summary of Volume Sold

Sold **ASQ/Non ASQ Volume**	**FY95-98[1]**	**FY99-02**	**FY95-02 Total**	**FY95-02[2] Declared ASQ**
ASQ Volume - Harvest Land Base	144.9	21.8	166.7	360
Non ASQ Volume - Reserves	15.2	4.2	19.4	n/a
Total	160.1	26.0	186.1	n/a
Sold Unawarded (as of 09/30/02)[3] ASQ/Non ASQ Volume	FY95-98[1]	FY99-02	FY95-02 Total	
ASQ Volume - Harvest Land Base	54.4	4.9	59.4	
Non ASQ Volume - Reserves	8.0	0.4	8.4	
Total	62.4	5.3	67.7	

[1] Third Year Evaluation - Figure V12-1 plus volume sold in FY95 prior to signing of the RMP

[2] Declared annual ASQ times 8

[3] Sold Unawarded sales which have been resold but are still Unawarded tallied for original FY sold

Table 15. Volume and Acres Sold by Land Use Allocations

ASQ Volume (Harvest Land Base)	FY95-98[4]	FY99-02	FY95-02 Total	Decadal Projection
Matrix	138.6	21.5	160.1	424.0
AMA	6.3	0.5	6.8	46
ASQ Acres (Harvest Land Base)	FY95-98[4]	FY99-02	FY95-02 Total	Decadal Projection
Matrix	5,541	1084	6,625	13,588
AMA	358	39	397	903
Key Watershed ASQ Volume (Harvest Land Base)	FY95-98[5]	FY99-02	FY95-02 Total	Decadal Projection
Key Watersheds	39.6	4.0	43.6	87.7

[4] Third Year Evaluation - Figure 12-7 plus volume sold in FY95 prior to signing of the RMP

[5] Third Year Evaluation - Figure 12-8 plus volume sold in FY95 prior to signing of the RMP

Table 16. Sales Sold by Harvest Types

ASQ Volume **(Harvest Land Base)**	**FY95-98[6]**	**FY99-02**	**FY95-02 Total**	**Decadal Projection**
Regeneration Harvest	115.1	2.4	117.5	435.3
Commercial Thinning & Density Management 17.1 6.3 23.4 18.6	17.1	14.7	31.8	18.6
Other	10.0	2.4	12.4	0.0
Total	142.3	19.5	161.8	450
ASQ Acres (Harvest Land Base)	FY95-98[6]	FY99-02	FY95-02 Total	Decadal Projection
Regeneration Harvest	3,127	53	3,180	11,991
Commercial Thinning & Density Management 17.1 6.3 23.4 18.6	1,613	843	2,456	2,499
Other	780	215	995	
Total	5,520	1,111	6,641	14,490
Reserve Acres	FY95-98[7]	FY99-02	FY95-02 Total	
Late-Successional Reserves	659	149	808	
Riparian Reserves	533	111	644	
Total	1,192	260	1,452	

[6] Third Year Evaluation Figure 12-4 plus volume sold in FY95 prior to signing of the RMP

[7] Third Year Evaluation Section 12-F - Harvest from Reserves plus acres sold in FY95 prior to signing of the RMP

Table 17. Sale Acres Sold by Age Class

Regeneration Harvest **(Harvest Land Base)**	**FY95-98[6]**	**FY99-02**	**FY95-02 Total**	**Decadal Projection**
0-70	101	6	107	0
80-140	1,173	17	1,190	4,660
150-190	318	0	318	3,141
200+	1,534	30	1,564	4,190
Total	3,127	53	3,179	11,991
Density Management, Commercial Thinning and Other (Harvest Land Base)	FY95-98[6]	FY99-02	FY95-02 Total	Decadal Projection
0-70	1,632	322	2,393	2,059
80-140	399	84	498	440
150-190	113	7	120	0
200+	249	138	389	0
Total	2,393	551	3,401	2,499

[6] Third Year Evaluation Figure 12-4 plus volume sold in FY95 prior to signing of the RMP.

planned projects to be delayed. BLM and the US Forest Service are currently preparing an EIS on Port-Orford Cedar management to address the issues raised in the litigation.

As a result of these factors, the Roseburg District timber sale program has been unable to award a timber sale containing a regeneration harvest since 1997 and has continued to focus on commercial thinning projects in fiscal 2002. A total of 11.9 MMBF was offered in advertised timber sales. (0.6 MMBF of the offered volume was on lands administered by the Eugene District and does not count towards Roseburg ASQ. The volume and associated acres are not reflected in the tables below.) An additional 0.6 MMBF was sold in small negotiated timber sales and modifications to active timber sales. The value of all timber sold in fiscal 2002 was $2,212,378. The monies associated with timber sales are paid as timber is harvested over the life of the contract, which is three years or less. Timber sale receipts collected by the Roseburg District in fiscal year 2002 from active harvesting totaled $379,763 from Oregon and California Railroad and Public Domain Lands. This relatively low level of receipts (timber sale receipts in 1998 were $17,000,000) is reflective of both the low number of timber sales available for harvest and the operating restrictions imposed during the summer of 2002 fire season.

Table 18 provides a summary, by land use allocation and harvest type, of timber sale volumes and acres of timber harvested since the signing of the NFP.

Silviculture Activities

Data is for contracts awarded after October 1, 1995. Data is displayed by fiscal year of contract award and does not necessarily correspond with the year the project was actually accomplished.

Brush field Conversion - To date no acres have undergone conversion. It is not expected that any attempt would be made unless herbicides were available as a conversion tool.

Site Preparation (FIRE) - The number of acres prepared with prescribed fire, both broadcast treatment and pile treatment is about 44% of planned. A continued decline in trend is likely to continue due to less than expected levels of regeneration harvest and other resource concerns.

Site Preparation (OTHER) - The number of acres prepared with alternative site preparation techniques is about 4% of planned. Factors affecting this activity are the same as for prescribed fire.

Planting (regular stock) - Total planted acres since 1995 without regard to genetic quality is at 57% of RMP assumed levels due to lack of planned RMP levels of timber harvest. Reforestation with genetically unimproved planting stock is 204% of planned. Total planting for 2002 is less than 20% of the annual level anticipated in the RMP because the Roseburg District has been unable to award a timber sale with a regeneration harvest since 1997. Regeneration harvests are the mechanism by which areas are made available for planting to start new forest stands for subsequent rotations. It is likely that in 2003 and 2004, planting will fall to less than 10% of the expected annual level because of the lack of the regeneration harvests which were anticipated in the RMP.

Planting (improved stock) - In fiscal year 2002, 67% of the acres reforested were planted with genetically improved Douglas-fir. 59% of the acres planted were in the GFMA land use allocation. Only GFMA acres are counted towards RMP monitoring goals since genetic improvement is assumed to contribute to ASQ only when done on GFMA acres. A phase in period for use of genetically improved Douglas-fir of 3 to 4 years was assumed to allow for older sales outside the GFMA land use allocation to be reforested and for seed orchards to reach production.

Table 18. Roseburg District Timber Sale Volume and Acres.

	1995	1996	1997	1998	1999	2000	2001	2002	1995-2002 Total	1995-2002 Annual Average	RMP/EIS Assumed Annual Average	Percent of Assumed Average
MBF												
Total Timber Sale Volume	17,624	45,993	51,783	44,726	10,135	1,473	2,723	11,755	186,211	23,276	49,500	47%
Matrix Timber Sales	17,004	41,055	42,692	37,887	9,416	1,190	2,071	8,754	160,069	20,009	45,000	44%
GFMA Regeneration Harvest	13,285	32,172	27,575	24,786	1,055	-39	0	0	98,835	12,354		
GFMA Commercial Thinning	1,657	3,016	2,907	3,451	4,022	166	1,794	4,307	21,320	2,665		
GFMA Salvage & ROW	323	1,817	3,516	1,446	438	477	277	358	8,652	1,082		
C/D Block Regeneration Harvest	1,130	629	5,123	5,869	1,353	0	0	0	14,104	1,763		
C/D Block Commercial Thinning	457	2,978	3,455	1,739	2,059	166	0	3,755	14,609	1,826		
C/D Block Salvage	153	442	117	597	488	586	0	334	2,716	339		
RR Density Management	24	2,424	2,175	811	395	55	2	868	6,754	844		
RR Salvage	245	55	3	236	140	18	1	17	715	89		
LSR Density Management	63	102	1,728	5,559	151	0	0	1,724	9,327	1,166		
LSR Salvage	204	1,162	266	123	33	210	595	36	2,629	329		
Total All Reserves	536	3,743	4,172	6,728	719	282	598	2,645	19,424	2,428	4,500	54%
Key Watersheds Matrix Timber Sales	25	8,439	18,392	12,767	2,351	681	791	201	43,647	5,456	8,700	63%
Little River AMA All Harvest Types	0	1,033	4,682	30	0	0	0	294	6,039	755	4,600	16%
Little River AMA Salvage	83	162	236	81	0	0	54	63	679	85		
Total AMA Timber Sales	83	1,195	4,918	111	0	0	54	357	6,718	840		
Acres												
Total Regeneration Harvest	386	906	836	800	56	0	0	0	2,984	373	1,190	31%
Total Commercial Thinning	113	426	568	536	411	2	87	457	2,600	325	250	130%
Total Density Management	2	216	301	483	38	0	0	179	1,219	152		
GFMA Regeneration Harvest	354	866	713	649	20	0	0	0	2,602	325		
GFMA Commercial Thinning	69	197	267	361	209	2	87	250	1,441	180		
GFMA Salvage & ROW	30	47	289	125	16	16	13	29	563	70		
C/D Block Regeneration Harvest	32	40	123	151	36	0	0	0	382	48		
C/D Block Commercial Thinning	44	229	301	175	203	0	0	173	1,125	141		
C/D Block Salvage	20	35	25	52	16	4	0	12	163	20		
RR Density Management	0	216	188	97	38	0	0	60	599	75		
RR Salvage	8	4	0	20	9	1	1	2	45	6		
LSR Density Management	2	0	113	386	0	0	0	119	620	78		
LSR Salvage	21	96	33	8	2	9	18	1	188	24		
Total All Reserves	31	316	334	511	49	10	19	183	1,452	182		
Little River AMA Regeneration Harvest	0	0	68	0	0	0	0	0	68	9		
Little River AMA Commercial Thinning	0	94	134	0	0	0	0	34	262	33		
Little River AMA Salvage	10	9	36	7	0	0	2	3	67	8		

GFMA, C/D Block & AMA Commercial Thinning totals include all intermediate harvest types
LSR & RR Density Management totals include all intermediate harvest types
Salvage totals also include timber sales designated as Right of Way (ROW) harvests

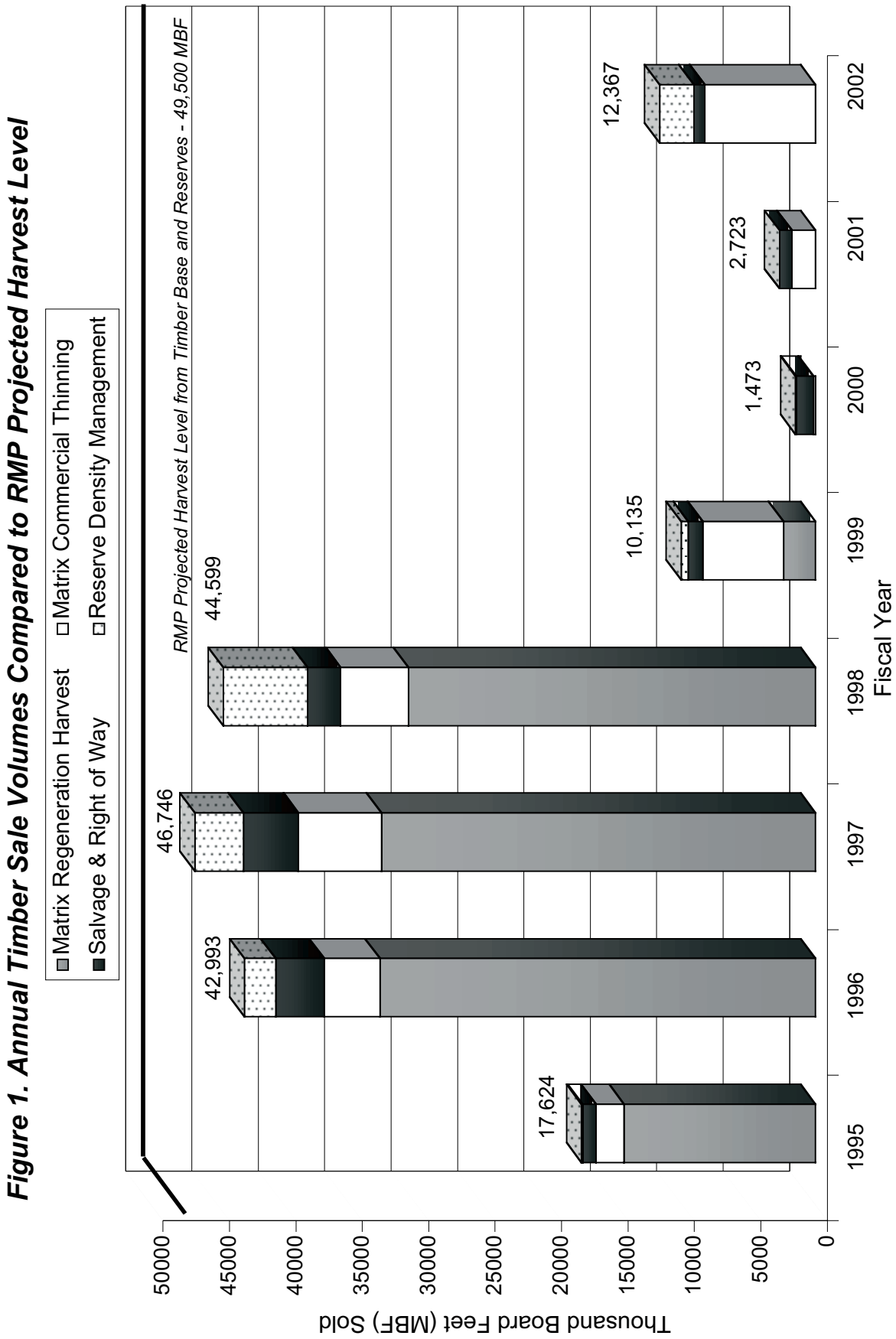


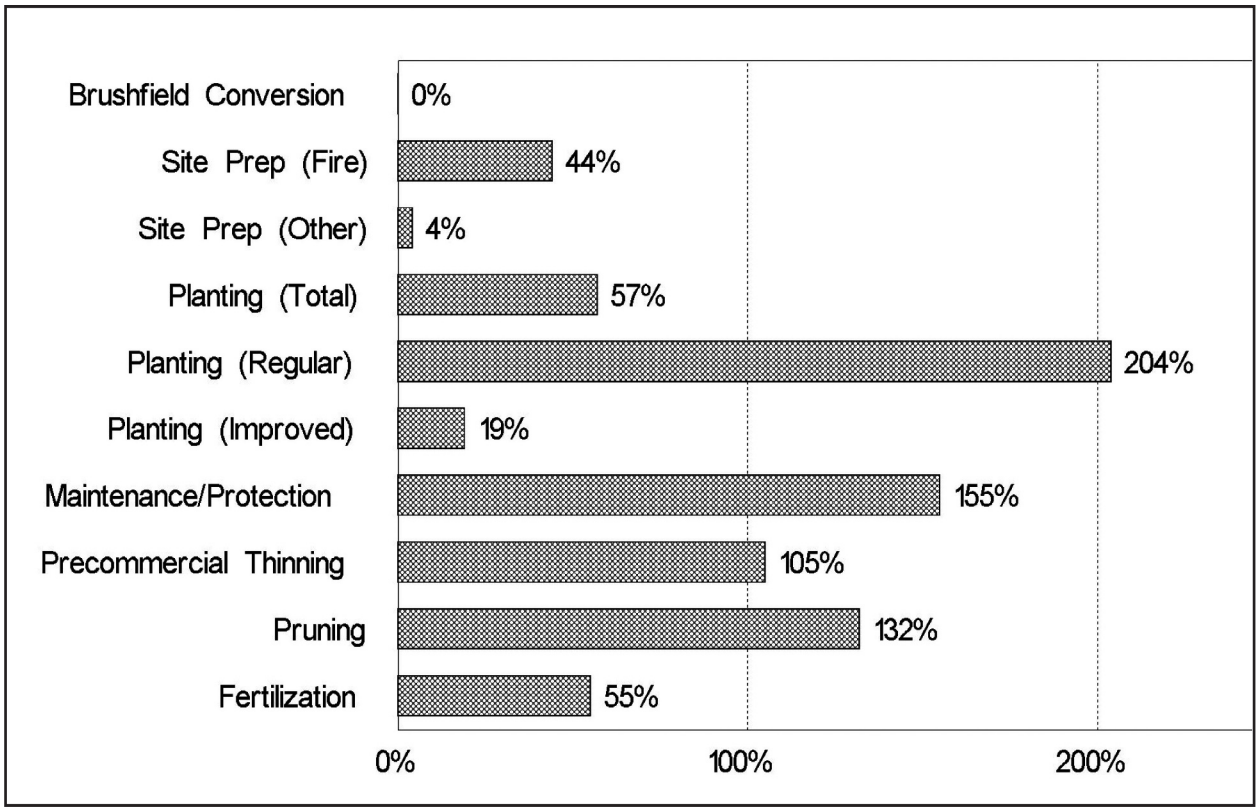
Figure 1. Annual Timber Sale Volumes Compared to RMP Projected Harvest Level

Table 19. Roseburg District Forest Development Activities.

	FY 96-97	FY 98-99	FY 00-01	FY 02	Totals	Average Annual	Planned Annual	Differences Actual-Planned
Brushfield Conversion	0	0	0	0	0	0	15	(105)
Site Preparation (fire)	1,145	571	812	63	2,591	370	840	(3,289)
Site Preparation (other)	0	0	13	0	13	2	50	(337)
Planting (total)	1,851	1,857	1,707	251	5,666	809	1,430	(4,344)
Planting (regular)	1,484	1,268	1,297	102	4,151	593	290	2,121
Planting (improved stock)	367	589	392	149	1,497	214	1,140	(6,483)
Maintenance/Protection	3,749	2,432	2,104	720	9,005	1,286	830	3,195
PCT	7,446	6,678	10,293	4,283	28,700	4,100	3,900	1,400
Pruning	1,219	1,105	533	1,387	4,244	606	460	1,024
Fertilization	4,411	1,093	0	0	5,504	786	1,440	(4,576)
Reforestation Surveys	25,299	29,302	21,535	9,842	85,978	12,283	11,750	3,728

Data is for forest development contracts awarded after October 1, 1995. Data is displayed by fiscal year of contract award and does not necessarily correspond with the year the project was actually accomplished.

Figure 2. Forest Development Accomplishments as a Percent of RMP Assumption.



Planning for production of genetically improved stock has proved difficult due to the uncertainty of timber harvest timing. Seed must be sown one to three years prior to actual need. Due to decline in timber harvest overall and uncertainty in harvest timing, it is likely that this target will be approximately 13-35% of RMP levels by the end of the decade.

Maintenance/Protection - Acres of maintenance/protection treatments is currently 155% of planned levels. It is anticipated that at this rate, assumed RMP levels would be exceeded by 25-40%.

Precommercial Thinning (PCT) - Currently PCT is at assumed RMP levels. It is expected that at a minimum RMP goals will be met, or slightly exceeded over the decade.

Pruning - Currently pruning accomplishments are 132% of assumed RMP levels. Depending on funding this trend could continue. It is expected that RMP levels will be exceeded by 20 to 40% by decade's end.

Fertilization - Currently fertilization accomplishments are about 55% of assumed RMP levels. There is the potential to exceed planned RMP levels by about 20% if funding is available. However, implementation of future fertilization has been delayed by an administrative appeal of the proposed action.

Forest development, reforestation, silvicultural and timber stand improvement practices were accomplished in fiscal year 2002 through contracts valued at approximately $997,000.

Special Forest Products

In addition to the advertised timber sales described above, the district sold a variety of special forest products as shown in Table 24. The sale of special forest products generally follow the guidelines contained in the Oregon/Washington Special Forest Products Procedure Handbook, H-5400-2. There are no estimates or projections in the RMP ROD or FEIS that need to be compared to the sold quantities shown.

In general, the Roseburg District has been able to meet public demand for special forest products, with the exception of firewood for home heating. Firewood has been generated almost exclusively from logging residues in recent years. With the reduction in regeneration harvest the district has experienced, there has been very little opportunity to provide firewood.

Noxious Weeds

Noxious weed management goals on the district were not only met, but exceeded as a direct result of partnerships and projects funded by Title II. Over ten thousand acres were inventoried and the noxious weed infestations mapped in 2002. Noxious weeds were controlled on 1422 acres and 23 percent of those, or 334 acres were monitored to determine the effectiveness of the control treatments. One hundred percent of the noxious weed control projects conducted on the district were compatible with the Aquatic Conservation Strategy objectives.

The Roseburg District continues to survey BLM administered land for noxious weeds by conducting noxious weed inventories and pre-project surveys. In all, 10,513 acres were inventoried. Infestations of high priority noxious weeds are reported to the Oregon Department of Agriculture (ODA) and the District cooperates with ODA and Douglas Soil and Water Conservation District to control those infestations. PacifiCorps funded an intensive inventory by BLM including 197 acres of BLM lands. Work in the Cox Creek Weed Management Area (WMA) accounted for 7000 acres of inventory. The WMA funded primarily by TitleII and ODA, is a cooperative weed control project involving approximately 30 partners.

The RMP identified two objectives for noxious weeds. The first objective resulted in manual, mechanical, chemical and biological control of weeds on 1422 acres. Of those, Title II funding contributed to the weed control on 649 acres, primarily in the WMA but also including manual control by Northwest Youth Corps and Oregon Youth Conservation Corps. Scotch broom was the commonly controlled weed accounting for 916 acres. Biological control agents were released at three sites to control meadow knapweed. Biological control agents are established on 14 other noxious weed species throughout the Roseburg District. They are present on: Bull Thistle, Canada thistle, Gorse, Italian thistle, Meadow knapweed, Milk thistle, Poison hemlock, Purple loosestrife,

Table 20. Special Forest Products

No. of Contracts

Product	FY96	FY97	FY98	FY99	FY00	FY01	FY 02
Boughs-Coniferous	183	104	96	80	47	50	75
Burls & misc.	9	10	15	1	15	14	11
Christmas Trees	266	245	217	159	231	283	219
Edibles & Medicinals	3	3	0	1	0	4	5
Floral & Greenery	120	128	89	161	57	65	33
Mosses - Bryophytes	3	4	4	0	0	11	0
Mushrooms - Fungi	56	50	25	20	2	55	55
Transplants	7	2	1	1	28	1	4
Wood Products/Firewood	10	460	197	219	281	250	102
Totals	857	1,006	640	722	661	733	504

Quantity Sold

Product	FY96	FY97	FY98	FY99	FY00	FY01	FY02
Boughs-Coniferous (lbs)	164,850	96,700	76,600	67,500	38,002	47,100	96,100
Burls & misc. (lbs.)	12,900	20,200	35,275	300	24,550	29,300	22,000
Christmas Trees (ea.)	266	245	217	159	231	283	219
Edibles & Medicinals (lbs.)	1,578	1,800	0	200	0	2,000	3,800
Floral & Greenery (lbs.)	69,120	83,100	48,525	96,136	32,300	31,450	15,000
Mosses - Bryophytes (lbs.)	6,333	1,998	0	1,833	0	30,500	0
Mushrooms - Fungi (lbs.)	1,572	2,524	1,048	875	1,200	1,676	2,898
Transplants	560	450	20	140	50	10	92
Wood Products/Firewood (bf)	267,960	600,574	352,729	63,944*	214,496*	59,636*	25,224*

* cu. ft.

Value $

Product	FY96	FY97	FY98	FY99	FY00	FY01	FY02
Boughs-Coniferous	3,297	1,948	1,572	1,350	780	993	2,883
Burls & misc.	505	816	1,411	12	994	1,014	699
Christmas Trees	1,375	1,225	1,085	795	1,155	1,415	1,095
Edibles & Medicinals	70	72	0	10	0	100	430
Floral & Greenery	3,458	4,019	3,305	4,745	1,383	2,051	1,320
Mosses - Bryophytes	150	60	0	5	0	1,220	0
Mushrooms - Fungi	393	631	262	218	300	439	725
Transplants	480	350	5	14	20	10	45
Wood Products/Firewood	49,111	74,436	73,901	53,230	36,151	19,366	21,999
Totals	$58,839	$83,557	$81,541	$60,379	$40,783	$26,608	$29,196

Rush skeletonweed, Scotch broom, Slender-flowered thistle, St. Johnswort, Tansy ragwort and Yellow starthistle. Once released, biological control agents reproduce and spread. No efforts have been made to quantify the extent or level of control achieved by these agents. Acres of treatment by species are shown in Table 21. Because of technical problems with the database, acres of treatment by species are not available for fiscal year 2002.

The second objective results in incorporating weed inventory, treatment and monitoring into other projects on the district, developing partnerships and conducting educational outreach programs to improve the understanding of noxious weeds, to prevent spread and reduce introduction.

Table 21. Noxious Weed Control Summary.

Treatment	Species	Fiscal Year 95	96	97	98	99	00	01
Manual/ Mechanical								
	English ivy	-	-	-	-	-	-	2
	Gorse	1	1	1	1	1	1	0
	Himalayan blackberry	-	-	-	-	-	0	37
	Meadow knapweed	0	0	0	0	0	7	1
	Portuguese broom	-	-	-	-	4	(5)	2
	Purple loosestrife	0	0	0	0	0	1	2
	Rush skeletonweed	1	1	0	1	1	85	66
	Scotch broom*	180	90	8	453	400	296	146
	Sulfur cinquefoil	-	-	-	-	1	1	1
	Tansy ragwort	0	0	0	6	1	0	0
	Thistles	0	0	0	152	50	2	6
	Yellow starthistle	1	21	20	1	1	12	25
	Woolly distaff thistle	0	0	0	1	1	1	1
Chemical								
	Diffuse knapweed	3	3	3	1	1	3	3
	Field bindweed	0	0	0	0	0	0	3
	Gorse	0	0	0	0	0	0	1
	Himalayan blackberry	-	-	-	-	-	2	1
	Portuguese broom	0	0	0	0	(35)	(35)	1
	Scotch broom*	0	0	0	38	66	199	559
	Thistles	0	0	0	5	5	0	0
	Yellow starthistle	0	1	1	1	1	1	3
Biological								
	Scotch broom	0	0	0	0	1	2	0
	Yellow starthistle	0	5	0	1	0	0	0
Total		185	122	31	670	534	615	860

*Scotch Broom includes one acre or less of French and Spanish broom.

The acres in parentheses were overlapping with and counted as Scotch broom treatment

Fire and Fuels Management

Special care is taken to ensure that all prescribed fire projects are done in compliance with the Oregon Smoke Management Plan.

Fire/Fuels Management -	June to September 1995
Prescribed Fire:	332 acres
On district wildfires:	9 fires for a total of 1.95 acres - all lightning caused
Off district wildfires:	13 district personnel accepted assignments to 12 fires.

Fire/Fuels Management - 1996
Prescribed Fire: 304 acres
On district wildfires: 21 fires for a total of 15.17 acres - 17 caused by lightning, 4 human caused
Off district wildfires: 57 district personnel accepted assignments to 35 fires.

Fire/Fuels Management - 1997
Prescribed Fire: 872 acres
On district wildfires: 4 fires for a total of 1.61 acres; all were human caused.
Off district wildfires: No district personnel were assigned to any off district fires in 1997. One employee was detailed to the Redmond Hot Shots during 1997.

Fire/Fuels Management - 1998
Prescribed Fire: 161 acres
On district wildfires: 21 fires for a total of 13.27 acres - 19 were lightning caused and 2 were human caused
Off district wildfires: 28 district personnel accepted assignments to 27 wildfires

Fire/Fuels Management - 1999
Prescribed Fire: 198 acres
On district wildfires: 3 fires for a total of 3.57 acres - 2 lightning caused, and 1 human caused
Off district wildfires: 66 district personnel accepted assignments to 29 wildfires

Fire/Fuels Management - 2000
Prescribed Fire: 530 acres
On district wildfires: 4 fires for a total of 2.37 acres - 2 lightening caused and 2 human caused
Off district wildfires: 73 people, 11 engines, 5 Probeye Irs were assigned to 43 wildfires

Fire/Fuels Management - 2001
Prescribed Fire: 372 acres (assisted the Umpqua National Forest / Tiller Ranger District with the loan of 1 probeye and Coos Bay BLM with 1 Type 3 engine)
On district wildfires: 11 fires for a total of 2.76 acres - 9 were lightning caused and 2 were human caused (Lightning - 2.65 acres, Human - .11 acres)
Off district wildfires: 143 people, 25 engines, 12 Probeye/Palm Ir's, and 3 pumps; 10 cubies and 4 pickups were assigned to 43 wildfires.

Fire/Fuels Management - 2002
Prescribed Fire: 1255.1 acres (29 of those acres were mechanically treated)
(Sent 2 engines with 3 people to assist the Umpqua National Forest / North Umpqua Ranger District prescribed fire program and 1 engine with 2 people to assist the Lakeview Interagency Fire Center prescribed fire program.)

On district wildfires: 32 fires for a total of 271.72 acres - 21 were lightning caused, 9 were human caused and 2 were misc. (Lightning = 195.95 acres, Human = 3.67 acres, Misc. = 82.1 acres)

Off district wildfires: 178 personnel, 2 mechanics service vehicles, 5 AD's, 1 dump truck, 4 Annuitants, 2 vans, 18 engines, 3 Palm IR's, 8 water tenders, 10 pumps, 3 front end loaders, 10,000 + feet of hose and 4 road graders were assigned to 41 wildfires

Fire/Fuels Management - Total, June 1995-September 2002
Prescribed Fire: 4024 acres

On district wildfires: 104 fires for a total of 315 acres - 80 lightning caused and 24 human caused

Off district wildfires: 538 district personnel accepted assignments to 189 wildfires across the nation.

In fiscal year 2002 there were 50 red carded district personnel and these went to the following:
5 – Alaska, 4 - Arizona, 9 – Colorado, 1 – Georgia, 10 – Nevada, 7 - New Mexico, 135 – Oregon 3 AD's & 4 Annuitants, 1 - South Dakota, 3 – Utah, 2 - Washington + 2 AD's, 1 - Wyoming

Access and Rights-of-Way

Because public and private lands are intermingled within the district boundary, each party must cross the lands of the other in order to access their lands and resources such as timber. Throughout most of the district this has been accomplished through Reciprocal Logging Road Rights-of-Way Agreements with neighboring private landowners. The individual agreements and associated permits (a total of approximately 140 on the district) are subject to the regulations which were in effect when they were executed. Additional rights-of-way have been granted or renewed for the construction of driveways, utility lines for servicing residences, domestic and irrigation water pipelines, legal ingress and egress, and communication sites.

A Transportation Management Plan has been developed to provide goals, objectives and guidelines for the district. The district is currently developing Transportation Management Objectives. The Transportation Management Plan will become final when the objectives are completed. The road system is being managed in accordance with both the Transportation Management Plan objectives and the Aquatic Conservation Strategy Objectives which are delineated in the Roseburg District Resource Management Plan.

Roads

The Roseburg District has approximately 3,000 miles of roads which are controlled or improved by the BLM. Timber sales are often designed such that the purchasers have responsibility for maintaining those BLM roads that are used in execution of the contract. In addition, road maintenance is accomplished on a regular basis by the district road maintenance crew.

The Roseburg District road maintenance crew maintained approximately 700 miles of road in fiscal year 2002 and ten bridges. In addition, the road maintenance crew completed over 70 special requests from the resource areas, four storm damage projects, subsoiling and extensive roadside brushing.

Table 22. Access and R/W Five Year Summary.

	R/W Permit	R/W Reciprocal Agreement Assignment
Fiscal Year 1997	14	3
Fiscal Year 1998	10	8
Fiscal Year 1999	15	4
Fiscal Year 2000	16	7
Fiscal Year 2001	3	5
Fiscal Year 2002	7	4
Total	**67**	**32**

Energy and Minerals

The Formosa Abandoned Mine Land (AML) site, an abandoned copper and zinc mine located at Silver Butte, encompasses approximately 76 acres of privately owned property and 2 acres of BLM managed lands in steep mountainous terrain. The mine originally operated in the early 1900's, with the majority of production occurring between 1927 and 1933. The Formosa mine was then reopened by Formosa Explorations, Inc. in 1990 and produced copper and zinc ore at a rate of 350-400 tons per day between 1990 and 1993. The Oregon Department of Geology and Minerals Industries (DOGAMI) issued a permit for the mining activities and required Formosa to establish a reclamation bond prior to beginning operations. The mine closed in 1994 and conducted mine reclamation activities using a bond of one million dollars. Formosa spent most of the bond money and satisfied most of DOGAMI's reclamation requirements then declared bankruptcy. In the winter of 1995-1996, the drainfield from the adits failed and began releasing acid mine drainage (AMD) to Middle Creek and South Fork Middle Creek.

Post reclamation monitoring of South Fork Middle Creek and Middle Creek indicated that 18 stream miles have been impacted from metals contamination associated with AMD (primarily cadmium, copper, lead and zinc) from the Formosa mine site. Based on this situation, the DEQ and BLM have determined that this project is a high priority for further action.

Results from investigations completed from 1994 to 2000 indicated that the concentrations of dissolved metals found in Middle Creek and South Fork Middle Creek pose an imminent threat to aquatic life including anadromous fish.

In fiscal year 2000, the Roseburg District issued an action memorandum to approve Removal Actions at the Formosa AML site by the Department of Environmental Quality. The Roseburg District has the authority for this action under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

The DEQ, the lead agency in the clean-up at the Formosa AML site, initiated further investigation in November 2001 to supplement the Remedial Investigation performed by the BLM in 2000. The field investigation portion of the supplemental Remedial Investigation, completed in June 2002, included extensive monitoring by BLM and DEQ. The DEQ, its contractor Hart Crowser, and the BLM have analyzed the data and Hart Crowser has prepared a Supplemental Remedial Investigation Report. Results of the data analysis indicate that groundwater from the mine workings is the primary contributor of metals to both Middle Creek and the South Fork of Middle Creek.

The BLM and DEQ decided to complete the RI/FS for the site prior to completing any additional site measures. It is anticipated that the RI/FS process will be completed by February 2003.

The Middle Creek watershed will continue to be monitored to assist in completing the RI/FS. The RI/FS will fill in data gaps identified during the data evaluation so that an appropriate final remedy may be selected to address AMD from the mine.

Table 23. Roseburg District Mining Related Activities.

	Fiscal Year						
	1996	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
Plan of Operation	1	0	0	0	0	0	0
Mining notices received & Reviewed	11	1	2	5	5	0	0
Mining claim compliance inspections	106	116	48	36	22	22	20
Notices of non-compliance issued	8	0	0	0	0	0	0
Community pit inspections	54	47	35	22	39	95	20

During fiscal year 1996-1998 work was performed in rehabilitation of Middle Creek and the Mighty Fine Mine.

Land Tenure Adjustments

No land exchanges occurred during fiscal year 2002. Two real property acquisitions were made in 2002. Twenty acres were acquired through the Land and Water Conservation Fund for the Beatty Creek ACEC and twenty-one acres were acquired that were inadvertently omitted in the 1994 Dunning Ranch land exchange. Three leases/permits were issued.

Hazardous Materials

The BLM approach to hazardous materials management on public lands (1) seeks to prevent the generation and acquisition of hazardous materials; (2) is intended to reduce the amounts and toxicity of wastes generated; (3) provides for the responsible management of waste materials in order to protect the natural resources, as well as the people who live, work on and use BLM administered lands; and (4) provides for aggressive cleanup and restoration of BLM lands that are contaminated by hazardous waste materials.

In 2002 a Special Cleanup Fund (SCF) was used to do lead paint and asbestos testing on buildings in occupancy trespass. Subsequently, these buildings were removed from public land and cleaned up. This SCF was also utilized to test water wells and abandon unnecessary wells in the district.

All hazardous materials incidents on public lands are handled in accordance with the Roseburg District Contingency Plan for Hazardous Materials Incidents, which is consistent with Federal and State regulations. The following table shows the number of Incidents requiring response for fiscal year 1999 through fiscal year 2002.

Coordination and Consultation

Federal Agencies

During the period of June 1995 through September 2002, significant cooperation and coordination between federal agencies has taken place. There is ongoing participation in the Southwest Oregon Provincial Executive Committee and Southwest Oregon Provincial Advisory Committee. There have been many very significant and involved interagency efforts that have included the Roseburg District BLM, US Fish and Wildlife Service, US Forest Service, National Marine Fisheries Service , Environmental Protection Agency, US Geological Survey, National Resource Conservation Service, and Bonneville Power Administration on projects such as watershed analysis, late-successional reserve assessments, the Little River Adaptive Management Area, water quality projects, transmission lines, etc. In addition, personnel from several of these agencies have been involved in project level planning, conflict resolution and Section 7 consultation

Table 24 Hazardous Material Incidents Requiring Response

Fiscal Year	Incidents Requiring Response
1997	2
1998	3
1999	3
2000	2
2001	1
2002	2

under the Endangered Species Act. Significant federal agency coordination and cooperation has occurred through the Regional Interagency Executive Committee and the Regional Ecosystem Office established under the Northwest Forest Plan. Under the Northwest Forest Plan, interagency cooperation and coordination has proceeded at an unprecedented level.

State of Oregon

The Roseburg District has continued its long term working relationship with Oregon Department of Forestry, Oregon Department of Fish and Wildlife, State Historic Preservation Office, and the Oregon Department of Environmental Quality. These relationships cover diverse activities from timber sale planning to fish habitat inventory, from water quality monitoring to hazardous material cleanup and air quality maintenance to wildfire suppression. The development of the North Bank Habitat Management Area environmental impact statement was accomplished in cooperation with Oregon Department of Fish and Wildlife.

Counties

The Roseburg District is located primarily within Douglas County, with a small amount of acres of Roseburg District BLM-administered lands in Lane County and Jackson County. There is frequent communication between the Roseburg District and county commissioners and other county staff. This communication involves BLM proposed projects, county projects, which may affect county lands, water quality issues and other issues. County commissioners receive copies of all major publications, project updates, and project proposals.

Cities

The Roseburg District has memorandums of understanding with the cities of Drain, Riddle, and Canyonville. The objective of these agreements is to maintain the best water quality through Best Management Practices. A Special Land Use Permit has been issued to the City of Myrtle Creek for watershed protection which includes the city intake and the adjoining 190 acres.

Tribes

Tribes are represented on the Southwest Oregon Provincial Interagency Executive Committee which coordinates activities within the province. The district contacts tribes directly for the coordination of many projects.

Watershed Councils

The Roseburg District is involved and supports the Umpqua Watershed Council and is represented on the Council's Technical Advisory Committee. The Council is involved in projects such as the Umpqua Basin Assessment, and fisheries and water quality issues.

Other Local Coordination and Cooperation

The Roseburg District has a partnership with Umpqua Training and Employment to sponsor students from Wolf Creek Job Corps in their "Mentor" program. The district has hosted Resource Apprentices funded by Umpqua Training and Employment. The district has participated as one of six partners with the Oregon Youth Conservation Corps project. The district has coordinated and contracted for work provided by the Northwest Youth Corps. Other partnerships include a Girl Scouts day camp at Millpond Recreation Site, hosts to members of Experience International and Apprentice in Science and Engineering.

The district developed and activated a significant telephone dial-up information line offering information to the public regarding fire levels and closures, road closures, recreation,

campgrounds, pavilions, the Little River Adaptive Management Area, fire wood lots, timber sales, the Annual Program Summary and Monitoring Report, and seasonal programs such as Earth Day activities and Christmas tree cutting. The Roseburg District has sponsored Public Lands Day in which 26 partners and 360 volunteers participated.

Research and Education

In October 1995, BLM management identified Northwest Forest Plan implementation as the agency's top national priority. Over the next decade, the BLM will be focusing Northwest Forest Plan research in three primary areas: 1) additional dimensions of young forest stand biodiversity; 2) work on determining appropriate riparian buffer widths; whether management actions in riparian reserves can be conducted without compromising Northwest Forest Plan Aquatic Conservation Strategy Objectives including protection of Pacific salmon; and 3) work on Survey and Manage species.

A long term (15 years plus) western Oregon wide density management study was initiated in 1997 by the Roseburg District in cooperation with the United States Geological Service (USGS) Forest and Rangeland Ecosystem Science Center (FRESC). Three study sites are located on the Roseburg District . The study was established to explore techniques to accelerate development of young stands into late-successional forest structures through active management.. The first post treatment data collection effort was completed in fiscal year 2000 for the two sites which have been harvested to date. The study contains components examining vegetation response, effects of treatments on micro-climate and micro-habitat, aquatic vertebrates, lichens and bryophytes. These sites also serve as demonstration areas for educational purposes.

The Roseburg District participated with USGS FRESC in a review of past precommercially thinned stands to evaluate whether thinning treatments at younger ages (less than 20 years old) are adequate to encourage the development of more diverse forest, or if adjustments to current practices are warranted. The results of this review were described in an unpublished paper titled, "Young Stand Study Report".

In fiscal year 1998, the Roseburg District contracted with the USGS, Water Resources Division to conduct a literature review and field study of fertilization effects on the aquatic ecosystem in the Little River Adaptive Management Area. In fiscal year 2002 the findings were published in a USGS report titled "Ecological Effects on Streams from Forest Fertilization—Literature Review and Conceptual Framework for Future Study in the Western Cascades".

This research compliments the work being undertaken to implement the Cooperative Forest Ecosystem Research (CFER) program the BLM has developed with Biological Resources Division, US Geologic Survey, Oregon State University, and Forest and Rangeland Ecosystem Science Center (FRESC), US Geologic Survey. The CFER program was initiated in June 1995. The intent of the program is to develop and convey reliable scientific information needed to successfully implement ecosystem-based management in the Pacific Northwest, especially on lands dominated by young forests and fragmented by multiple ownership. There are currently 22 research projects currently being undertaken by FRESC that have as the core area forest ecosystems. Other FRESC research includes such core areas as aquatic and wetland ecosystems, and wildlife ecology.

Information Resource Management

The ability to accomplish very complex management of diverse resources over 425,000 acres requires enormous amounts of information. In order to accomplish this management in an efficient manner, the Roseburg District employees the most up to date electronic office and

geographic information system (GIS) hardware and software. There have been several recent major accomplishments concerning information resource management.

First, the office data and electrical systems were upgraded to carry the district well into the future. All of the outdated cabling and data communications equipment were removed during the process. Next, the data connections to other districts, agencies and the Internet were completed. The district achieved its goal of providing all employees access to electronic mail, office automation software and the Internet.

Finally, and most significant to district resource management professionals, is the growth in use of the geographic information system. This electronic mapping and analysis tool is providing a means for district specialists to complete complex analyses of spatial and relational data. A large number of resource managers have recently been trained in the use of GIS software. The training has resulted in a surge of GIS use on the district.

There has been a significant continuing effort to upgrade software and hardware with the goal of simplifying work and increasing capability to accomplish complex analysis of large amounts of data. All of these achievements are the result of a focused effort to modernize the district office. The Roseburg District's goal is to continue to place appropriate technology and training in the hands of employees and decision makers to increase efficiency and effectiveness.

Geographic Information System - The BLM in western Oregon made a substantial investment in building a geographic information system (GIS) as it developed the resource management plans (RMPs). This information system has allowed the BLM to organize and standardize basic resource data across the western Oregon districts.. The GIS has now become a day to day tool in resource management that allows us to display and analyze complex resource issues in a fast and efficient manner. BLM is now actively updating and enhancing the resource data as conditions change and further field information is gathered. The GIS plays a fundamental role in ecosystem management which allows the BLM to track constantly changing conditions, analyze complex resource relationships, and take an organized approach for managing resource data.

Cadastral Survey

Cadastral Survey crews perform an essential function in the accomplishment of resource management objectives. Cadastral=s traditional work has been performing legal boundary surveys; establishing, or reestablishing, marking and maintaining federal boundaries. In addition to the normal work, Cadastral provided technical assistance for legal and spatial land information products and other related services that enhance the management of the natural and cultural resources.

Project Completed	15
Cadastral Projects	16
Miles of Survey Line Run	53
Monuments Set	69
Boundary marked & posted	29
*Contacts	161

* generally documented responses to phone calls, correspondence, E-mail and office visits.

Table 25. Roseburg District Cadastral Survey Activity

	Fiscal Year						
	1996	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
Projects Completed	7	10	13	10	10	12	15
Cadastral Projects	7	7	7	7	9	14	16
Miles of Survey Line Run	35.7	58	78	41	41	57	53

Law Enforcement

Roseburg District have two full time BLM Rangers along with the services of a Douglas County Deputy Sheriff (through a law enforcement agreement with Douglas County) for law enforcement duties. Law enforcement efforts on the Roseburg District for fiscal year 1996 through 2002 included participating in operations during active protests and other demonstrations having the potential for confrontation, destruction of government property, or threatened employee or public safety, investigating occupancy trespass cases, coordination with various state, local and federal agencies on the exchange of information concerning illegal or planned illegal activities on BLM lands, along with regular patrols and other ongoing investigations. Cases and incidents have resulted in written warnings, citations, physical arrests, and the referral of cases to other agencies. In addition, through the BLM Rangers and Deputy Sheriff, the Roseburg District has been able educate the public concerning appropriate uses of public lands and resources as well as preventing or avoiding potentially unlawful or harmful incidents and activities.

National Environmental Policy Act Analysis and Documentation

NEPA documentation

The review of the environmental effects of a proposed management action can occur in any of four ways: categorical exclusions, administrative determinations, environmental assessments, or environmental impact statements.

A categorical exclusion is used when it has been determined that some types of proposed activities do not individually or cumulatively have significant environmental effects and may be exempt from requirements to prepare an environmental analysis. Categorical exclusions (CX) are covered specifically by Department of Interior and BLM guidelines.

An administrative determination is a determination by BLM that NEPA documentation previously prepared by the BLM fully covers a proposed action and no additional analysis is needed. This procedure is often used in conjunction with a plan conformance determination. If an action is fully in conformance with actions specifically described in the RMP and analyzed in the RMP/FEIS, a plan conformance determination may be made and no additional analysis would be needed. A recent procedure now being implemented by the BLM is called a determination of NEPA adequacy (DNA) in which an action is examined in the light of existing NEPA documents to determine if NEPA requirements have been met.

An environmental assessment (EA) is prepared to assess the effects of actions that are not exempt from NEPA, are not categorically excluded, and are not covered by an existing environmental document. An EA is prepared to determine if a proposed action or alternative will significantly affect the quality of the human environment.

Major proposals that will significantly affect the environment, and that have not been previously analyzed through an environmental impact statement (EIS) require that an EIS be prepared.

Roseburg District Environmental Documentation, Fiscal Years 1996-2002

For fiscal year 2002, the Roseburg District completed 11 environmental assessments, 5 determinations of NEPA adequacy and 37 categorical exclusions. During fiscal years 1996-2002, the Roseburg District completed approximately 85 environmental assessments, 430 categorical exclusions, 32 determination of NEPA adequacy (DNA) or Plan conformance determinations and

one environmental impact statement. The environmental assessments vary in complexity, detail and length depending on the project involved.

Protest and Appeals

Most Roseburg District timber sale environmental assessment decision records have been protested and appealed since the expiration of the Recission Act at the end of December 1996. Protest and appeal issues have challenged compliance with the RMP ROD, compliance with NEPA, analyses, assumptions and conclusions. With two exceptions, protests and appeals have been received by a single local environmental organization.
Recurring issues raised in the protests and appeals include: EA is insufficient, an EIS is needed, fail to follow recommendations of watershed analysis, improperly determine riparian reserve widths, not maintaining or restoring degraded watersheds, snags and coarse woody debris, failure to implement Survey and Manage protocol, and road building.

The staff work involved in responding to protest and appeals on the Roseburg District represent a significant workload.

Plan Maintenance

The Roseburg Resource Management Plan Record of Decision was approved in June 1995. Since that time, the Roseburg District has begun implementation of the plan across the entire spectrum of resources and land use allocations. As the plan is implemented it sometimes becomes necessary to make minor changes, refinements or clarifications of the plan. Potential minor changes, refinements or clarifications in the plan may take the form of maintenance actions. Maintenance actions respond to minor data changes and incorporation of activity plans. This maintenance is limited to further refining or documenting a previously approved decision incorporated in the plan. Plan maintenance will not result in expansion of the scope of resource uses or restrictions or change the terms, conditions and decisions of the approved resource management plan. Maintenance actions are not considered a plan amendment and do not require the formal public involvement and interagency coordination process undertaken for plan amendments. Important plan maintenance will be documented in the Roseburg District Planning Update and Roseburg District Annual Program Summary. Examples of possible plan maintenance issues that would involve clarification may include the level of accuracy of measurements needed to establish riparian reserve widths, measurement of coarse woody debris, etc. Much of this type of clarification or refinement involves issues that have been examined by the Regional Ecosystem Office and contained in subsequent instruction memos from the BLM Oregon State Office. Depending on the issue, not all plan maintenance issues will necessarily be reviewed and coordinated with the Regional Ecosystem Office or Provincial Advisory Committee. Plan maintenance is also described in the Roseburg District Resource Management Plan Record of Decision, page 79.

The following items have been implemented on the Roseburg District as part of plan maintenance. Some are condensed descriptions of the plan maintenance items and do not include all of the detailed information contained in the referenced instruction or information memos. These plan maintenance items represent minor changes, refinements or clarifications that do not result in the expansion of the scope of resource uses or restrictions or change the terms, conditions and decisions of the approved resource management plan.

Plan Maintenance for fiscal year 1996

1. Refinement of management direction pertaining to riparian reserves.

Standard of accuracy for measuring riparian reserve widths.(NFP Record of Decision pg B-13, Roseburg RMP Record of Decision pg 23)

As reviewed by the Regional Ecosystem and Research, and Monitoring Committee; a reasonable standard of accuracy for measuring riparian reserve widths in the field for management activities is plus or minus 20 feet or plus or minus 10% of the calculated width.

2. Refinement of management direction pertaining to riparian reserves.

Determining site-potential tree height for riparian reserve widths. NFP Record of Decision page C-31, Roseburg RMP Record of Decision pg 24)

According to the NFP Record of Decision, and the Roseburg District Resource Management Plan Record of Decision, "site potential tree height is the average maximum height of the tallest dominant trees (200 years or older) for a given site class." As reviewed by the Regional Ecosystem Office and as set forth by Instruction Memo OR-95-075, the Roseburg District will determine site-potential tree height for the purpose of establishing riparian reserve widths by the following steps:

- Determine the naturally adapted tree species which is capable of achieving the greatest height within the fifth field watershed and/or stream reach in question;
- Determine the height and age of dominant trees through on-site measurement or from inventory data (Continuous Forest Inventory Plots;

Average the site index information across the watershed using inventory plots, or well-distributed site index data, or riparian-specific derived data where index values have a large variation;
Select the appropriate site index curve;
Use Table 1 (included in Instruction Memo OR-95-075) to determine the maximum tree height potential which equates to the prescribed riparian reserve widths.

Additional detail concerning site potential tree height determination is contained in the above referenced instruction memo. Generally, the site potential tree heights used on the Roseburg District are usually in the vicinity of 160 to 200 feet.

3. Minor change and refinement of management direction pertaining to coarse woody debris in the matrix.

Coarse woody debris requirements.(NFP Record of Decision pg C-40, Roseburg RMP Record of Decision pg 34, 38, 65)

As recommended by the Research and Monitoring Committee and as reviewed and forwarded by the Regional Ecosystem Office, the Roseburg District will use the following guidelines in meeting the coarse woody debris requirements (leave 120 linear feet of logs per acre greater than or equal to 16 inches in diameter and 16 feet long) in the General Forest Management Area and Connectivity/Diversity Blocks.

- In determining compliance with the linear feet requirements for coarse woody debris, the Roseburg District will use the measurement of the average per acre over the entire cutting unit, or total across the unit.

- log diameter requirements for coarse woody debris will be met by measuring logs at the large end.

- interdisciplinary teams will establish minimum coarse woody debris requirements on each acre to reflect availability of coarse woody debris and site conditions.

- During partial harvests early in rotational cycle, it is not necessary to fall the larger dominant or codominant trees to provide coarse woody debris logs.

- Count decay class 1 and 2 tree sections greater than or equal to 30 inches in diameter on the large end that are between 6 feet and 16 feet in length toward the 120 linear feet requirement

In addition, the coarse woody debris requirements have been further refined in cooperation with the Southwest Oregon Province Advisory Committee, a diverse group of land managers and interest groups with representation from federal land management and regulatory agencies, state and local government, timber industry, recreation, environmental, conservation, fishing, mining, forest products, grazing, and tribal interests. After this refinement has been implemented for one year, the Province Advisory Committee will evaluate the results.

This process for determining coarse woody debris requirements, which is described in seven steps, is anticipated to be a very simple process that an interdisciplinary team will follow when planning projects that may impact levels of coarse woody debris. New prescriptions will be only for the project being planned.

(Note: This plan maintenance refinement was in effect for one year and was not renewed.)

4. Minor change in management direction pertaining to lynx.

Change in specific provisions regarding the management of lynx. (NFP Record of Decision pages C-5, C-45, C-47 C-48; Roseburg RMP Record of Decision pages 45, 46, 47).

This documents an Oregon State Director decision to implement through plan maintenance of the western Oregon BLM resource Management Plans a Regional Interagency Executive Committee decision.

This refinement of lynx management consists of the changing the survey and manage lynx requirements from survey prior to ground disturbing activities to extensive surveys. Implementation schedule is changed from surveys to be completed prior to ground disturbing activities that will be implemented in fiscal year 1999 to surveys must be under way by 1996. Protection buffer requirements for lynx are unchanged.

These changes simply resolve an internal conflict within the Northwest Forest Plan Record of Decision and Roseburg Resource Management Plan.

5. Minor change in standards and guidelines for *Buxbaumia piperi*

On July 26, 1996, the Oregon State Director issue a minor change in the standards and guidelines or management action direction in the RMP for *Buxbaumia piperi* (a species of moss) through plan maintenance. The State Director's action "maintained" the Roseburg, Salem, Eugene, Medford, and Klamath Falls Resource Management Plans. Simultaneously, the Forest Service issued Forest Plan corrections for 13 National Forests in the Northwest to accomplish the same changes.

This plan maintenance action removes *B. piperi* as Protection Buffer species. This change corrects an error in which mitigation measures described on page C-27 of the Northwest Forest Plan Record of Decision and on page 44 of the Roseburg District Resource Management Plan Record of Decision were incorrectly applied to *B. Piperi*.

B. piperi was addressed in the Scientific Analysis Team (SAT) report published in 1993. The Northwest Forest Plan Record of Decision included some Protection Buffer species sections from the SAT report. The SAT Protection Buffer species status was developed to improve the viability of species considered at risk. Although B. piperi is not rare, it was apparently carried forward as a Protection Buffer species because it was rated with a group of rare mosses that occupy similar habitat.

This plan maintenance is supported by staff work and information from the Survey and Manage Core Team, and the expert panel of Pacific Northwest specialists on bryophytes, lichens and fungi that participated in the Scientific Analysis Team process.

6. Minor change/correction concerning mountain hemlock dwarf mistletoe

Appendix H-1 of the Roseburg RMP Record of Decision indicated that Aruethobium tsugense was to be managed under survey strategies 1 and 2. The Regional Ecosystem Office later determined mountain hemlock dwarf mistletoe to be common and well distributed in Oregon, and recommended that *Aruethobium tsugense* subsp. *Mertensianae* be managed as a survey strategy 4 species in Washington only. This information was received in OSO Information Bulletin OR-95-443 is adopted as RMP clarification.

Plan Maintenance for fiscal year 1997

1. Correction of typographical errors concerning understory and forest gap herbivore arthropods.

Appendix H, Table H-1, page 186 of the Roseburg RMP Record of Decision: "Anthropods" is changed to "Arthropods". "Understory and forest gap herbivores" is changed to "Understory and forest gap herbivores (south range). Information from Oregon State Office Information Bulletin OR-97-045.

2. Clarification of implementation date requirement for Survey and Manage component 2 surveys.

The S&G on page C-5 of the NFP ROD states "implemented in 1997 or later", the NFP ROD, page 36 states "implemented in fiscal year 1997 or later". In this case where there is a conflict between specified fiscal year (ROD-36) and calendar year (S&G C-5) the more specific fiscal year date will be used over the non-specific S&G language. Using fiscal year is the more conservative approach and corresponds to the fiscal year cycle used in project planning and, also, to the subsequent reference to surveys to be implemented prior to fiscal year 1999. Information from Oregon State Office Instruction Memorandum OR-97-007.

3. Clarification of what constitutes ground disturbing activities for Survey and Manage component 2.

Activities with disturbances having a likely "significant" negative impact on the species habitat, its life cycle, microclimate, or life support requirements should be surveyed and assessed per protocol and are included within the definition of "ground disturbing activity".

The responsible official should seek the recommendation of specialists to help judge the need for a survey based on site-by-site information. The need for a survey should be determined by the line officer's consideration of both the probability of the species being present on the project site and the probability that the project would cause a significant negative affect on its habitat. Information from Oregon State Office Instruction Memo OR-97-007.

4. Clarification when a project is implemented in context of component 2 Survey and Manage.

S&G C-5 of NFP ROD and Management Action/Direction 2.c., page 22 of the RMP ROD states that "surveys must precede the design of activities that will be implemented in [fiscal year] 1997 or later." The interagency interpretation is that the "NEPA decision equals implemented" in context of component 2 species survey requirements. Projects with NEPA decisions to be signed before June 1, 1997 have transition rules that are described in IM OR-97-007. Information from Oregon State Office Instruction Memorandum OR-97-007.

5. Conversion to Cubic Measurement System.

Beginning in fiscal year 1998 (October 1997 sales), all timber sales (negotiated and advertised) will be measured and sold based upon cubic measurement rules. All timber sales will be sold based upon volume of hundred cubic feet (CCF). The Roseburg District RMP ROD declared an allowable harvest level of 7.0 million cubic feet. Information from Oregon State Office Instruction Memorandum OR-97-045.

6. Clarification of retention of coarse woody debris.

The NFP ROD S&G, pg C-40 concerning retention of existing coarse woody debris states: "Coarse Woody Debris already on the ground should be retained and protected to the greatest extent possible. . . ". The phrase "to the greatest extent possible" recognizes felling, yarding, slash treatments, and forest canopy openings will disturb coarse woody debris substrate and their dependant organisms. These disturbances should not cause substrates to be removed from the logging area nor should they curtail treatments. Reservation of existing decay class 1 and 2 logs, in these instances, is at the discretion of the district. Removal of excess decay class 1and 2 logs is contingent upon evidence of appropriately retained or provided amounts of decay class 1 and 2 logs.

Four scenarios are recommended to provide the decay class 1 and 2 material by using standing trees for coarse woody debris:

Scenario 1. Blowdown commonly occurs and wind normally fells retention trees, providing both snags and coarse woody debris immediately following regeneration harvest. After two winter seasons, wind firm trees may still be standing; top snap occurs providing both snags and coarse woody debris; and blowdowns include total tree length, often with the root wad attached. A third year assessment would monitor for coarse woody debris and determine if the need exists to fell trees to meet the required linear feet.

Scenario 2. In small diameter regeneration harvest stands, the largest sized green trees are selected as coarse woody debris and felled following harvest. The alternative is to allow these trees to remain standing and potentially to grow into larger sized diameter coarse woody debris substrate after a reasonable period of time.

Scenario 3. The strategy is to meet the decay class 1 and 2 log level required post-harvest immediately following logging or the site preparation treatment period. This strategy assumes that an adequate number of reserve trees are retained to meet the requirement. Upon completion of harvest, the existing linear feet of decay class 1 and 2 logs for each sale unit are tallied; and then the reserve trees are felled to meet the 120 feet linear foot requirement. Knockdowns, trees felled to alleviate a logging concern, and blowdowns are counted toward the total linear feet so long as they meet the decay class, diameter, and length requirements. The minimum amount of coarse woody debris linear feet are ensured, and excess trees continue to grow.

Scenario 4. Provide the full requirement of coarse woody debris in reserve trees. There is no need to measure linear feet since the decay class 1 and 2 requirements will be met from the standing, reserved trees. Accept whatever linear feet of decay class 1 and 2 logs is present on the unit post-harvest. The management action will be to allow natural forces (primarily windthrow) to provide infusions of trees into coarse woody debris decay classes 1 and 2 over time from the population of marked retention trees and snag replacement trees.

Large diameter logs which are a result of felling breakage during logging but are less than 16 feet long may be counted towards the linear requirement when:

- the large end diameters are greater than 30 inches and log length is greater than 10 feet
- log diameters are in excess of 16 inches and volume is in excess of 25 cubic feet.
- they are the largest material available for that site.

The above information for clarification of coarse woody debris requirements is from Oregon State Office Instruction Memo OR-95-28, Change 1, and Information Bulletin OR-97-064.

7. Clarification of insignificant growth loss effect on soils.

Management action/direction contained in the RMP ROD pp 37 and 62 states that "In forest management activities involving ground based systems, tractor skid trails including existing skid trails, will be planned to have insignificant growth loss effect. This management action/direction was not intended to preclude operations in areas where previous management impacts are of such an extent that impacts are unable to be mitigated to the insignificant (less than 1%) level. In these cases, restoration and mitigation will be implemented as described in the RMP ROD management action/direction and best management practices such that growth loss effect is reduced to the extent practicable.

Plan maintenance for fiscal year 1998

1. Refinement of 15% Retention Management Action/Direction.

Guidance on implementation of the 15% retention management action/direction which provides for retention of late-successional forests in watersheds where little remains. A joint BLM-FS guidance which incorporated the federal executives' agreement was issued on September 14, 1998, as BLM Instruction Memorandum No. OR-98-100. This memo clarifies and refines the standard and guideline contained in the Northwest Forest Plan and RMP that directs that in fifth field watersheds in which federal forest lands are currently comprised of 15% or less late-successional forest should be managed to retain late-successional patches. The memo emphasizes terminology and intent related to the standard and guideline, provides methods for completing the assessment for each fifth field watershed, dictates certain minimum documentation requirements and establishes effective dates for implementation. Instruction Memo OR-98-100 is adopted in its entirety as RMP clarification and refinement.

2. Clarification of Visual Resource Management Action/Direction.

Management Action/Direction for Visual Resources has been found to be unclear due to internal inconsistency. The Roseburg RMP includes management action/direction in addition to that which is common to all other western Oregon BLM districts. The prescriptive management action/direction unique to the Roseburg District RMP has been found too difficult to implement in a logical and consistent manner. The management action/direction for visual resources is refined by the deletion of five paragraphs that discuss harvest scenarios on page 53 of the RMP/ROD. This refinement does not result in the expansion of the scope of resource uses and allows the Roseburg District RMP/ROD to be consistent with other western Oregon BLM RMP/RODs.

Plan maintenance for fiscal year 1999

1. Refinement of Survey and Manage Management Action/Direction.

Ongoing plan maintenance has resulted from the refinement and clarification related to the survey and manage management action/direction (Roseburg RMP ROD pg. 22). Survey and manage gives direction for hundreds of species and taxa. The management recommendations and survey protocols for these species is received through Instruction Memoranda which are jointly issued by the BLM and Forest Service through coordination with the Regional Ecosystem Office. In fiscal year 1999, survey protocols were established for lynx (IM No. OR-99-25) and fifteen vascular plants (IM No. OR-99-26); management recommendations were received for fifteen vascular plants (IM No. OR-99-27), nineteen aquatic mollusk species (IM No. OR-99-38), and five bryophyte species (IM No. OR-99-39). In addition, a change in the implementation schedule for certain survey and manage and protection buffer species was issued (IM No. OR 99-47). This schedule change was analyzed through an environmental assessment.

Plan maintenance for fiscal year 2000

1. Refinement of Survey and Manage Management Action/Direction.

Ongoing plan maintenance has continued as in fiscal year 2000 regarding survey and manage management action/direction with the establishment of management recommendations and survey protocols through jointly issued Instruction Memoranda by the BLM and Forest Service in coordination with the Regional Ecosystem Office. In fiscal year 2000, survey protocols were established for amphibians (IM No. OR-200-04), bryophytes (IM No. OR-2000-17, IM No. OR-2000-17 change 1), fungi (IM No. OR-2000-18), and red tree vole (IM No. OR-2000-37. Management recommendations were received for mollusks (IM No. OR-2000-03, IM No. OR-2000-15), and lichens (IM No. OR-2000-42). These instruction memorandums may be found at the Oregon State Office web site under "Northwest Forest Plan" (http://web.or.blm.gov/)

2. Clarification of ACEC/RNAs closed to motorized use.

Bushnell-Irwin Rocks ACEC/RNA was inadvertently not included on the list of ACEC/RNAs that are closed to motorized use on page 59 of the RMP ROD. ACEC/RNA's are closed to motorized use on page 51 of the RMP ROD and Bushnell-Irwin Rocks ACEC/RNA is listed as closed to motorized use in the Roseburg District Off-Highway Vehicle Implementation Plan. This plan maintenance eliminates this inconsistency and clarifies that Bushnell-Irwin Rocks ACEC/RNA is closed to motorized use.

3. Refinement and clarification of Best Management Practices (RMP ROD Appendix D.) related to site preparation using prescribed burning.

Through an interdisciplinary process, the Roseburg District has determined that the objective of maintaining soil productivity could be better accomplished through refinement and clarification of Best Management Practices related to site preparation using prescribed burning.

For the purposes of this plan maintenance, the Best Management Practices language found on pages 139-140 of the RMP ROD, III.B.1 through 9 and III. D.1. is replaced by the following:

(III.C. and D.2 to end remain unchanged):

B. Site Preparation Using Prescribed Burning

Objectives: To maintain soil productivity and water quality while meeting resource management objectives.

a.. Machine pile and burn:

1. Limit the use of mechanized equipment to slopes less than 35%.

2. Do not compact skeletal or shallow soils.

3. Keep total surface area of soil compaction (greater than 15% bulk density increase in a greater than 4 inch thick layer) to a maximum of 10% of machine piled area (prior to tillage).

4. Till all compacted areas with a properly designed winged subsoiler. This could be waived if less than 2% of the machine piled area is compacted.

5. Materials to be piled will be 16 inches in diameter or less.

6. Burn when soil and duff moisture between piles is high.

7. Avoid displacement of duff and topsoil into piles.

8. Highly sensitive soils are all soils less than 20 inches deep, soils with less than 4 inches of "A" horizon, granite and schist soils on slopes greater than 35% and other soils on slopes greater than 70%. These soils are referred to as category 1 soils. On highly sensitive (category 1) soils, machine pile and burn treatments considered to be essential to meet resource management objectives will be designed to minimize consumption of litter, duff, and large woody debris. Mineral soil exposed by the burn will be less than 15% of the unit surface area.

b. Hand pile and burn, swamper burning:

1. Pile small materials (predominately 1 - 6 inches in diameter).

2. Burn when soil and duff moisture between piles is high.

3. Only pile areas where loading (depth and continuity) require treatment to meet management objectives.

4. On highly sensitive (category 1) soils, hand pile and burn (and swamper burn) treatments considered to be essential to meet resource management objectives will be designed to minimize consumption of litter, duff, and large woody debris. Mineral soil exposed by the burn will be less than 15% of unit surface area.

c. Broadcast burning:

1. Burn under conditions that result in lightly to moderately burned area, minimizing consumption of duff and large woody debris. This typically occurs when soil and duff moisture is high.

   Lightly burned: The surface duff layer is often charred by fire but not removed. Duff, crumbled wood or other woody debris partly burned, logs not deeply charred.

   Moderately burned: Duff, rotten wood or other woody debris partially consumed or logs may be deeply charred by mineral soil under the ash not appreciably changed in color.

   Severely burned: Top layer of mineral soil significantly changed in color, usually to reddish color, next one-half inch blackened from organic matter charring by heat conducted through top layer.

2. When feasible, pull slash and woody debris adjacent to landing onto landing before burning.

3. On highly sensitive (category 1) soils, broadcast burning treatments considered essential to meet resource management objectives will be designed to minimize consumption of litter, duff, and large woody debris. Mineral soil exposed by the burn will be less than 15% of the unit surface area.

4. Clarification of what roads shall be included as a starting point to monitor the reduction of road mileage within key watersheds.

Guidance on how to define the baseline roads or the discretionary ability to close roads was not included in the RMP Management Action/Direction for Key Watersheds. Information Bulletin OR-2000-134 issued on March 13, 2000, clarified what roads shall be included in the 1994 BLM

road inventory base used as a starting point to monitor the "reduction of road mileage within Key Watersheds" as follows:

Any road in existence on BLM administered land as of April 1994, regardless of ownership or whether it was in the road records, shall be included in the 1994 base road inventory. Also, include BLM-controlled roads on non-BLM administered lands. A BLM controlled road is one where the BLM has the authority to modify or close the road. Do not include skid roads/trails, as technically they are not roads.

Plan Maintenance for fiscal year 2001

1. Refinement of implementation monitoring question regarding Survey and Manage management action/direction.

As a result of the modifications to the Survey and Manage management action/direction (standards and guidelines) through the Record of Decison and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines in January 2001, it is necessary to refine the implementation monitoring questions associated with this standard and guideline. Implementation monitoring question number one for All Land Use Allocations has been modified to read: "Is the management action for the Record of Decison and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines being implemented as required?".

2. Refinement of implementation monitoring questions regarding Special Status Species.
The implementation monitoring question regarding special status species were found to contain redundancies with the Survey and Manage monitoring questions. The redundancies have been eliminated by removing Survey and Manage questions from special status species. Survey and Manage monitoring is fully accomplished through the implementation question under All Land Use Allocations. In addition, implementation monitoring question number one for special status species was basically redundant with question number two and there for question number one was eliminated. The title for this monitoring section has been modified to delete reference to SEIS Special Attention Species (Survey and Manage).

3. Refinement and clarification of objectives, management action/direction and implementation monitoring question regarding soils resource.

The management action/direction for the Soils Resource is different than that for any other resource in that it combines RMP objectives with management action/direction. Experience in RMP monitoring has disclosed difficulty in effectively measuring the accomplishment of Soils Resource management action/direction. The District Soil Scientist and Geotechnical Engineer have examined this issue from a technical perspective in the field and recently published literature has been reviewed. The technical review and recent literature indicates that operational monitoring which would produce meaningful and reliable results of the current soils management action/direction as currently written is not practical.

The RMP is clarified and refined in the following manner:

The RMP objective to "improve and/or maintain soil productivity" (RMP pg. 35) is retained.

The *objective of* "insignificant growth loss effect" (RMP pg. 37) and "insignificant (less than one percent) growth loss effect" (RMP pg 62) is removed from management action/direction. The intention and purpose of this objective which was combined with management action/direction is preserved in the existing language of the RMP objectives for the soil resource.

The entire management action/direction contained in the fourth paragraph page 37 (beginning "In forest management activities. . . ") and the second paragraph page 62 (beginning "Plan timber sales. . . ") is replaced by:

"For forest management activities involving ground based systems, improve or maintain soil productivity by:

a.) the cumulative (created or used since the adoption of the RMP) main skid trails, landings and large pile areas will affect less than approximately 10%, of the ground based harvest unit

b.) a main skid trail is defined as a trail in which the duff is displaced such that approximately 50% or more of the surface area of the trail is exposed to mineral soil

c.) skid trails which were created prior to the adoption of the RMP should be re-used to the extent practical, such skid trails that are re-used will be included in the 10% limit of affected area within the ground based harvest unit

d.) limit skid trails to slopes generally less than approximately 35%. Examples of exceptions to the 35% slope limit would include situations such as small inclusions of steeper slopes, connecting trails to isolated ground based harvest areas, or the use of existing trails that can be used without causing undue effects to soils

e.) in partial cut areas, locate main skid trails so that they may be used for final harvest

f.) conduct ground based operations only when soil moisture conditions limit effects to soil productivity (these conditions generally can be expected to be found between May 15 and the onset of regular fall rains or may be determined by on-site examination)

g.) on intermediate harvest entries, ameliorate main skid trails and areas of non-main skid trails warranting amelioration, or document a plan (e.g. such as adding a map to watershed analysis) so that amelioration may be accomplished at the time of final harvest

h.) potential harvest units will be examined during the project planning process to determine if skid trails created prior to the adoption of the RMP have resulted in extensive enough compaction to warrant amelioration

i.) upon final harvest ameliorate all main skid trails, those portions of non-main skid trails warranting amelioration, skid trails documented and carried over from intermediate harvests, and skid trails created prior to the adoption of the RMP which were identified in the planning process as warranting amelioration

j.) amelioration of skid trails will generally consist of tilling with equipment designed to reduce the effects to soil productivity from compaction and changes in soil structure.

For mechanical site preparation, management action/direction is refined as follows:

The fourth condition under which track-type equipment must operate (RMP pg 63, beginning: "4. Operate at soil moistures that. . . ") is replaced with:

"4. Conduct mechanical site preparation when soil moisture conditions limit effects to soil productivity (these conditions generally can be expected to be found between May 15 and the onset of regular fall rains or may be determined by on-site examination). Total exposed mineral soil resulting from main skid trails and mechanical site preparation activities will be less than 10% of the ground based harvest unit area. Total exposed mineral soil as a result of mechanical site preparation in cable or helicopter harvest units will be less than approximately 5% of harvest unit area. Units will be examined after site preparation has been completed to determine if amelioration (generally tilling) is warranted to reduce the effects to soil productivity from compaction and changes in soil structure."

Implementation monitoring question number six for Water and Soils is changed to: "Have forest management activities implemented the management direction for ground based systems and mechanical site preparation as listed in the fiscal year 2001 plan maintenance?"

4. Refinement of Resource Management Plan evaluation interval.

The RMP, in the Use of the Completed Plan section(Roseburg District Record of Decision and Resource Management Plan, pp. 78-79), established a three year interval for conducting

plan evaluations. The purpose of a plan evaluation is to determine if there is significant new information and or changed circumstance to warrant amendment or revision of the plan. The ecosystem approach of the RMP is based on long term management actions to achieve multiple resource objectives including; habitat development, species protection, and commodity outputs. The relatively short three year cycle has been found to be inappropriate for determining if long term goals and objectives will be met. A five year interval is more appropriate given the resource management actions and decisions identified in the RMP. The Annual Program Summaries and Monitoring Reports continue to provide the cumulative RMP accomplishments. Changes to the RMP continue through appropriate amendments and plan maintenance actions. A five year interval for conducting evaluations is consistent with the BLM planning guidance as revised in November 2000.

The State Director decision to change the evaluation interval from three years to five years was made on March 8, 2002. It was directed that this plan maintenance be published in the 2001 Annual Program Summary. The next evaluation of the Roseburg District Resource Management Plan will address implementation through September 2003.

2001 Amendment to the Northwest Forest Plan

The Survey and Manage mitigation in the Northwest Forest Plan was amended in January 2001 through the signing of the Record of Decision (ROD) for the AFinal Supplemental Environmental Impact Statement for Amendment to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines.@ The intent of the amendment was to incorporate up-to-date science into management of Survey and Manage species and to utilize the agencies= limited resources more efficiently. The ROD provides approximately the same level of protection intended in the Northwest Forest Plan but eliminates inconsistent and redundant direction and establishes a process for adding or removing species when new information becomes available.

The ROD reduced the number of species requiring the Survey and Manage mitigation, dropping 72 species in all or part of their range. The remaining species were then placed into 6 different management categories, based on their relative rarity, whether surveys can be easily conducted, and whether there is uncertainty as to their need to be included in this mitigation. The following table shows a break down of the placement of these 346 species, and a brief description of management actions required for each.

The ROD identifies species management direction for each of the above categories. Uncommon species categories C and D require the management of Ahigh priority@ sites only, while category F requires no known site management. The new Standards and Guidelines also establish an in-depth process for reviewing and evaluating the placement of species into the different management categories. This process allows for adding, removing, or moving species around into various categories, based on the new information acquired through our surveys.

Approval of the *Record of Decision and Standards and Guidelines for Amendment to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standard and Guidelines* amended the Standards and Guidelines contained in the Northwest Forest Plan Record of Decision related to Survey and Manage, Protection Buffers, Protect Sites from Grazing, Manage Recreation Areas to Minimize Disturbance to Species, and Provide Additional Protection for Caves, Mines, and Abandoned Wooden Bridges and Building That are Used as Roost Sites for Bats. These standards and guidelines were removed and replaced by the contents of the *Record of Decision and Standards and Guidelines for Amendment to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standard and Guidelines*.

Plan Maintenance actions to delete all references to Management Action/Direction for Survey and Manage and Protection Buffer species in the Roseburg District Resource Management Plan and Appendices and adopt the Standards and Guidelines contained in the *Record of Decision and*

Standards and Guidelines for Amendment to the Survey and Manage, Protection Buffer, and other Mitigation Measures are required in response to the Record of Decision.

Copies of the ROD and Final SEIS may be obtained by writing the Regional Ecosystem Office at PO Box 3623, Portland, Oregon 97208, or they can be accessed at http://www.or.blm.gov/nwfpnepa..

Plan Maintenance for fiscal year 2002

1. This plan maintenance revises the formal evaluation cycle for the RMP from a three year cycle to a five year cycle.

The RMP, in the Use of the Completed Plan section, established a three year interval for conducting plan evaluations. The purpose of a plan evaluation is to determine if there is significant new information and/or changed circumstances to warrant amendment or revision of the plan. The ecosystem approach of the RMP is based on long term management actions to achieve multiple resource objectives including habitat development, species protection and commodity outputs. The relatively short three year cycle has been found to be inappropriate for determining if long term goals and objectives will be met. A five year interval is more appropriate given the resource management actions and decisions identified in the RMP. The Annual Program Summaries and Monitoring Reports continue to provide the cumulative RMP accomplishments. Changes to the RMP will continue through appropriate plan amendments and plan maintenance actions. A five year interval for conducting evaluations is consistent with the BLM Land Use Planning Handbook.

The State Directors decision to change the evaluation interval from three years to five years was made on March 8, 2002. The next evaluation for the Roseburg District RMP will address implementation through September 2003.

2. For Survey and Manage standards and guidelines, Survey Protocols, Management Recommendations, changes in species categories or removal of species from Survey and Manage are issued and conducted in accordance with the Amendment to Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines Record of Decision of January 2002. These changes are transmitted through Instruction Memoranda from the Oregon State Office. These Instruction Memoranda are numerous and complex and would be unwieldy to list individually. All such Instruction Memoranda regarding the Survey and Manage Survey Protocols,

Table 26. Redefine Categories Based on Species Characteristics

Relative Rarity	Pre-Disturbance Surveys Practical	Pre-Disturbance Surveys Not Practical	Status Undetermined Pre-Disturbance Surveys Not Practical
Rare $ Manager All Known Sites $ Pre-Disturbance Surveys $ Strategic Surveys	Category A - 57 species $ Manage All Known Sites $ N/A $ Strategic Surveys	Category B - 222 species $ Manage All Known Sites $ N/A $ Strategic Surveys	Category E - 22 species
Uncommon $ Manage High-Priority Sites $ Pre-Disturbance Surveys $ Strategic Surveys	Category C - 10 species $ Manage High-Priority Sites $ N/A $ Strategic Surveys	Category D - 14 species $ N/A $ N/A $ Strategic Surveys	Category F - 21 species

[1] Includes three species for which pre-disturbance surveys are not necessary.

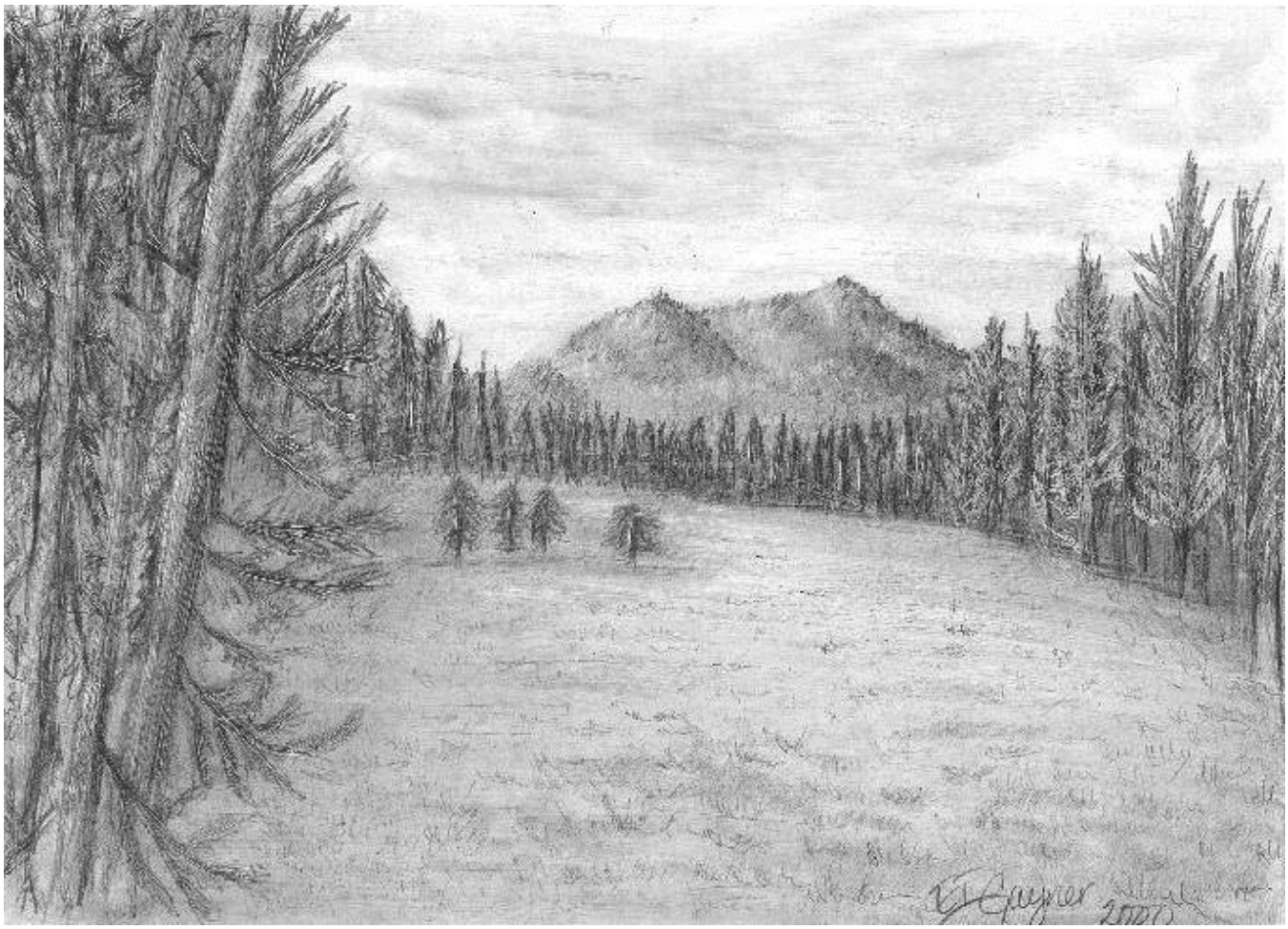
Management Recommendations or changes in species status are incorporated as ongoing plan maintenance.

3. The management action/direction for Wild Turkey Habitat contained on page 39 of the RMP is removed. This refinement in the Resource Management Plan recognizes that the Rio Grande wild turkey is an introduced species that is not only thriving but in many areas the large numbers of wild turkeys have become a nuisance and have required relocation by the Oregon Department of Fish and Wildlife. This management action/direction is, therefore, removed because it is not needed for this species.

4. The management action/direction for Roosevelt elk contained on page 39 of the RMP is removed. This refinement in the Resource Management Plan recognizes that a combination of other management action/direction and land ownership patterns has resulted in achieving a thriving population of Roosevelt elk. Road closures for the benefit of elk populations have been found to be either unnecessary or accomplished through decommissioning or closure of roads for the purposes of watershed health. Limitation of the size of harvest units, distance to cover and minimum width of cover are being accomplished through the need to meet other aspects of the RMP including riparian reserves, survey and manage species requirements, special status species requirements, threatened or endangered species requirements and watershed considerations. Because of the thriving Roosevelt elk population it has not been found necessary to establish forage plots. Transplants of elk have not been found necessary to supplement existing numbers or to establish new local populations.

5. It is necessary to clarify the definition of an existing road for the purposes of road maintenance. Five road maintenance levels are assigned to roads. Roads which are assigned road maintenance Level I or Level 2 may, on occasion, have trees or other vegetation encroach on or become established within the road prism or on the road surface because of low traffic levels and an extended period between road maintenance. In such instances, road maintenance may be used to re-establish the utility of the road. It would not fit the definition of road maintenance to re-establish the utility of a road that has been closed through full decommissioning or obliteration and that has been removed from Roseburg District road records with approval from parties to existing road use agreements.

ROSEBURG DISTRICT RESOURCE MANAGEMENT PLAN MONITORING FISCAL YEAR 2002



Monitoring Report
Fiscal Year 2002 Executive Summary

Introduction

This document represents the seventh monitoring report of the Roseburg District Resource Management Plan for which the Record of Decision was signed in June 1995. This monitoring report compiles the results and findings of implementation monitoring of the Resource Management Plan for fiscal year 2002. This report does not include the monitoring conducted by the Roseburg District which is identified in activity or project plans. Monitoring at multiple levels and scales along with coordination with other BLM and Forest Service units has been initiated through the Regional Interagency Executive Committee (RIEC).

The Resource Management Plan monitoring effort for fiscal year 2002 addressed the implementation questions relating to the land use allocations and resource programs contained in the Monitoring Plan. There are 51 effectiveness and validation questions included in the Monitoring Plan. The effectiveness and validation questions were not required to be addressed because some time is required to elapse after management actions are implemented in order to evaluate results that would provide answers.

Findings

Monitoring results found full compliance with management action/direction in the twenty land use allocations and resource programs identified for monitoring in the plan. Monitoring results of two of the 35 implementation monitoring questions showed variation in the level of activities compared to the assumed levels in the Resource Management Plan.

One question pertained to timber resources: "By land use allocation, how do timber sale volumes, harvested acres, and the age and type of harvest compare to the projections in the Resource Management Plan?" Legal, administrative, and Northwest Forest Plan implementation challenges have limited the ability to offer timber sales at the levels anticipated in the Resource Management Plan.

Another question pertained to silvicultural activities: "Were the silvicultural (e.g. planting with genetically selected stock, fertilization, release, and thinning) and forest health practices anticipated in the calculation of the allowable sale quantity implemented?" These activities have varied from the assumed levels in the Resource Management Plan because of a variety of circumstances including the limited ability to offer timber sales, particularly regeneration harvest timber sales at the level anticipated.

A third question pertained to the Little River Adaptive Management Area. The Little River Adaptive Management Area has not met certain requirements of the RMP. It does not have a functioning advisory committee, it does not have an approved plan, it has not tested the innovative practices that would test the emphasis of Little River Adaptive Management Area.

Recommendations

It is not possible at this time to accurately predict the effect of the uncertainties on the ability to implement the underlying assumptions that form the basis of the Allowable Sale Quantity. Amendments to the Northwest Forest Plan are being considered that would potentially affect the Survey and Manage standards and guidelines, and clarify the Aquatic Conservation Strategy.

There is currently no strategy to resolve the discrepancies associated with the Little River Adaptive Management. An evaluation is scheduled for fiscal year 2004 which will include an assessment of these and other circumstances regarding the implementation and objectives of the Resource Management Plan.

Conclusions

Analysis of the fiscal year 2002 monitoring results concludes that the Roseburg District has complied with all Resource Management Plan management action/direction with the exceptions discussed above. The Resource Management Plan will be evaluated in fiscal year 2004. No major change in management direction or Resource Management Plan implementation is warranted at this time.

Monitoring Fiscal Year 2002

Introduction

This document represents the seventh monitoring report of the Roseburg District Resource Management Plan for which the Record of Decision was signed in June 1995. This monitoring report compiles the results and findings of implementation monitoring of the Resource Management Plan. Included in this report are the projects that took place from October 2001 through September 2002. Effectiveness and validation monitoring will be conducted in subsequent years when projects mature or proceed long enough for the questions asked under these categories of monitoring to be answered. The term "management action/direction" discussed in the Resource Management Plan and this monitoring report is approximately equivalent to the term "standards and guidelines" used in the Record of Decision for the Northwest Forest Plan.

Background

The BLM planning regulations (43 CFR 1610.4-9) call for the monitoring and evaluation of resource management plans at appropriate intervals.

Monitoring is an essential component of natural resource management because it provides information on the relative success of management strategies. The implementation of the RMP is being monitored to ensure that management actions: follow prescribed management direction (implementation monitoring), meet desired objectives (effectiveness monitoring), and are based on accurate assumptions (validation monitoring)(see Appendix I, Record of Decision and Resource Management Plan). Some effectiveness and most validation monitoring will be accomplished by formal research. Certain effectiveness monitoring efforts are currently underway through the Regional Ecosystem Office. The nature of the questions concerning effectiveness monitoring require some maturation of implemented projects in order to discern results. This and validation monitoring will be conducted as appropriate in subsequent years.

The monitoring process usually collects information on a sample basis. Monitoring could be so costly as to be prohibitive if not carefully and reasonably designed. Therefore, it is not necessary or desirable to monitor every management action or direction. Unnecessary detail and unacceptable costs are avoided by focusing on key monitoring questions and sampling procedures. The level and intensity of monitoring varies, depending on the sensitivity of the resource or area and the scope of the management activity.
Monitoring Overview

This monitoring report focuses on the 35 implementation monitoring questions contained in the Resource Management Plan. This report does not include the monitoring conducted by the Roseburg District identified in activity or project plans. The monitoring plan for the Resource Management Plan incorporates the Monitoring and Evaluation Plan for the Record of Decision for the Northwest Forest Plan.

Monitoring at multiple levels and scales along with coordination with other BLM and Forest Service units has been initiated through the Regional Interagency Executive Committee (RIEC). At the request of the Regional Interagency Executive Committee, the Regional Ecosystem Office (REO) has implemented a regional-scale Implementation Monitoring Program.

The monitoring process is intended to be an iterative, adaptive process where we learn by doing. As results are evaluated, the process is expected to be adjusted as needed. Changes may be made

in the monitoring process itself to increase clarity, efficiency, and usefulness of monitoring. Other adjustments may be made in district processes and procedures to increase our success in achieving implementation objectives.

The goal of management is to have very high compliance with all management action/direction or all standards and guidelines. Failure to achieve 100 percent compliance will result in the evaluation aspect of adaptive management to determine if adjustments are necessary to correct deficiencies.

Monitoring Process and Approach

The Resource Areas are responsible for the collection, compilation, and analysis of much of the data gained through monitoring activities. Resource Areas must report their findings and recommendations to the District for consolidation and publication in the Annual Program Summary.

The RMP Monitoring Plan consists of key questions for implementation, and effectiveness and validation monitoring relating to the various land use allocations and resource programs. The key questions are applied through monitoring requirements identified in the Monitoring Plan. Monitoring requirements describe appropriate sampling levels and how the key questions will be answered.

Although some monitoring requirements indicate that the information for some key questions will be found in the Annual Program Summary, this document has been designed to stand alone and all answers and information are provided in this report. When combined with the Annual Program Summary, there is some repetition of information.

The Resource Management Plan directs that the Annual Program Summary will track the progress of plan implementation, state the findings made through monitoring, specifically address the implementation monitoring questions posed in each section of the Monitoring Plan and serve as a report to the public. The Resource Management Plan monitoring effort for Fiscal Year 2001 addressed the 35 implementation questions relating to the 20 land use allocations and resource programs contained in the Monitoring Plan.

There are 51 effectiveness and validation questions included in the Monitoring Plan. These questions generally require some time to elapse after management actions are implemented in order to evaluate results that would provide answers. Examples of effectiveness and validation questions in the Monitoring Plan are: "Is the forest ecosystem functioning as a productive and sustainable ecological unit?", "Is the health of the Riparian Reserve improving?", "Are stands growing at a rate that will produce the predicted yields?", "What are the effects of management on species richness (numbers and diversity)?". These kinds of questions are mostly not able to be addressed in the first years of plan implementation. Effectiveness and validation monitoring status, progress and results will be reported in subsequent year monitoring reports as appropriate. Certain effectiveness monitoring efforts are currently underway through the Regional Ecosystem Office.

Monitoring Results and Findings

The results of answering the implementation questions in the Monitoring Plan are not easily characterized. Some questions may be answered in a yes or no manner. Some questions because of lack of activity in a particular aspect of a resource program may not be applicable. Many questions ask for a brief status report of an activity. The status-type of questions often lack thresholds of acceptable activity. Examples of this type of question are: "What is the status of designing and implementing wildlife restoration projects?", "What is the status of the preparation of assessment and fire plans for the Late-Successional Reserves?"

Although the nature of the monitoring questions makes any meaningful statistical summary difficult, some generalizations and highlights may be made.

There are 35 implementation monitoring questions. Monitoring results found full compliance with management action/direction in nineteen of the twenty land use allocations and resource programs identified for monitoring in the plan. Monitoring results of three of the 35 implementation monitoring questions showed variation in the level of activities compared to the assumed levels in the Resource Management Plan.

One question pertained to timber resources: "By land use allocation, how do timber sale volumes, harvested acres, and the age and type of harvest compare to the projections in the Resource Management Plan?"

Another question pertained to silvicultural activities: "Were the silvicultural (e.g. planting with genetically selected stock, fertilization, release, and thinning) and forest health practices anticipated in the calculation of the allowable sale quantity implemented?"

A third question pertained to the Little River Adaptive Management Area. The Little River Adaptive Management Area has not met certain requirements of the RMP. It does not have a functioning advisory committee, it does not have an approved plan, it has not tested the innovative practices that would test the emphasis of Little River Adaptive Management Area.

Discussion of Discrepancies

Timber Resources

The RMP Management Action/Direction for Timber Harvest states:

"The allowable sale quantity for the resource management plan is an estimate of annual average timber sale volume likely to be achieved from lands allocated to planned, sustainable harvest. This estimate, however, is surrounded by uncertainties."

"The allowable sale quantity represents neither a minimum level that must be met nor a maximum level that cannot be exceeded. It is an approximation because of the difficulty associated with predicting actual timber sale levels over the next decade, given the complex nature of many of the management actions/direction. It represents BLM's best assessment of the average amount of timber likely to be awarded annually in the planning are over the life of the plan, following a start-up period."

Except for the District declared Allowable Sale Quantity, projections are not intended as management action/direction, but rather are underlying RMP assumptions. Projected levels of activities are the approximate level expected to support the Allowable Sale Quantity.

In FY2002, 11.9 million board feet (MMBF) was sold. This represents 26% of the 45 MMBF allowable sale quantity. Cumulative information on timber harvest acres, volumes, and harvest types since the adoption of the RMP are provided in the Timber Resources section of the Annual Program Summary.

Short term legal, administrative, and Northwest Forest Plan implementation challenges have limited the ability to offer timber sales at the levels anticipated by the RMPs. These include:

Survey and Manage standard and guideline: The current constraints on the lands available for harvest with the current list of species and management recommendations covered by the Survey and Manage has been greater than anticipated by the RMP. Strategic surveys conducted over the next several years will help address fundamental questions of Survey and Manage (S&M)

species, including: is there a concern for persistence; is the species rare or uncommon; what is the appropriate management for the species; and do the reserve land allocations and Standard & Guidelines (S&Gs) of the NFP provide a reasonable assurance of species persistence? Criteria for management of high priority sites have yet to be developed for some of the uncommon species. Two lawsuits are currently underway regarding the Survey and Manage S&G. An amendment to the Northwest Forest Plan is being considered that would modify Survey and Manage standards and guidelines or replace them with the Special Status Species Program.

Resolution of Endangered Species Act Consultation Issues Associated with Anadromous Fish. National Marine Fisheries Service is currently re-evaluating salmon and steelhead listings for the West Coast in order to address circumstances where both hatchery and wild fish are present in an Evolutionarily Significant Unit. There is also a current appeal before the Ninth Circuit Court of Appeals regarding the U.S. District Court, District of Oregon decision which had the effect of de-listing the Oregon coast coho. In the interim timber sales have placed emphasis on partial cuts, i.e., sales for which either a "No Effect" (NE) or "Not Likely to Adversely Affect" (NLAA) biological determination can be made for listed anadromous fish. This emphasis is driven by circumstances in an attempt to effectively utilize appropriated funds and implement the Allowable Sale Quantity and socio-economic objectives of the RMP and NFP to the maximum extent possible. An amendment to the Northwest Forest Plan is being considered that would clarify the Aquatic Conservation Strategy requirements.

It is not possible at this time to accurately predict the effect of the uncertainties on the ability to implement the underlying assumptions that form the basis of the Allowable Sale Quantity. Amendments to the Northwest Forest Plan are being considered that would potentially affect the Survey and Manage standards and guidelines, and clarify the Aquatic Conservation Strategy. An evaluation is scheduled for fiscal year 2004 which will include an assessment of these and other circumstances regarding the implementation and objectives of the Resource Management Plan.

Silvicultural Activities

Variation in silvicultural activities from assumed levels in the RMP include the following:

Brush field Conversion - To date no acres have undergone conversion. It is not expected that any attempt would be made unless herbicides were available as a conversion tool.

Site Preparation (FIRE) - The number of acres prepared with prescribed fire, both broadcast treatment and pile treatment is about 44% of planned. A continued decline in trend is likely to continue due to less than expected levels of regeneration harvest and other resource concerns.

Site Preparation (OTHER) - The number of acres prepared with alternative site preparation techniques is about 4% of planned. Factors affecting this activity are the same as for prescribed fire.

Planting (regular stock) - Total planted acres since 1995 without regard to genetic quality is at 57% of RMP assumed levels due to lack of planned RMP levels of timber harvest. Reforestation with genetically unimproved planting stock is 204% of planned. Total planting for 2002 is less than 20% of the annual level anticipated in the RMP because the Roseburg District has been unable to award a timber sale with a regeneration harvest since 1997. Regeneration harvests are the mechanism by which areas are made available for planting to start new forest stands for subsequent rotations. It is likely that in 2003 and 2004, planting will fall to less than 10% of the expected annual level because of the lack of the regeneration harvests which were anticipated in the RMP.

Planting (improved stock) - In fiscal year 2002, 67% of the acres reforested were planted with genetically improved Douglas-fir. 59% of the acres planted were in the GFMA land use allocation. Only GFMA acres are counted towards RMP monitoring goals since genetic improvement is assumed to contribute to ASQ only when done on GFMA acres. A phase in period for use of

genetically improved Douglas-fir of 3 to 4 years was assumed to allow for older sales outside the GFMA land use allocation to be reforested and for seed orchards to reach production.

Planning for production of genetically improved stock has proved difficult due to the uncertainty of timber harvest timing. Seed must be sown one to three years prior to actual need. Due to decline in timber harvest overall and uncertainty in harvest timing, it is likely that this target will be approximately 13-35% of RMP levels by the end of the decade.

Maintenance/Protection - Acres of maintenance/protection treatments is currently 155% of planned levels. It is anticipated that at this rate, assumed RMP levels would be exceeded by 25-40%.

Precommercial Thinning (PCT) - Currently PCT is at assumed RMP levels. It is expected that at a minimum RMP goals will be met, or slightly exceeded over the decade.

Pruning - Currently pruning accomplishments are 132% of assumed RMP levels. Depending on funding this trend could continue. It is expected that RMP levels will be exceeded by 20 to 40% by decade's end.

Fertilization - Currently fertilization accomplishments are about 55% of assumed RMP levels. There is the potential to exceed planned RMP levels by about 20% if funding is available. However, implementation of future fertilization has been delayed by an administrative appeal of the proposed action.

Forest development, reforestation, silvicultural and timber stand improvement practices were accomplished in fiscal year 2002 through contracts valued at approximately $997,000.

Although silvicultural practices have varied from the assumed levels in the Resource Management Plan, they are reasonably consistent with and support the current level and types of timber harvest.

Little River Adaptive Management Area

The Little River Adaptive Management Area has not met certain requirements of the RMP. It does not have a functioning advisory committee, it does not have an approved plan, it has not tested the innovative practices that would test the emphasis of Little River Adaptive Management Area.

There is currently no strategy to resolve the discrepancies associated with the The Little River Adaptive Management. An evaluation is scheduled for fiscal year 2004 which will include an assessment of these and other circumstances regarding the implementation and objectives of the Resource Management Plan.

Recommendations and Conclusions

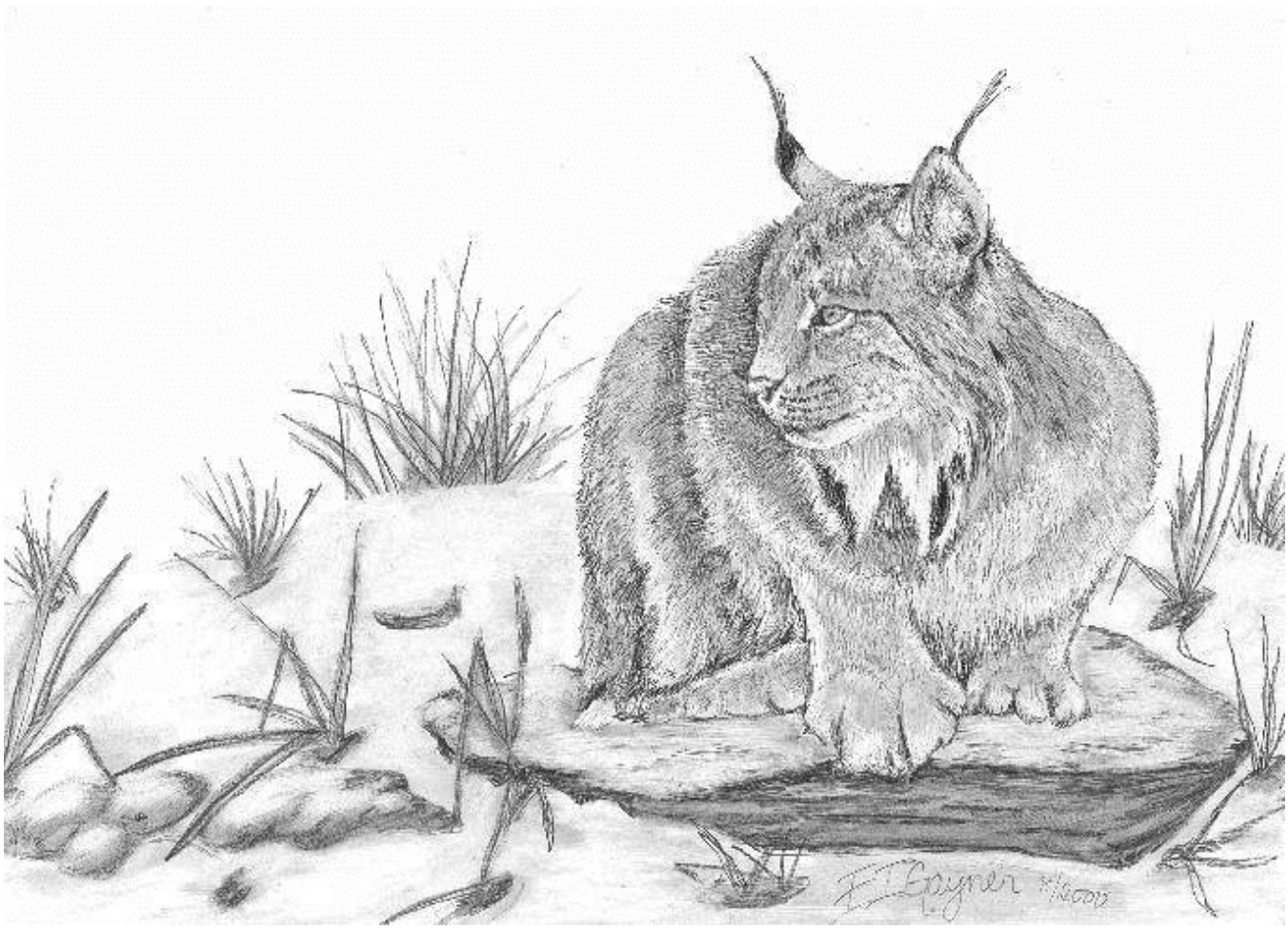
The Roseburg District has complied with all Resource Management Plan management action/direction in fiscal year 2002 activities. Implementation monitoring since the adoption of the Resource Management Plan in 1995 has indicated that the Roseburg District has consistently implemented the Resource Management Plan with a high degree of success. The few discrepancies that have been discovered by monitoring during the past seven years have been examined closely and corrective action has been taken. However, the departure of timber sales and silvicultural activities from the level of actions assumed in the Resource Management Plan and the discrepancies associated with the Little River Adaptive Management Area are a concern to the management of the Roseburg District.

The departures from assumed level of activities related to timber sales and silviculture in the Resource Management Plan are largely a result of conditions and uncertainties that the Roseburg District does not directly control. The discrepancies related to the Little River Adaptive

Management Area are a result of complex circumstances that will be carefully examined to determine an appropriate course of action. An evaluation in fiscal year 2004 will examine the implementation and objectives of the Resource Management Plan, including timber, silviculture and the Little River Adaptive Management Area. No major change in management direction or Resource Management Plan implementation is warranted at this time

Hundreds of discrete actions are reviewed through the 35 implementation monitoring questions. The Roseburg District has achieved a remarkable record in implementing the Resource Management Plan. Analysis of the fiscal year 2002 monitoring results concludes that the Roseburg District has complied with all Resource Management Plan management action/direction. Implementation of the Roseburg District Resource Management Plan involves the management of diverse natural resources through a complex mix of planning, budgeting, environmental analysis, compliance with many laws and regulations, on-the-ground actions, contracting, follow-up actions, monitoring and adaptive management that take place year after year and involves many BLM resource professionals and managers. The managers and employees of the Roseburg District take pride in the monitoring results of fiscal year 2002.

Resource Management Plan Monitoring Report



All Land Use Allocation

Expected Future Conditions and Outputs

Protection of SEIS special attention species so as not to elevate their status to any higher level of concern.

Implementation Monitoring

Monitoring Question 1:
Is the management action for the Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines being implemented as required?

Monitoring Requirement:
At least 20 percent of all management actions will be examined following the decision to implement the project.

Monitoring Performed:
Swiftwater Resource Area - Cat Tracks Commercial Thinning.

South River Resource Area - Partial Renovation and Partial Decommissioning of BLM road 29-4-23.1, Thompson Creek Tree Lining, and Weaver Road Commercial Thinning.

Findings:
Animals:
Swiftwater Resource Area - Cat Tracks EA and Contract.
Pre-disturbance surveys for the Oregon red tree vole (RTV) were completed on 114 acres in July 2001. The Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines as applicable to RTVs was implemented.

South River Resource Area - Partial Renovation and Partial Decommissioning of BLM road 29-4-23.1
The 29-4-23.1 road, segment B decommissioning, was evaluated for Del Norte Salamander (Plethodon elongatus) habitat, July 11, 2000. This evaluation determined habitat was not present; therefore pre-disturbance surveys were not required. This road segment was also evaluated for Oregon red tree vole (RTV) habitat. Habitat was not present and pre-disturbance surveys were not required. Surveys for *Helminthoglypta hertleini* (Oregon Shoulderband), *Megomphix hemphilli* (Oregon Megomphix), *Prophysaon coeruleum* (Blue-gray Tail-dropper), *Prophysaon dubium* (Papillose Tail-dropper), and *Pristiloma arcticum crateris* (Crater Lake Tightcoil) were conducted on August 15, 2000. The surveys determined no presence of these species. Great Gray Owl (Strix nebulosa) surveys were not required as the project was below the elevation that requires protocol surveys.

Thompson Creek Tree Lining
Thompson Creek was evaluated for Del Norte Salamander (*Plethodon elongatus*) habitat. No habitat was found; therefore pre-disturbance surveys were not required. Oregon red tree vole (RTV) surveys were conducted on November 20, 2001. One tree that shown evidence of nesting material was climbed on March 19, 2002. The nest was inactive. No other nests were found within 100 meters of the tree. It was determined that no impact to the species would occur within the project area. Habitat was evaluated for *Helminthoglypta hertleini* (Oregon Shoulderband), *Megomphix hemphilli* (Oregon Megomphix), *Prophysaon coeruleum* (Blue-gray Tail-dropper), and *Prophysaon dubium* (Papillose Tail-dropper) on November 20, 2001. No habitat was present

within the project area; therefore pre-disturbance surveys were not required. Great Gray Owl (Strix nebulosa) surveys were not required as the project was below the elevation that requires protocol surveys.

Weaver Road Commercial Thinning
Weaver Road Commercial Thinning was not evaluated for Del Norte Salamander habitat because the species was moved to Survey and Manage Category D (Uncommon, Pre-disturbance surveys not practical or not necessary) (Record of Decision and Standards and Guidelines, for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines, January 2001). Pre-disturbance surveys were not required within the project area. Oregon red tree vole (RTV) surveys were completed on April 24, 2001. The units proposed in the Weaver Road Thinning that met the average conifer diameter required for surveys were units E1, E2, E5, J, L, and M. Of these units, E1, E2, J, L, and M were dropped from the sale. In unit E5, a known red tree vole site was located. The unit boundary was adjusted to avoid impact to the site. The rest of the units did not meet protocol requirements; therefore protocol surveys were not required. Surveys were conducted on December 5-6, 2000 for *Helminthoglypta hertleini* (Oregon Shoulderband), *Megomphix hemphil I* (Oregon Megomphix), *Prophysaon coeruleum* (Blue-gray Tail-dropper), and *Prophysaon dubium* (Papillose Tail-dropper). *Prophysaon coeruleum* was the only species found within the project area. *Prophysaon coeruleum* was determined to be a common species (Record of Decision and Standards and Guidelines, for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines, January 2001, pg 53). Known sites of the species were released from survey requirements. Protection is not required. No other species were found in the rest of the units. Great Gray Owl (Strix nebulosa) surveys were not required as the project is below the elevation that requires protocol surveys.

Plants:
Swiftwater Resource Area - The Cat Tracks Project was surveyed in winter season 2001 and in spring/summer season 2001. The site was determined non-habitat for special status plants and SEIS Special Attention Species. The management action for the Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines is being implemented.

South River Resource Area - The 29-4-23.1 road, segment B decommissioning, was surveyed 5/22/2001 for Special Status Plants and SEIS Special Attention Species. No Special Status Species or SEIS Special Attention Species were found.

Thompson Creek was surveyed on 4/25/2000 for Special Status Species and SEIS Special Status Species. *Euonymus occidentalis*, a Special Status Plant Tracking Species was found. No SEIS Species Status Species were found. Because *E. occidentalis* is not likely to survive consistent flooding, recommendations were made to avoid inundation of habitat by not falling trees within a distance of 50 feet from the site. Contracted activities followed these recommendations.

Weaver Road Commercial Thinning was surveyed for Special Status Plants and SEIS Special Attention Species, 9/18/2000 and 5/1/2001. The following species were found:

Buxbaumia viridis Bryophyte	Units E1, E4, F, G, H1
Otidea leporina Fungi	Units A
Hydum umbilicatum Fungi	Units A, E6, F, G, H1, H3
Craterellus tubaeformis Fungi	Units A, C, E2, F, H3
Ramaria stuntzii Fungi	Units E4

All sites had recommendations of 100 foot buffers. These buffered areas were removed from the project area.

Follow-up Monitoring
None.

Conclusions:
Required management action for the Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines is being implemented.

Comment/Discussion:
None.

Riparian Reserves

Expected Future Conditions and Outputs

See Aquatic Conservation Strategy Objectives.

Provision of habitat for special status and SEIS special attention species.

Implementation Monitoring

Monitoring Question 1:
Is the width of the Riparian Reserves established according to RMP management direction?

Monitoring Requirement:
At least 20 percent of management activities within each resource area will be examined prior to project initiation and reexamined following project completion, to determine whether the width of the riparian reserves were maintained.

Monitoring Performed:

Swiftwater Resource Area - Cat Tracks Commercial Thinning. An accuracy of 10% is expected during layout of the sale.

South River Resource Area
Program review. Follow-up monitoring on Kola's Ridge Commercial Thinning. Follow-up monitoring is pending on Final Curtain timber sale (sold-unawarded), Class of 98 timber sale (sold-unawarded), and Dream Weaver timber sale (sold-unawarded).

Findings:
Swiftwater Resource Area
Cat Tracks Commercial Thinning
This sale has been laid out and sold but has not as yet been operated on. Riparian Reserve boundaries were not established on the ground since commercial thinning would occur both inside the Riparian Reserve and outside in the Matrix rendering a measurable boundary unnecessary. A different marking prescription was used in the Matrix (retain 120 sq. ft. of basal area) vs. a heavier mark in the Riparian Reserve (retain 100 sq. ft. of basal area). This difference would not be noticeable to the observer as a delineation of the edge of the Riparian Reserve. The objective of maintaining a Riparian Reserve will be met as laid out.

South River Resource Area
FY 2002 harvest activities are comprised of Weaver Road Commercial Thinning, Bland Days Commercial Thinning, and Slimewater Density Management. Weaver Road and Bland Days do not contain established no-cut Riparian Reserve boundaries. Slimewater Density Management is in LSR. None of the FY 2002 projects require monitoring of Riparian Reserve widths.

Follow-up Monitoring:
Kola's Ridge Commercial Thinning:
As part of the final inspection process, the contract administrator for Kola's Ridge Commercial Thinning inspected the boundaries of the Riparian Reserves established for this sale. The widths that were measured in the pre-activity monitoring (FY 2001 Monitoring Report) were found to be unchanged after harvest. Follow-up monitoring is competed on Kola's Ridge. Follow-up monitoring is pending on Final Curtain timber sale (sold-unawarded), Class of 98 timber sale (sold-unawarded), and Dream Weaver timber sale (sold-unawarded).

Conclusion:
Riparian reserve widths have been established according to RMP management direction.

South River Resource Area – Riparian reserve widths for Kola's Ridge were established according to RMP management direction and maintained after harvest.

Monitoring Question 2:
Are management activities in Riparian Reserves consistent with SEIS Record of Decision Standards and Guidelines, and RMP management direction?

Monitoring Requirement:
At least 20 percent of management activities within Riparian Reserves will be examined prior to project initiation and reexamined following project completion, to determine whether the actions were consistent with the SEIS Record of Decision Standards and Guidelines and ROD/RMP management direction. In addition to reporting the results of this monitoring, the Annual Program Summary will also summarize the types of activities that were conducted or authorized within Riparian Reserves.

Monitoring Performed:

Swiftwater Resource Area – Cat Tracks Commercial Thinning

South River Resource Area - Three projects were selected for monitoring, consisting of the Suicide Creek Culvert Replacement, St. John Creek Culvert Replacement and Bland Days Commercial Thinning. Decisions for these projects were issued in fiscal year 2002, with project completion expected in the summer of 2003. Follow-up monitoring is pending on the Class of 98 timber sale (sold-unawarded).

Findings:

Swiftwater Resource Area - Cat Tracks Commercial Thinning
The ROD/RMP (p. 28) contains management direction to "Design and implement watershed restoration projects in a manner that promotes long-term ecological integrity of ecosystems, conserves the genetic integrity on native species, and attains Aquatic Conservation Strategy objectives." Additional direction is given to "Design and implement fish and wildlife habitat restoration and enhancement activities in a manner that contributes to attainment of Aquatic Conservation Strategy objectives." These objectives will be met by the sale as laid out. The commercial thinning of the Riparian Reserve will accelerate tree growth and thereby attain late-successional features more quickly than not entering these stands. Timber sale features will also result in two trees per acre being felled or girdled within the Riparian Reserve to provide a source of interim woody debris that is currently lacking in these units.

South River Resource Area - Suicide Creek Culvert Replacement
As stated in the ROD/RMP (p. 134), the primary objectives in the design and construction of stream crossings are:

> "To preclude stream crossings from being a direct source of sediments to streams thus minimizing water quality degradation and provide [sic]unobstructed movement for aquatic fauna."
>
> "To create a stable roadway that will minimize soil erosion and water quality degradation."

This project will replace two large culverts with a single-span concrete bridge designed to pass a 100-year flood event. The present culverts have severely downcut the stream bed at the outflow, resulting in increased fine sediment. This has also created a fall that is impassable to most fish.

Replacement of the culverts will correct these problems, consistent with objectives 2, 3, 4 and 5 of the Aquatic Conservation Strategy, and consistent with management direction from the ROD/RMP.

To reduce potential sedimentation associated with construction activities, the following best management practices (ROD/RMP, pp.134-36) and project design criteria will be employed:

- In-stream construction activities will be restricted to the period between July 1 and September 15, during low summer flows. This is consistent with conditions of the General Authorization of the Oregon Division of State Lands.
- Stream flow will be pumped or otherwise diverted around the work area during construction activities.
- In-stream equipment operation will be limited to the greatest degree practicable.

Waste material will be end-hauled to an authorized upland site for disposal.

- Bridge abutments and stream banks immediately above and below the bridge will be armored with rip-rap to prevent erosion.
- Disturbed areas will be revegetated with native grasses.

St. John Creek Culvert Replacement

The same objectives identified with regard to the Suicide Creek project are applicable to the replacement of two large stream crossing culverts on St. John Creek. Replacement of the culverts will restore fish access to an estimated 3.5 miles of stream habitat.

The existing culverts will be replaced with open-arched pipes designed to pass a 100-year flood event. The pipes will be sized to greater than full bank-width. This will reduce in-pipe water velocity, which will reduce bank and channel scour, and allow the accumulation of streambed substrates. This will allow aggrading of the streambed, and will facilitate upstream and downstream passage by fish and other aquatic fauna. Best management practices and project design criteria to be employed are consistent with those described for the Suicide Creek project.

Bland Days Commercial Thinning

Unit 1 (Unit A from the South Umpqua Connectivity Density Management Environmental Assessment # OR-105-00-03) encompasses approximately 2 acres allocated as Riparian Reserve. This area may be characterized as a small sag pond that forms the headwaters of a small, intermittent stream.

In keeping with the recommendations of soil and hydrology staff, approximately 1 acre was excluded from treatment to protect the sag pond. The stream exiting the pond was buffered with a minimum 20-foot wide buffer to protect stream bank and channel integrity, and to provide a filter strip to trap and prevent sediment from reaching the stream. This is consistent with objectives 3, 4 and 5 of the Aquatic Conservation Strategy (ROD/RMP, p. 19).

Within the remainder of the acre of Riparian Reserve, density management will be applied. The objective is to reduce tree density to approximately 70 trees per acre. At this density, there should be sufficient light reaching the forest floor to allow for germination and development of shrubs and trees that will form a secondary canopy layer in an area where the current overstory is closed and single-layered.

Density management in Riparian Reserves is consistent with management direction (ROD/RMP, p. 25) to "Apply silvicultural practices for Riparian Reserves to control stocking, reestablish and manage stands, and acquire vegetation characteristics needed to attain Aquatic Conservation Strategy Objectives." The action is also consistent with objectives 8 and 9 of the Aquatic Conservation strategy (ROD/RMP, p. 20) to "Maintain and restore the species composition and structural diversity of plant communities in riparian zones . . ." and to "Maintain and restore habitat to support well distributed populations of native plant, invertebrate, and invertebrate riparian dependent species."

Follow-up Monitoring:
Follow-up monitoring is pending on Suicide Creek Culvert Replacement, St. John Creek Culvert Replacement, Bland Days Commercial Thinning, and Class of 98 timber sale (sold-unawarded).

Conclusion:
Management activities in Riparian Reserves were consistent with SEIS Record of Decision Standards and Guidelines, and RMP management direction.

Comment/Discussion:
None.

Monitoring Question 3:
A) Do all mining operations have a plan of operations that address the required issues identified in the RMP? B) Where alternatives exist, are structures, support facilities, and roads located outside the Riparian Reserves? C) Are all solid and sanitary waste facilities handled as outlined in management direction in the minerals management portion of the RMP?

Monitoring Requirement:
All approved mining Plans of Operations will be reviewed to determine if: A) both a reclamation plan and bond were required B) structures, support facilities and roads were located outside of Riparian Reserves, or in compliance with management action/direction for Riparian Reserves if located inside the Riparian Reserve C) and if solid and sanitary waste facilities were excluded from Riparian Reserves or located, monitored, and reclaimed in accordance with RMP management direction.

Monitoring Performed:
Program review.

Findings:
No plans of operations were filed during fiscal year 2001.

Conclusion:
RMP objectives were met.

Comment/Discussion:
None.

Late-Successional Reserves

Expected Future Conditions and Outputs

Development and maintenance of a functional, interacting, late-successional, and old-growth forest ecosystem in Late-Successional Reserves

Protection and enhancement of habitat for late-successional and old-growth forest-related species including the northern spotted owl and marbled murrelet.

Implementation Monitoring

Monitoring Question 1:
Were activities conducted or authorized within Late-Successional Reserves consistent with SEIS Record of Decision Standards and Guidelines, RMP management direction and Regional Ecosystem Office review requirements?

Monitoring Requirements:
At least 20 percent of the activities that are authorized or conducted within Late-Successional Reserves will be reviewed in order to determine whether the actions were consistent with SEIS Record of Decision Standards and Guidelines, RMP management direction and Regional Ecosystem Office review requirements.

Monitoring Performed:
Swiftwater Resource Area – Review of Swiftwater activities.

South River Resource Area – Manual maintenance, precommercial thinning, and reforestation surveys.

Findings:
Swiftwater Resource Area - Review of activities showed that the only projects within LSRs were tree planting, manual maintenance of seedlings, precommercial thinning and reforestation surveys. These activities meet the criteria for exemption from REO review or are consistent with the LSR Assessment and are also consistent with the SEIS ROD and RMP.

South River Resource Area - Manual maintenance was completed on 377 acres within the LSRs. Treatment was done on 325 acres in LSR #223 and 52 acres in LSR #259. These units were consistent with the criteria of undesirable vegetation (competition) delaying attainment of late-successional conditions. All manual maintenance units were reviewed so that they met the treatment specifications required to meet LSR objectives. Certain species were reserved from cutting. Sprouting hardwood clumps were cut to one main sprout to maintain the hardwood component.

Precommercial thinning was completed on 905 acres within the LSRs; 467 acres in LSR #223, 335 acres in LSR #259, and 103 acres in LSR #261. Certain species were reserved from cutting. Sprouting hardwood clumps were cut to one main sprout to maintain the hardwood component. An additional 85 acres were thinned by girdling in LSR #223. Based on a diameter limit, only conifers were girdled and left standing and hardwoods were not treated. All the thinning units were reviewed so that they met the treatment specifications and LSR objectives from LSR Assessments and the REO exemption criteria.

Reforestation surveys were conducted on 1,101 acres within the LSRs to monitor previous treatments and to recommend future treatments.

Conclusion:
Swiftwater Resource Area – RMP objectives were met.

South River Resource Area – These maintenance and precommercial thinning activities meet the criteria for exemption from REO review or are consistent with the LSR Assessment and are also consistent with the SEIS ROD and RMP.

Comment/Discussion:
Swiftwater Resource Area - None.

South River Resource Area – The Slimewater Creek Density Management timber sale was sold in FY 02, however no activity was conducted on the contract area during the year. Monitoring on this sale in LSR #223 will take place during FY 03.

Little River Adaptive Management Area

Expected Future Conditions and Outputs

Utilization of Adaptive Management Areas for the development and application of new management approaches for the integration and achievement of ecological health, and economic and other social objectives.

Provision of well-distributed, late-successional habitat outside reserves; retention of key structural elements of late-successional forests on lands subjected to regeneration harvest; restoration and protection of riparian zones; and provision of a stable timber supply.

Implementation Monitoring

Monitoring Question 1
What is the status of the development of the Little River Adaptive Management Area plan, and does it follow management action/direction in the RMP ROD (pg 83-83)?

Monitoring Requirements
Report the status of AMA plan in Annual Program Summary as described in Question 1.

Monitoring Performed:
Little River AMA plan reviewed.

Findings:
In October, 1997 REO reviewed a draft of the Little River AMA plan. Both Roseburg BLM and Umpqua National Forest are currently operating under the draft plan. No strategy has been developed yet to finalize the draft plan.

Conclusion:
RMP requirements were met.

Matrix

Expected Future Conditions and Outputs

Production of a stable supply of timber and other forest commodities.

Maintenance of important ecological functions such as dispersal of organisms, carryover of some species from one stand to the next, and maintenance of ecologically valuable structural components such as down logs, snags, and large trees.

Assurance that forests in the Matrix provide for connectivity between Late-Successional Reserves.

Provision of habitat for a variety of organisms associated with early and late-successional forests.

Implementation Monitoring

Monitoring Question 1:
Is 25-30 percent of each Connectivity/Diversity Block maintained in late-successional forest condition as directed by RMP management action/direction?

Monitoring Requirements
At least 20 percent of the files on each year's timber sales involving Connectivity/Diversity Blocks will be reviewed annually to determine if they meet this requirement.

Monitoring Performed:
Bland Days Commercial Thinning

Findings:
Unit #1 of the Bland Days Commercial Thinning falls within Connectivity/Diversity Block 38. This block currently has 45 percent maintained in late-successional condition. Thinning of unit #1 will result in no change to this percentage.

Conclusion:
Guidelines established by the RMP have been met.

Comment/Discussion:
None.

Monitoring Question 2
Are late-successional stands being retained in fifth-field watersheds in which Federal forest lands have 15 percent or less late-successional forest?

Monitoring Requirements
All proposed regeneration harvest timber sales in watersheds with less than 15 percent late-successional forest remaining will be reviewed prior to sale to ensure that a watershed analysis has been completed.

Monitoring Performed:
None

Findings:
No timber sales involving regeneration harvest were sold in fiscal year 2001.

Conclusion:
No regeneration harvest timber sales have been planned in watersheds with less than 15 percent late-successional forest. RMP objectives have been met.

Comment/Discussion:
None.

Air Quality

Expected Future Conditions and Outputs

Attainment of National Ambient Air Quality Standards, Prevention of Significant Deterioration goals, and Oregon Visibility Protection Plan and Smoke Management Plan goals.

Maintenance and enhancement of air quality and visibility in a manner consistent with the Clean Air Act and the State Implementation Plan.

Implementation Monitoring

Monitoring Question 1:
Were efforts made to minimize the amount of particulate emissions from prescribed burns?

Monitoring Requirements
At least twenty percent of prescribed burn projects carried out in fiscal year 2002 and subject to the current RMP will be randomly selected for monitoring to assess what efforts were made to minimize particulate emissions.

Monitoring Performed:
Program review.

Project Monitored, Specific Information:
Approximately 1000 acres of hillside pasture and open hardwood stands were broadcast burned at the NBHMA in September of 2002.

Findings:
Swiftwater Resource Area - Successful efforts were made to minimize particulate emissions from prescribed burning. Burning was completed during the "open burning season" as designated by the Douglas Forest Protection Agency (DFPA). The fuels consumed by the prescribed fire were light, flashy fuels including grass, brush, and hardwood litter. These flash fuels were consumed quickly during the burn, and only the occasional stump or large log burned for any length of time. Weather conditions featuring unstable air masses were present the days of ignition. This provided good vertical lifting and mixing, aiding in rapid dispersion of the smoke (particulate emissions). Mop-up of burning logs and stumps near control lines reduced the amount of residual smoke to a minimum. No smoke intrusions occurred in the local Designated Areas monitored by the DFPA.

South River Resource Area - The South River Resource Area accomplished 48 acres of prescribed broadcast burning in the spring of 2002. All burning was done under approved Smoke Management clearance from the Oregon Department of Forestry. Two timber sale units on the Kernel John timbr sale were burned on May 10, 2002. Helicopter ignition of these units resulted in short duration burns. Residual smoke was minimized by rapid mopup and significant rains occurred in the week following ignition. Both units were free of visual smokes within 1 month of being burned. An aerial (helicopter) scan of the units utilizing infrared equipment did not locate any residual hot spots. All units were 100% moped up prior to start of fire season. No smoke intrusions were reported from these prescribed burns.

Conclusion:
Swiftwater Resource Area - RMP requirements were met.

South River Resource Area - Efforts were made to reduce particulate emissions from prescribed burns.

Comment/Discussion:
None.

Monitoring Question 2:
Are dust abatement measures used during construction activities and on roads during BLM timber harvest operations and other BLM commodity hauling activities where needed?

Monitoring Requirements:
At least 20 percent of the construction activities and commodity hauling activities carried out in fiscal year 2001 and subject to the current RMP will be monitored to determine if dust abatement measures were implemented where needed.

Monitoring Performed:
Program review.

Findings:
No road construction activities or timber harvest operations occurred during fiscal year 2002 that required dust abatement measures.

Conclusion:
RMP requirements were met.

Comment/Discussion:
None.

Water and Soils

Expected Future Conditions and Outputs

Restoration and maintenance of the ecological health of watersheds. See Aquatic Conservation Strategy Objectives.

Improvement and/or maintenance of water quality in municipal water systems.

Improvement and/or maintenance of soil productivity.

Reduction of existing road mileage within Key Watersheds or at a minimum no net increase.

Implementation Monitoring

Are site specific Best Management Practices (BMP), identified as applicable during interdisciplinary review, carried forward into project design and execution?

Monitoring Requirement:
At least 20 percent of the timber sales and silviculture projects will be selected for monitoring to determine whether or not Best Management Practices were planned and implemented as prescribed in the E.A.. The selection of management actions to be monitored should include a variety of silvicultural practices, Best Management Practices, and beneficial uses likely to be impacted where possible given the monitoring sample size.

Monitoring Performed:
Swiftwater Resource Area – Cat Tracks Commercial Thinning.

South River Resource Area - Weaver Road Commercial Thinning:
Monitoring of the Weaver Road EA showed that all except one BMP/recommendation identified during the interdisciplinary review was carried forward into the project design. A recommendation to decommission a cutoff between two roads was not carried forth into the project design but will be completed by the maintenance crew at the same time they decommission the other roads listed in the EA.

Findings:
Swiftwater Resource Area - Cat Tracks Commercial Thinning:
Soils related BMPs identified as applicable during the interdisciplinary review and EA process were carried forward into on-the-ground project design.

South River Resource Area - Weaver Road Commercial Thinning:
Monitoring of the Weaver Road EA showed that all except one BMP/recommendation identified during the interdisciplinary review was carried forward into the project design. A recommendation to decommission a cutoff between two roads was not carried forth into the project design but will be completed by the maintenance crew at the same time they decommission the other roads listed in the EA.

Follow-up Monitoring:
Follow-up monitoring is pending on Dream Weaver timber sale (sold-unawarded) -97, Buck Fever timber sale (sold-unawarded)-97, Class of 98 timber sale, Kola's Ridge commercial thinning, and Weaver Road commercial thinning.

Conclusion:
Requirements were met.

Comment/Discussion:
None.

Monitoring Question 2:
Have forest management activities implemented the management direction for ground-based systems and mechanical site preparation as listed in the fiscal year 2001 Plan Maintenance?

Monitoring Requirement:
All ground-based activities, including mechanical site preparation, will be assessed after completion to determine if management direction has been implemented.

Monitoring Performed:
Swiftwater Resource Area – Program review showed that there were no timber sales in Swiftwater RA where ground-based activities took place.

South River Resource Area – Program Review.

Findings:
Swiftwater Resource Area – There were no ground-based activities during FY 2002.

South River Resource Area – No ground-based timber harvest activities occurred in FY 02.

Conclusion:
RMP requirements have been met.

Comment/Discussion:
None.

Monitoring Question 3:
Was prescribed burning on highly sensitive soils (Category I) avoided? If prescribed burning took place on highly sensitive soils was a rationale and analysis provided in the environmental assessment or other documents of why the burning was essential for resource management and was there a site specific prescription provided to minimize adverse impacts on soil properties? Was the prescription to minimize impacts on soil properties implemented successfully?

Monitoring Requirement:
All prescribed burning on highly sensitive soils carried out in the last fiscal year will be assessed to answer question 7.

Monitoring Performed:
Swiftwater Resource Area – Program review showed that approximately 1000 acres of broadcast burning occurred at the NBHMA in the fall of 2002. Some of the burning occurred in areas of sensitive soils.

South River Resource Area – Kernel John units 3 and 5.

Findings:
Swiftwater Resource Area – - Burning at the NBHMA occurred in some areas described by the soil scientist as Category 1 soils (highly sensitive to prescribed burning). These sensitive soils were designated as areas of shallow soil. Avoiding the use of prescribed fire on Category 1 soils applies when burning / consuming heavy fuel loads, resulting in long duration burns that consume large amounts of duff and soil organics and can negatively impact soil properties.

The burning prescription used resulted in a high intensity, very short duration fire that did not allow a negative heat pulse to penetrate deeply into the soil. The flash fuels burned and consumed quickly, generally within minutes of ignition. The burns were necessary to rejuvenate and stimulate the production of grass, forbs, and brush species which are essential for quality

Columbia White Tail Deer habitat. The NBHMA EIS more than adequately describes the need for prescribed burning, any associated impacts on soil properties, and the creation of better forage material.

South River Resource Area – Both units broadcast burned during the spring of 2002 had Category I soils. Burning these units was required to achieve reforestation as the units helicopter logged. The EA for the Kernel John timber sale provided rationale and analysis of the need to broadcast burn units 3 and 5 for site preparation. The Prescribed Fire Burnplans included site specific prescriptions to minimize impacts to soils (minimizing bare soil exposure). Post-burn field review was conducted on May 17, 2002. Unit 3 had portions that exceeded the 15 percent bare soil threshold. Overall, the unit averaged less than 15 percent bare soil exposed from the burn. Unit 5 averaged less than 10 percent bare soil from the burn. Both unit 3 and unit 5 have met the standards established in the ROD/RMP.

Conclusion:
RMP requirements were met.

Comment/Discussion:
None.

Monitoring Question 4:
What watershed restoration / rehabilitation projects are being developed and implemented?

Monitoring Requirement:
Watershed restoration / rehabilitation projects will be reviewed for status.

Monitoring Performed:
Swiftwater Resource Area – Program review showed that approximately 1000 acres of broadcast burning occurred at the NBHMA in the fall of 2002. Some of the burning occurred in areas of sensitive soils.

South River Resource Area - Program review.

Findings:
Swiftwater Resource Area – Burning at the NBHMA occurred in some areas described by the soil scientist as Category 1 soils (highly sensitive to prescribed burning.) These sensitive soils were designated as areas of shallow soil. Avoiding the use of prescribed fire on Category 1 soils applies when burning / consuming heavy fuel loads, resulting in long duration burns that consume large amounts of duff and soil organics and can negatively impact soil properties.

The burning prescription used resulted in a high intensity, very short duration fire that did not allow a negative heat pulse to penetrate deeply into the soil. The flash fuels burned and consumed quickly, generally within minutes of ignition. The burns were necessary to rejuvenate and stimulate the production of grass, forbs, and brush species which are essential to quality Columbia White Tail Deer habitat. The NBHMA EIS more than adequately describes the need for prescribed burning, any associated impacts on soil properties, and the creation of better forage material.

South River Resource Area - The district's watershed restoration / rehabilitation work was accomplished jointly through the BLM's maintenance program, Job-in-the-Woods funding, the district's timber sale program, Title II and various other sources of funding. Projects that were developed and/or implemented in fiscal year 2002 include stream habitat restoration and large culvert replacement to reduce sediment risk and restore fish passage.

Following are specific watershed restoration/rehabilitation projects developed and/or implemented in fiscal year 2002 that were funded independently of timber sales:

Barriers to Fish Passage Removed (This is also reported in Fish Habitat Program)
The following culverts were replaced in 2002:

- Union Creek Culvert
- Live Oak Creek Culvert
- Holmes Creek Culvert
- Weaver Creek Culvert
- Little Canyon Creek Culverts (2 structures)
- Andrews Creek Culverts (3 structures)
- Gassey & Field Creek Culverts (2 structures)
- Lees Creek Culvert
- Little Wolf Creek Culvert
- Ringtail Creek Culvert
- Woodstock Creek Culvert
- Copperhead Culvert
- Buckshot Culvert
- Evarts Culvert

In-stream Placement of Large Wood and stream bank stabilization (This is also reported in Fish Habitat Program).

Large wood was placed in stream channels to improve habitat in two different creeks:

- Thompson Creek. One mile of stream was treated.
- Upper Smith River. One mile of stream was treated.

Conclusions:
RMP objectives were met.

Comment/Discussion:
None.

Monitoring Question 5:
What is the status of closure, elimination or improvement of roads to further Aquatic Conservation Strategy Objectives, and to reduce the overall road mileage within Key Watersheds?

Monitoring Requirement:
The Annual Program Summary will address Implementation Question 5.

Monitoring Performed:
Program review.

Findings:
Since the implementation of the Roseburg District RMP, roads have been treated to further Aquatic Conservation Strategy Objectives. The following road definitions apply to Tables 30-33. These tables summarize road activities for the district and show how those activities further Aquatic Conservation Strategy Objectives by watershed and reduce overall road mileage within Key Watersheds.

<u>Definitions</u>
Improve Drainage &/or Road Surfacing - Road improvements in which extra drainage structures are added and/or rock is added using BMPs in order to raise the road level to current RMP standards, effectively reduce sedimentation, and increase infiltration of intercepted flows.

Decommission - Existing road segment will be closed to vehicles on a long-term basis, but may be used again in the future. Prior to closure, the road will be prepared to avoid future maintenance needs; the road will be left in an “erosion-resistant” condition which may include establishing

cross drains, and removing fills in stream channels and potentially unstable fill areas. Exposed soils will be treated to reduce sedimentation. The road will be closed with a device similar to an earthen barrier (tank trap) or equivalent.

Full Decommission - Existing road segments determined to have no future need may be subsoiled (or tilled), seeded, mulched, and planted to reestablish vegetation. Cross drains, fills in stream channels and potentially unstable fill areas may be removed to restore natural hydrologic flow. The road will be closed with a device similar to an earthen barrier (tank trap) or equivalent.

Conclusion:
RMP requirements to reduce overall road mileage within Key Watersheds were met.

Table 27. Swiftwater Resource Area Key Watershed Completed and Contract Awarded Road Projects through Fiscal Year 2002.

5th Field Watershed	Permanent New Road Construction (miles)	Decommission of Existing Roads (miles)	Full Decommission of Existing Roads (miles)	Road Improvements (Drainage, Surfacing, etc.) (miles)
Canton Creek*	0.2	2	27.6	22
Upper & Middle Smith River	1.4	6.3	10.7	3.7
Total	1.6	8.3	38.3	25.7

* Figures include USFS completed projects within watershed.

Table 28. Swiftwater Non-Key Watershed Completed and Contract Awarded Road Projects through Fiscal Year 2002.

5th Field Watershed	Permanent New Road Construction* (miles)	Decommission of Existing Roads (miles)	Full Decommission of Existing Roads (miles)	Road Improvements (Drainage, Surfacing, etc.) (miles)
Elk Creek	0.4	2.8	2.7	14.8
Upper Umpqua	0.4	1.4	3.9	22.3
Calapooya	0.1	0.0	0.2	9.5
Little River *	0.3	0.0	2.9	49.3
Rock Creek	0.0	0.9	0.9	5.0
Lower North Umpqua	0.0	12.3	0.6	0.0
Middle North Umpqua	0.2	0.4	2.4	5.7
R/W Plats 95-97	5.3	0.0	0.0	0.0
Total	6.7	17.8	13.6	106.6

* Figures include USFS completed projects within watershed.

Table 29. South River Key Watershed Completed and Contract Awarded Road Projects through Fiscal Year 2002.

5th Field Watershed	Permanent New Road Construction* (miles)	Decommission of Existing Roads (miles)	Full Decommission of Existing Roads (miles)	Road Improvements (Drainage, Surfacing, etc.) (miles)
Lower Cow Creek	0.3	0.0	0.0	0.7
South Umpqua River	1.6	1.2	6.0	37.6
Middle South Umpqua River/Dumont Creek	0.0	0.0	0.7	0.0
Total	1.9	1.2	6.7	38.3

* 1.0 miles of the total 1.8 miles of permanent road were built by private Right-of-way holders.

Table 30. South River Non-Key Watershed Completed and Contract Awarded Road Projects through Fiscal Year 2002.

5th Field Watershed	Permanent New Road Construction* (miles)	Decommission of Existing Roads (miles)	Full Decommission of Existing Roads (miles)	Road Improvements (Drainage, Surfacing, etc.) (miles)
Lower Cow Creek	5.4	0.0	0.0	0.3
Middle Fork Coquille River	0.5	0.0	0.0	9.2
Myrtle Creek	2.3	0.0	4.9	30.9
Middle South Umpqua River/Rice Creek	2.2	0.0	0.1	0.0
Ollala Creek/Lookingglass Creek	0.8	0.0	3.0	13.5
South Umpqua River	1.2	0.0	2.3	2.8
Total	12.4	0.0	10.3	56.7

* 9.5 miles of the total 11.7 miles of permanent road were built by private Right-of-way holders.

Wildlife Habitat

Expected Future Conditions and Outputs

Maintenance of biological diversity and ecosystem health to contribute to healthy wildlife populations.

Implementation Monitoring

Monitoring Question 1:
Are suitable (diameter and length) numbers of snags, coarse woody debris, and green trees being left, in a manner as called for in the SEIS Record of Decision Standards and Guidelines and RMP management direction?

Monitoring Requirement:
At least 20 percent of regeneration harvest timber sales in each resource area will be examined by pre-and post-harvest (and after site preparation) inventories to determine snag and green tree numbers, heights, diameters, and distribution within harvest units. Snags and green trees left following timber harvest activities (including site preparation for reforestation) will be compared to those that were marked prior to harvest.

The same timber sales will also be inventoried pre- and post-harvest to determine if SEIS Record of Decision and RMP down log retention direction has been followed.

Monitoring Performed:
Program review.

Findings:
No Regeneration harvest timber sales occurred during fiscal year 2001.

Follow-up Monitoring
Followup monitoring is pending on Class of 98 timber sale (sold-unawarded), Dream Weaver timber sale (sold-unawarded), and Sweet Pea timber sale (sold-unawarded).

Conclusion:
RMP objectives are being met.

Comment/Discussion:
None.

Monitoring Question 2:
Are special habitats being identified and protected?

Monitoring Requirement:
At least 20 percent of BLM actions, within each resource area, on lands including or near special habitats will be examined to determine whether special habitats were protected.

Monitoring Performed:
Swiftwater Resource Area – Pre-disturbance surveys for the Oregon red tree vole (RTV) were completed on 114 acres in July 2001. The Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines as applicable to RTVs was implemented.

South River Resource Area – Slimewater LSR Density Management, Thompson Creek Large Wood Recruitment, and Weaver Road Commercial Thinning.

Findings:
Swiftwater Resource Area - Three active red tree vole sites were identified though surveys and protected with 10 acre buffers according to the Record of Decision and Standard and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines..

South River Resource Area - Surveys were conducted throughout the project areas identified above for several special status species according to protocol. No special habitats were found to occur within the project areas during these surveys.

Special habitat for peregrine falcon (cliff eyrie) and Thompson big-eared bat (abandoned mines) has been identified in the resource area. A plan for protection and management of the peregrine falcon site was completed in fiscal year 2002. Coordination with Oregon Department of Fish and Wildlife and analysis was initiated for a maternity colony and hibernacula for Thompson's big-eared bats. It is anticipated that a strategy for protection and management of this site will be completed by March of 2003.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None.

Monitoring Question 3:
What is the status of designing and implementing wildlife restoration projects?

Monitoring Requirement:
Swiftwater Resource Area – Review program for status of restoration projects.

South River Resource Area – The Annual Program Summary will address Question 3.

Monitoring Performed:
Review AWP accomplishments.

Findings:
Swiftwater Resource Area - The North Bank Habitat Management Area was acquired to provide secure habitat for the Roseburg population of the Columbian white-tailed deer. The final EIS was completed in 2000 and the Record of Decision and HMP were completed in 2001. On-the-ground habitat management began in 2001. During fiscal year 2002, 1000 acres were burned, water developments were installed, noxious weeds were treated and mowing and seeding were accomplished. Stream and riparian restoration projects are being implemented and include planting of native vegetation, in-stream structure placement and road repair and decommissioning. The projects are designed to maintain and enhance riparian and oak woodland habitats that benefit the white-tailed deer, as well as other special status species that occur in the area.

South River Resource Area - The Environmental Analysis and the silvicultural prescription were completed the second quarter of fiscal year 2001 for Slimewater Creek Density Management. This project is in the South Umpqua River/Galesville LSR and is designed to meet the objectives of LSR management by implementing a treatment that would lead to a multilayered forest canopy, large trees, canopy gaps for spatial diversity, understory development, snags, and down wood. The interdisciplinary team concentrated on the specifics of how to accelerate the development of late-successional forest and address prevention of large scale disturbance by fire, wind, insects or disease, that would destroy or limit the ability of the LSR to sustain viable late-successional forest conditions and their associated species populations.

In 2002 the project was sold and awarded. It is anticipated that this project will be completed in the fall of 2003. The level of course wood debris and snags are to be monitored for five years

post treatment. Additional trees may need to be cut or girdled to meet the course wood and snag objectives identified in the Environmental Assessment.

Conclusions:
Swiftwater Resource Area - RMP requirements were met.

South River Resource Area – RMP requirements were met. Follow-up monitoring will be needed to ensure that course wood and snag objectives have been met.

Comment/Discussion:
None.

Fish Habitat

Expected Future Conditions and Outputs

See Aquatic Conservation Strategy Objectives.

Maintenance or enhancement of the fisheries potential of streams and other waters, consistent with BLM's Anadromous Fish Habitat Management on Public Lands guidance, BLM's Fish and Wildlife 2000 Plan, the Bring Back the Natives initiative, and other nationwide initiatives.

Rehabilitation and protection of at-risk fish stocks and their habitat.

Implementation Monitoring

Monitoring Question 1:
What fish habitat restoration and enhancement activities are being designed and implemented?

Monitoring Requirements
The Annual Program Summary will report on the status of the design and implementation of fish habitat restoration and habitat activities.

Monitoring Performed:
Program review.

Findings:
Swiftwater Resource Area –
Culvert replacements for fish passage:

Upper Umpqua Watershed
Little Canyon Creek Culvert Replacements:
2 culverts removed and replaced

Little Wolf Culvert Replacement
1 culvert removed and replaced

Elk Creek Watershed
Andrews Creek Culvert Replacements:
3 culverts removed and replaced

Lees Creek Culvert Replacement:
1 Culvert removed and replaced

Calapooya Creek Watershed
Gassy/Field Creek Culvert Replacements:
2 Culverts removed and replaced

Canton Creek Watershed
Ringtail Culvert Replacement:
1 Culvert removed and replaced

Rock Creek Watershed
Woodstock Culvert Replacement:
1 Culvert removed and replaced

Little River Watershed
Evarts Creek Road Repair & Culvert Replacement
1 Culvert removed and replaced
Note: 0.2 miles of road improvement (to fix a road slump and slide)

Copperhead Creek Culvert Replacement:
1 Culvert removed and replaced

Buckshot Creek Culvert Replacement
1 Culvert removed and replaced

Instream enhancement:
Large wood was placed on one mile of Upper Smith River.

South River Resource Area - Several aquatic restoration projects were identified, planned, developed, and/or implemented during FY 2002. Bingham Creek culvert replacements (2) had been rescheduled for completion in FY 2001 and were successfully implemented in FY 2002. Weaver Creek, Union Creek, and Live Oak Creek culvert replacements had Records of Decision signed, were subsequently designed, scheduled, and successfully implemented in FY 2002. Thompson Creek Tree Lining project also was designed, scheduled, and implemented in FY 2002. The following projects had Records of Decision signed, were designed and scheduled, but were not implemented owing to extreme fire hazards and work restrictions: Suicide Creek culvert replacements, St. Johns Creek culvert replacements, and Days Creek Fish Habitat Enhancement. Those projects have been rescheduled for completion in FY 2003. Culvert replacement projects that have had Records of Decision signed, have been designed and scheduled include: Russell Creek and East Fork Stouts Creek.

In addition, there are several aquatic restoration projects in the planning and developmental stage that will be covered under the Myrtle Creek Restoration Environmental Assessment. This EA will be receiving public comment soon and thus has not yet had a Record of Decision signed. The projects covered under this EA include: Upper North Myrtle Creek culvert replacement, Riser Creek culvert replacement, three Lee Creek culvert replacements, and 0.9 mile fish habitat enhancement on Slide Creek.

Culvert Replacements
The five completed culvert replacements and the ten planned/scheduled culvert replacements were and will be, respectively, replaced to improve fish passage and eliminate the risk of failure. Although all projects are located on fish bearing streams, some streams are considered above anadromous runs of salmon and steelhead. Nonetheless, all projects will provide improved fish passage for resident (e.g., cutthroat trout) and/or anadromous fish species.

Instream Fish Habitat Enhancement Projects
Fish habitat enhancement projects are designed to improve habitat conditions, presumably from some degraded state, based on a particular streams most limiting factor. Such projects employ the addition of large woody debris and some also use boulder clusters to create habitat features that are lacking. The Thompson Creek Tree Lining project was designed to improve gravel retention and establish better spawning habitat for salmonids through the strategic felling and placement of large coniferous trees. The Days Creek Fish Habitat Enhancement project was designed to provide both spawning and juvenile rearing habitat for salmonids through the placement and alignment of conifer logs and boulder clusters. The Slide Creek Fish Habitat Enhancement project is still in the planning stages, but will be designed to improve spawning habitat for salmonids, provide more summer/winter rearing habitats for salmonids and other fish species, and restore floodplain connectivity where the channel is incised. These projects will help to promote salmon recovery and improve habitat conditions for other at risk species (i.e., lamprey).

Conclusions:
RMP objectives have been met. Aquatic Conservation Strategy Objectives were met.

Comment/Discussion:
None.

Monitoring Question 2:
Are potential adverse impacts to fish habitat and fish stocks being identified?

Monitoring Requirements:
At least 20 percent of the files on each year's timber sales, and other relevant actions, will be reviewed annually to evaluate documentation regarding fish species and habitat and related recommendations and decisions in light of policy and SEIS Record of Decision Standards and Guidelines and RMP management direction. If mitigation was required, review will ascertain whether such mitigation was incorporated in the authorization document and the actions will be reviewed on the ground after completion to ascertain whether the mitigation was carried out as planned.

Monitoring Performed:
Swiftwater Resource Area - Cat Tracks Commercial Thinning:

South River Resource Area - Selected projects for FY 2002 monitoring are Thompson Creek Tree Lining, Weaver Creek Culvert Replacement, and Weaver Road Commercial Thinning. Followup monitoring was completed for the Bingham Creek Culvert Replacement. Followup monitoring is pending on Class of 98 timber sale (sold-unawarded), Dream Weaver timber sale (sold-unawarded) and Kola's Ridge timber sale (sold-unawarded).

Findings:
Swiftwater Resource Area - Cat Tracks Timber Sale
An environmental assessment (EA) was completed and the project sold during fiscal year 2002. Cat Tracks Units 7A and C are located within the Upper Pass Creek sixth-field subwatershed in the headwaters of Pass Creek Tributary #1, a fish bearing stream at the lower reach of the tributary approximately ¼ mile from the project site. A Riparian Management Zone (RMZ) was developed using a 40 foot No-harvest buffer from non-fishbearing streams (Cat Tracks project area did not contain fish-bearing streams). The EA included the following:

Riparian habitat would be protected by maintaining a Riparian Management Zone. No removal for harvest purposes would occur within this zone, however treatment to restore riparian habitat (snag creation, falling trees to provide a source of interim down woody debris, and falling trees into streams) would occur.

Habitat would be protected from logging damage by directionally felling trees that are within 100' of streams away from the streams and yarding logs away from or parallel to the streams (i.e. logs would not be yarded across streams). NOTE: In Cat Tracks Unit 7C, logs would be yarded across streams, however logs would be fully suspended to avoid any ground disturbance within or immediately adjacent to stream channels.

No road building would take place within the Riparian Reserves.

Restricting road renovation and log hauling on unsurfaced roads to the dry season (normally May 15 to Oct. 15), however, operations would be suspended during periods of heavy precipitation. This season could be adjusted if unseasonable conditions occur (e.g. an extended dry season or wet season).

In the RR and outside of the riparian management zone, retain large diameter conifers and hardwoods from all the species present. Vary the spacing to create canopy openings around conifers with large live limbs and live crowns, large hardwoods, and pockets of existing natural

conifer regeneration. Trees would be retained to about 100 square feet of basal area per acre. Vary the spacing to select the desired tree, clump of trees, or to create or enlarge an opening around a large limbed/full crowned tree.

Within the RR and the riparian management zone and after the logging operation is complete mark an average of 2 trees per acre for snags and down logs. Mark trees to be felled with an F, and trees to be girdled with a G. Whenever possible select damaged and defective trees that are not old residuals or old growth. Look for trees with the bark knocked off, broken tops, broken limbs, and sparse crowns. This operation would be appraised to occur under the timber sale contract, but the purchaser may have the option of buying out. If the buy out option is taken, the BLM would perform this work within two years under a service contract.

The above referenced conditions are implemented within the contract prospectus. No adverse impacts are anticipated to fisheries from the Cat Tracks Timber sale. Benefit to the riparian habitat through the density management prescription would be to restore ACS components within the project area.

South River Resource Area:
Thompson Creek Tree Lining
An environmental assessment, South River Restoration EA, was completed during fiscal year 2000 and the project was planned during FY 2000 and FY 2001 and subsequently implemented and completed during the summer of 2002. The purpose of the project was to provide spawning habitat for salmonids and improve overall aquatic habitat structure for 0.75 mile of Thompson Creek by felling and strategically placing cedar and Douglas fir logs in the stream channel. This project provides for the restoration of natural gravel retention, floodplain connectivity, and overall aquatic habitat. The action meets objectives outlined in the Best Management Practices (BMP) (Appendix D, ROD/RMP p. 141) such as: "To mitigate and minimize damage to riparian vegetation, streambanks, and stream channels." RMP requirements have been met and no follow-up monitoring is required.

Weaver Creek Culvert Replacement
An environmental assessment, South River Restoration EA, was completed during fiscal year 2000 and the project was planned during FY 2000 and FY 2001 and subsequently implemented and completed during the summer of 2002. The purpose of the project was to eliminate the risk of failure and catastrophic sediment delivery to Weaver Creek and provide fish passage for resident and anadromous fish species. To maintain fish passage and control the amount of downcutting below the culvert, grade control structures were installed inside and below the culvert. The action meets objectives outlined in the Best Management Practices (BMP) (Appendix D, ROD/RMP p. 134) such as: "To preclude stream crossings from being a direct source of sediment to stream thus minimizing water quality degradation and provide unobstructed movement for aquatic fauna." Mitigation measures required by the authorizing EA (streamflow bypass, seed & mulch disturbed streambank, use of boom and straw bales in the stream channel) were properly employed by the contractor. RMP requirements have been met and no follow-up monitoring is required.

Weaver Road Commercial Thinning
An environmental assessment, South River Commercial Thinning 2000 EA, was completed during FY 2000 and the project was planned during FY 2000, and 2001 and is currently being completed and implemented in FY 2003. The purposes of the project were to diversify forest stand structure, promote the development of late succession habitat characteristics, and meet the District's annual timber sale quantity and socioeconomic objectives (ROD/RMP, p. 8, p. 55). No direct adverse impacts to fish species were identified in the EA; however, renovations and improvements to roads are expected to reduce the contribution of road-derived sediment in lower portions of the watershed (i.e., a long term net improvement). A post operational field review within Riparian Reserves of units will be required to determine if supplemental large woody material should be added. Follow up monitoring will be required for FY 2003.

Followup Monitoring:

Bingham Creek Culvert Replacement

An environmental assessment was completed during fiscal year FY 2000 and the project was scheduled for summer FY 2001. This project was not completed in FY 2001 due to contracting difficulties, but was finally completed and implemented in FY 2002, after which time follow up monitoring will occur. The purpose of this project was to replace two large culverts that were at risk of near term failure and impeded fish passage for resident cutthroat trout and other fish species. To maintain fish passage and control the amount of headcutting above the culvert or downcutting below the culvert, grade control structures were installed for each culvert. The action meets objectives outlined in the Best Management Practices (BMP) (Appendix D, ROD/RMP p. 134) such as: "To preclude stream crossings from being a direct source of sediment to stream thus minimizing water quality degradation and provide unobstructed movement for aquatic fauna." Mitigation measures required by the authorizing EA (streamflow bypass, seed & mulch streambanks, planting trees, use of boom and straw bales in the stream channel) were properly employed by the contractor. RMP requirements have been met and no further follow-up monitoring is required.

Followup monitoring is pending on Class of 98 timber sale (sold-unawarded), Dream Weaver timber sale (sold-unawarded) and Kola's Ridge timber sale (sold-unawarded).

Conclusions:

RMP objectives have been met.

Comment/Discussion:

None.

Special Status Species Habitat

Expected Future Conditions and Outputs

Protection, management, and conservation of federal listed and proposed species and their habitats, to achieve their recovery in compliance with the Endangered Species Act and Bureau special status species policies.

Conservation of federal candidate and Bureau sensitive species and their habitats so as not to contribute to the need to list and recover the species.

Conservation of state listed species and their habitats to assist the state in achieving management objectives.

Maintenance or restoration of community structure, species composition, and ecological processes of special status plant and animal habitat.

Protection of Bureau assessment species and SEIS special attention species so as not to elevate their status to any higher level of concern.

Implementation Monitoring

Monitoring Question 1:
Do management actions comply with plans to recover threatened and endangered species?

Monitoring Requirement:
At least 20 percent of the files on each year's timber sales and other relevant actions will be reviewed annually to evaluate documentation regarding special status species and related recommendations and decisions in light of Endangered Species Act requirements, policy and SEIS Record of Decision Standards and Guidelines, and RMP management direction. If mitigation was required, review will ascertain whether such mitigation was incorporated in the authorization document and the actions will be reviewed on the ground after completion to ascertain whether the mitigation was carried out as planned.

Monitoring Performed:
Swiftwater Resource Area - Programs were assessed for compliance with recovery plans.

South River Resource Area:
Thompson Creek Tree-Lining – Review of biological staff reports, environmental assessment decision, contract and field inspection reports. Slimewater LSR Density Management – Review of biological staff reports, environmental assessment, and decision. Weaver Road Commercial Thinning – Review of biological staff reports, environmental assessment, decision, contract specifications and field inspection reports.

Findings:
Swiftwater Resource Area - Proposed actions that have the potential to affect the species listed above were assessed through an interdisciplinary or multi disciplinary process (depending on type, scope and sensitivity of the project) that considered consistency and compliance with recovery plans.

South River Resource Area:
Thompson Creek LWD Recruitment – The project occurred within the range of the marbled murrelet (MAMU) and the northern spotted owl. Removal of trees that provide suitable nesting habitat for both species was determined to be a may affect, not likely to adversely affect. Surveys were completed on the site for MAMU for two seasons and resulted in no detections. A seasonal

restriction on operations (FWS/DOA) was incorporated as project design to avoid disturbance to unsurveyed habitat within ¼ mile. The project occurred within ¼ mile of a known nest site for spotted owls. A seasonal restriction would be implemented if spotted owls were nesting, to eliminate the possibility of nest abandonment from noise disturbance.

The decision statement signed April 29, 2002 incorporates the seasonal restrictions and discussion of both MAMU and spotted owl. It also states the spotted owl surveys indicate that the site is not active this current year and the restriction for owl will not be required if the project is implemented this season. However, surveys would be required the next year if the contract is still active to determine the location of the pair and if the seasonal restriction would be required.

The project was offered in the Thompson Creek Restoration contract (HRP020312) and awarded to Blue Ridge Timber Cutting Inc. The contract included an endangered species clause, which required the contractor to discontinue operations in the event a listed species was discovered present in or adjacent to the project area. Work began on the project September 23, 2002 and completed September 24, 2002. All work was completed outside the nesting season for both MAMU and northern spotted owl. Project monitoring completed.

Slimewater LSR Density Management – The only listed species with the potential to be present in the project area is the northern spotted owl. The project was expected to have negligible likelihood of affecting owls, a determination of may affect, not likely to adversely affect was made as the project area does not affect designated suitable nesting and foraging habitat. The FWS LOC dated May 31, 2001 agreed with the BLM determination noting that the project is designed to "… develop late successional stand conditions." There were no know spotted owl nesting sites within ¼ mile of the project and a seasonal restriction was not required. The decision incorporated the ESA discussion from the environmental assessment. There are no special requirements for this project requiring follow-up monitoring.

Weaver Road Commercial Thinning – The timber sale is only a portion of the thinning (Units B, C, E3 & E5) analyzed in the South River Commercial Thinning 2000 EA. The project occurred within the range of the marbled murrelet (MAMU) and the northern spotted owl. The thinning units do not contain suitable nesting habitat for MAMU and all suitable habitat with ¼ mile of the thinning was required to be surveyed. Analysis stated that the thinning would have minimal affect on the use of the stand for dispersal habitat of the spotted owl. The stands were not designated nesting and foraging habitat and the project would not remove suitable habitat. None of the units for Weaver Road Thinning were within ¼ mile of a known spotted owl site limiting the potential for noise disturbance. The entire project analyzed was determined to be a "may affect, not like to adversely affect" for both species and FWS concurred with the affects determination in a LOC dated May 31, 2001.

Field surveys conducted in the spring of 2001 did detect MAMU presence in Section 19, however none of the murrelets sited exhibited nesting or occupancy behavior. Because the murrelet detections were within ¼ mile of Unit E3, the potential to affect murrelets existed and a DOR requiring operations to cease two hours before sunset until two hours after sunrise from April 1st to August 5th for Unit E3 was incorporated into the decision. There were no special requirements that carried forward to the decision for northern spotted owls.

Weaver Road timber sale contract OR10-TS02-01 was sold to D. R. Johnson Lumber Co. on November 27, 2001. Harvest Area No. 4 of the Weaver Road timber sale is the same area identified as Unit E3 in the South River Commercial Thinning 2000 EA. Contract Specification 41(C)(12) states "All operations associated with the Harvest of Area No. 4 shall be scheduled so that daily work is done only during the time period from two hours after sunrise to two hours before sunset due to the potential disturbance of nesting Marbled Murrelets. This daily restriction will be in effect April 1 to August 5, both days inclusive, of each year." Cutting and yarding has occurred on the project, however no activity has occurred in Harvest Area No. 4 (E3) to date. Follow-up monitoring will need to occur for the Weaver Road timber sale to ensure that the daily operating restriction for murrelets is enforced.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None

Monitoring Question 2:
What coordination with other agencies has occurred in the management of special status species?

Monitoring Requirement:
The Annual Program Summary will address Implementation Question 2.

Monitoring Performed:
Program Review.

Findings:
Swiftwater Resource Area - BLM coordinates regularly with ODFW, USFWS, NMFS, USFS and DEQ. Research projects and monitoring of the white-tailed deer are being implemented by ODFW and USFWS on the North Bank Habitat Management Area.

South River Resource Area - Coordination with the US Fish and Wildlife Service and National Oceanic and Atmospheric Administration-Fisheries was done to meet the consultation requirements under the Endangered Species Act (1973) as amended. Consultation was done for a variety of projects that included commercial thinning, hazard trees removal, plus tree clearing, pre-commercial thinning, roadside salvage, culvert replacement, rock quarry operation, tree lining, and other miscellaneous actions. Other coordination with US Fish and Wildlife Service, Oregon Department of Fish and Wildlife, Oregon State University, Oregon Natural Heritage Program, Oregon Department of Agriculture, etc. occurred as necessary to fund and conduct inventory, monitoring, and research efforts for a variety of plant and animal species, including: purple martin, western pond turtle, bald eagle, bats, Columbia white-tailed deer, anadromous fish, Arabis koeleri, popcorn flower, and Kincaid's lupine in Douglas Co. Data concerning special status species is shared with the Oregon Natural Heritage Program, ODF&W, USFWS and private landowners.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None

Cultural Resources

Expected Future Conditions and Outputs

Identification of cultural resource localities for public, scientific, and cultural heritage purposes.

Conservation and protection of cultural resource values for future generations.

Provision of information on long-term environmental change and past interactions between humans and the environment.

Fulfillment of responsibilities to appropriate American Indian groups regarding heritage and religious concerns.

Implementation Monitoring

Monitoring Question 1:
Are cultural resources being addressed in deciding whether or not to go forward with forest management and other actions? During forest management and other actions that may disturb cultural resources, are steps taken to adequately mitigate disturbances?

Monitoring Requirements
At least 20 percent of the files on each year's timber sales and other relevant actions (e.g., rights-of-way, instream structures) will be reviewed annually to evaluate documentation regarding cultural resources and American Indian values and decisions in light of requirements, policy and SEIS Record of Decision Standards and Guidelines and RMP management direction. If mitigation was required, review will ascertain whether such mitigation was incorporated in the authorization document and the actions will be reviewed on the ground after completion to ascertain whether the mitigation was carried out as planned.

Monitoring Performed
Swiftwater Resource Area – Cat Tracks Commercial Thinning

South River Resource Area – Slimewater Creek Density Management, Bland Days Commercial Thinning, and Weaver Road Commercial Thinning.

Findings:
Swiftwater Resource Area - Cat Tracks Commercial Thinning
A cultural project tracking form under the Oregon BLM/SHPO cultural resource protocol was completed. It documents that field exams, site file reviews and inventory record reviews were conducted and approved by the area Cultural Resource Specialist and Field Manager. No cultural resources were found in the project area. In consultation with the State Historic Preservation Office the project was found to have "No Effect" on cultural resources. The project was approved to proceed with no follow-up monitoring required.

South River Resource Area - A cultural project tracking form under the Oregon BLM/SHPO cultural resource protocol was completed for all three projects. It documents that field exams, site file reviews and inventory record reviews were conducted by the area Cultural Resource Specialist who concluded that "no known cultural resources will be impacted by this action". All three projects were consulted with the State Historic Preservation Office (SHPO) who agreed with the "no effect" determination. No mitigation was required and no follow-up monitoring is required.

Conclusion:
Cultural resources have been addressed in deciding whether or not to go forward with fiscal year 2002 actions. RMP requirements were met.

Comment/Discussion:
None.

Visual Resources

Expected Future Conditions and Outputs

Preservation or retention of the existing character of landscapes on BLM-administered lands allocated for Visual Resource Management Class I and II management; partial retention of the existing character on lands allocated for Visual Resource Management Class III management and major modification of the existing character of some lands allocated for Visual Resource Management Class IV management.

Continuation of emphasis on management of scenic resources in selected high-use areas to retain or preserve scenic quality.

Implementation Monitoring

Monitoring Question 1:
Are visual resource design features and mitigation methods being followed during timber sales and other substantial actions in Class II and III areas?

Monitoring Requirements
Twenty percent of the files for timber sales and other substantial projects in Visual Resource Management Class II or III areas will be reviewed to ascertain whether relevant design features or mitigating measures were included.

Monitoring Performed
Program review of all Fiscal Year 2001 actions.

Findings:
There were no major actions or timber sales in 2002 that impacted VRM Class II or III lands. No followup was required from the previous years monitoring as no actions occurred in VRM class II or III lands.

Conclusion:
RMP requirements were met.

Comment/Discussion:
None.

Rural Interface Areas

Expected Future Conditions and Outputs

Consideration of the interests of adjacent and nearby rural land owners, including residents, during analysis, planning, and monitoring related to managed rural interface areas. (These interests include personal health and safety, improvements to property and quality of life.)

Determination of how land owners might be or are affected by activities on BLM-administered land.

Implementation Monitoring

Monitoring Question 1:
Are design features and mitigation measures developed and implemented to avoid/minimize impacts to health, life and property and quality of life and to minimize the possibility of conflicts between private and federal land management?

Monitoring Requirements
At least 20 percent of all actions within the identified rural interface areas will be examined to determine if special project design features and mitigation measures were included and implemented as planned.

Monitoring Performed:
All Fiscal Year 2002 projects.

Findings:
No actions occurred within rural interface areas in the Swiftwater Resource Area, as identified in the PRMP/EIS (Map 6) as lands zoned R-5.

Conclusions:
RMP objectives were met.

Comment/Discussion:
None.

Recreation

Expected Future Conditions and Outputs

Provisions of a wide range of developed and dispersed recreation opportunities that contribute to meeting projected recreation demand within the planning area.

Provisions of nonmotorized recreational opportunities and creation of additional opportunities consistent with other management objectives.

Implementation Monitoring

Monitoring Question 1:
What is the status of the development and implementation of recreation plans?

Monitoring Requirements
The Annual Program Summary will address implementation question 1.

Monitoring Performed:
Program review of all established recreation sites.

Findings:
Swiftwater Resource Area – The North Umpqua Recreation Area Management Plan is being revised in 2003.

South River Resource Area – The Cow Creek Recreation Management Plan was completed and approved in April of 2001. Implementation is ongoing. The Island Creek Recreation Site has been developed, and the Salmon Viewing Watchable Wildlife Site was constructed in FY 2002. The Field Office continues to deal with vandalism along the Cow Creek Backcountry Byway.

Conclusion:
RMP requirements were met.

Comment/Discussion:
Recreation statistics are documented in the 2002 Recreation Management Information System (RMIS).

Special Areas

Expected Future Conditions and Outputs

Maintenance, protection, and/or restoration of the relevant and important values of the special areas which include: Areas of Critical Environmental Concern, Outstanding Natural Areas, Research Natural Areas, and Environmental Education Areas.

Provision of recreation uses and environmental education in Outstanding Natural Areas. Management of uses to prevent damage to those values that make the area outstanding.

Preservation, protection, or restoration of native species composition and ecological processes of biological communities in Research Natural Areas.

Provision and maintenance of environmental education opportunities to Environmental Education Areas. Management of uses to minimize disturbances of educational values.

Retention of existing Research Natural Areas and existing areas of Critical Environmental Concern that meet the test for continued designation. Retention of other special areas. Provision of new special areas where needed to maintain or protect important values.

Implementation Monitoring

Monitoring Question 1:
Are BLM actions and BLM authorized actions/uses near or within special areas consistent with RMP objectives and management direction for special areas?

Monitoring Requirements
Review program and actions for consistency with RMP objectives and direction.

Findings:
The Roseburg District has 12 special areas that total 11,323 acres. Defensibility monitoring has been conducted annually on all ACEC/RNAs since publication of the RMP. Unauthorized use by OHVs was detected at the North Myrtle Creek and Bushnell-Irwin ACEC/RNAs in fiscal year 2001. OHV barriers were constructed at three separate locations at the two ACEC/RNAs in an attempt to restrict unauthorized access. OHV trails in the Bushnell-Irwin ACEC/RNA were rehabilitated. Noxious weeds were controlled at the Myrtle Island and Bear Gulch ACEC/RNAs. Defensibility monitoring will continue in fiscal year 2002.

Baseline fungi, lichen, and bryophyte inventories have been completed at six ACEC/RNAs, one ACEC, and one candidate ACEC. A checklist for vascular plants was completed and published for the Myrtle Island ACEC/RNA in fiscal year 2001.

A land exchange initiated in fiscal year 2001 to expand the Beatty Creek ACEC/RNA, is currently being reviewed by the Washington Office staff for final approval. Twenty acres of land adjacent to the Beatty Creek ACEC/RNA was acquired by BLM through a Land and Water Conservation Fund purchase during FY 02.

Conclusion:
RMP requirements were met.

Monitoring Question 2:
What is the status of the preparation, revision, and implementation of Areas of Critical Environmental Concern management plans?

Findings:
Databases for vascular plant checklists were developed for all ACEC/RNAs. Draft management plans have been completed for four ACEC/RNAs. Three of these draft plans were finalized in fiscal year 2001. The EIS ROD was signed and a management plan was completed for the North Bank Area of Critical Environmental Concern in fiscal year 2001.

Seven ACECs were nominated by the public in the Final RMP. Five of these nominations were reviewed by the South River Field Office and decisions finalized in fiscal year 2001. All five areas were determined not to meet ACEC criteria. All remaining nominated areas are currently being managed to protect the proposed relevant and important values.

Conclusion:
RMP requirements were met.

North Umpqua Wild and Scenic River

Expected Future Conditions and Outputs

Protection of the Outstandingly Remarkable Values of designated components of the National Wild and Scenic Rivers System through the maintenance and enhancement of the natural integrity of river-related values.

Protection of the Outstandingly Remarkable Values of eligible/suitable wild and Scenic Rivers and the maintenance or enhancement of the highest tentative classification pending resolution of suitability and/or designation.

Protection of the natural integrity of river-related values for the maintenance or enhancement of the highest tentative classification determination for rivers found eligible or studied for suitability.

Designation of important and manageable river segments suitable for designation where such designation contributes to the National Wild and Scenic Rivers System.

Implementation Monitoring

Monitoring Question 1:
Are BLM actions and BLM authorized actions consistent with protection of the Outstandingly Remarkable Values of designated, suitable, and eligible, but not studied, rivers?

Monitoring Requirements
Annually, the files on all actions and research proposals within and adjacent to Wild and Scenic River corridors will be reviewed to determine whether the possibility of impacts on the Outstandingly Remarkable Values was considered, and whether any mitigation identified as important for maintenance of the values was required. If mitigation was required, the relevant actions will be reviewed on the ground, after completion, to ascertain whether it was actually implemented.

Monitoring Performed:
High-level monitoring of recreation use in the Wild & Scenic North Umpqua River Corridor was conducted 4 days per week between May 20 and Sept 20, 2002 through a Cooperative Management Agreement between the Roseburg District BLM and the Umpqua National Forest, North Umpqua Ranger District. The BLM had the lead on monitoring in the entire river corridor; USFS had the lead on issuing 20 Special Recreation Permits, 10 to commercial river outfitters and 10 to fly angling guides. Employees engaged in monitoring included one full time BLM River Manager and one temporary USFS river ranger. The objectives of the river survey were to:

- Monitor the five outstanding remarkable values on the North Umpqua W&SR.
- Provide a BLM/USFS presence on the river to contact, inform, and educate users.
- Document and monitor visitor use including commercial and public use.
- Coordinate management of the river between the BLM and Umpqua National Forest.
- Identify, minimize and manage safety hazards and user conflicts on the North Umpqua River.

Findings:

Outstandingly Remarkable Values

The Outstandingly Remarkable Values (ORV's) of North Umpqua River Management Plan describe the components that make the North Umpqua Wild and Scenic River the wonder that it is. The plan recognizes fish, water quality, recreation, scenery, and cultural resources as the ORV's within the North Umpqua Wild and Scenic Corridor. The plan also emphasizes the importance of protecting these resources through monitoring programs. The following information shows what is being done to monitor fisheries, water quality, scenic value, cultural resources, and recreation.

Fisheries
These counts were taken at the Winchester Dam Counting Station by Oregon Department of Fish and Wildlife (ODFW).

Table 31. ODFW Fish Counts at Winchester Dam

Year	Fall Chinook	Spring Chinook	Coho Salmon	Sea Run Cutthroat	Winter Steelhead	Summer Steelhead
1992	133	5,006	6,404	10	5,263	3,776
1993	87	5,928	6,829	0	4,366	5,414
1994	119	5,305	3,427	29	4,088	4,710
1995	223	9,816	3,491	1	5,719	6,402
1996	217	6,536	4,777	79	4,895	7,333
1997	118	5,769**	7,346	81	5,775	8,009**
1998	52	6,959	3,606**	91**	5,107	9,139
1999	31	7,375	7,367	159	6,336	5,390
2000	202	12,635	5,643	96	9,563	10,087
2001	247	20,694	15,861	93	11,086	11,331
2002	154	24,202	20,468	110	not available	9,175

Winter Steelhead counts are taken from December - April.
* Winter Counts were only taken through December 31st.
** The fish station was closed for repairs; some of the data is missing.

Water Quality
Water quality affects most of the other ORV's. The following table shows some of the water quality parameters that have been consistently monitored over the past several years. The water samples were taken between Idleyld and Rock Creek.

An acceptable pH range for the Umpqua Basin is between 6.5-8.5. It would be considered water quality limited if greater than 10% of the samples exceed this standard (fall outside the acceptable range), and a minimum of at least two samples exceed the standard during a season of interest. The 7 day maximum average temperature of the river should not exceed 17.8E C between June 1 and September 14. The 7 day maximum average temperature should not exceed 12.8E C at other times of the year; this helps with spawning conditions. Dissolved oxygen (DO) should have no less than 6.5mg/l or 90% saturation. If the 7-day minimum average for DO is less than this standard, water quality is considered limited. Although specific conductance has no standard, it is noted because specific conductance for the North Umqpua River is uniquely low.

Cultural Resources
The North Umpqua River has attracted people for thousands of years. It was decided that the artifacts from previous cultures were a part of what makes the North Umpqua Wild and Scenic River valuable. During the summer of 2002, two archaeological evaluation/mitigation projects were conducted along the North Umpqua River (DO383 and DO458). This mitigation included assessing areas prior to ground disturbance for projects in Susan Creek Campground (preparing a new camp host site) and Susan Creek Day-Use area (putting in a water line). No additional work was determined necessary. Five archeological sites were monitored (DO117, DO840, DO842, DO843, and, DO844) to check for degradation. No degradation was noted at any of the sites.

Scenery
According to the North Umpqua River Management Plan, the lands within the Wild and Scenic River Corridor will be managed to retain the visual quality objectives. Retention is defined as

Table 32. North Umpqua Water Quality Data

Year	Measurement	PH (units)	Temperature (C°)	Dissolved Oxygen (mg/L)	Specific Conductance (us/cm)
Desired Conditions	6.5-8.5	< 17.8	> 6.0	maintain	
1994	Maximum	8.5	23	14.7	77
	Minimum	7.1	.5	7.9	37
	Mean	7.8	11.75	11.3	57
1995	Maximum	8.5	20.5	12.9	72
	Minimum	7.1	2.5	12.9	39
	Mean	7.8	11.5	9.7	55.5
1996	Maximum	8.4	19	12.9	68
	Minimum	7.1	3.5	7.2	38
	Mean	7.75	11.25	10.05	53
1997	Maximum	8.1	20	13.9	66
	Minimum	7.1	4	8.9	33
	Mean	7.6	12	11.4	49.5
1998	Maximum	8	11.5	14.4	63
	Minimum	7.4	1.5	10.5	40
	Mean	7.7	6.5	12.45	51.5
1999	Maximum	8.2	17	14.5	70
	Minimum	6.6	3.5	8.5	26
	Mean	7.4	10.25	11.5	48
2000	Maximum	8.5	20	13.6	71
	Minimum	6.1	3	7.3	29
	Mean	7.3	11.5	10.45	50
2001	Maximum	8.5	21	13.6	76
	Minimum	6.6	2.2	6.4	41
	Mean	7.3	11.6	10	58.5
2002	Maximum	8.8	20.9	13.3	73
	Minimum	6.7	3	7.3	30
	Mean	7.75	11.95	10.3	51.5

2002 data is preliminary. A water year spans from October-September.

"management activities that should not be evident to the casual visitor." The exception to this rule as is written in the North Umpqua River Management Plan (pages 31-32) is as follows:

a) The vegetation poses a safety hazard along the highway, the river, a trail, powerline, or in a developed use recreation area.
b) The vegetation is located within an easement or right of way agreement area, and no suitable alternate route can be found.
c) The vegetation is in the way of a planned facility development or improvement project.
d) The vegetation needs to be cut to enhance a significant or outstandingly remarkable value.
e) A catastrophic natural event (such as wildfire, insect infestation, or blowdown storm) has left large numbers of dead, salvageable trees in the Corridor.
f) An insect infestation threatens adjacent timber lands outside the Corridor.

According to this definition, there were no significant scenic disturbances in the corridor during 2002. The visible part of the Apple Creek Fire occurred between Horseshoe Bend Campground and Apple Creek Campground. There was some routine highway maintenance work performed between Glide to Susan Creek Campground. Two inches of overlay was applied to the highway.

Recreation

Visitor Use:

- Boating Use: 700visits (BLM segment – up from 420 in 2001)
- Fishing Use: 6,200 visits (BLM segment - up from 2,902 in 2001)
- For entire W&S River: Commercial Adjusted Use - 2,102 visits;
  Private adjusted use - 3,354 visits.

BLM Presence on the river

The following illustrates compliance and non-compliance with the ORVs.

Compliment

On 7/07/02, some out-of-state rafters remarked how clean and litter free the North Umpqua River and Oregon are.

Logs in the River

- On 6/04/02, 6/07/02, 6/09/02, 6/16/02 and 7/07/02 rafters commented that the log below pinball was potentially hazardous. On 7/08/02, the Forest Service removed the log.
- On 7/08/02 the Forest Service was unable to remove the log at Snag Rock (just below Boulder Flat Campground). The larger log was moved off and pulled about 4 feet toward the bank (river right). On 7/15/02, the FS river ranger noted that the log at Snag Rock slipped further into the river. On 8/10/02, an inflatable kayaker was nearly swept into the strainer at Snag Rock.
- On 7/15/02, the FS river ranger noted that a new log is in the river in front of the Copeland Creek water gauge. She noted that the log was parallel with the river (left) and the root wad is stuck on a rock on the bottom of the river, but that it could easily be dislodged.

No Lifejackets

- Between 6/23/02 and 7/18/02, forty-one people were seen floating without lifejackets.

Over 20 persons in a group

- On 6/22/02 and 6/23/02, a group of 26 boaters was seen floating between Boulder Flat and Gravel Bin.
- When the numbers exceeded twenty by a few guides, commercial boaters either checked with the Noth Umpqua U.S.F.S. ranger station prior to arriving at the North Umpqua
  - River or they were approved at the put-in sights by the Forest Service river ranger.
- Commercial guides seemed to be unaware of the need to separate put-in times and groups by one hour. When asked, most guides felt like 20 minutes was more reasonable. There is a need for more education for the guides early in the season.

Theft

- On 6/15/02, Destination Wilderness had 2 coolers stolen at Horseshoe Bend Campground.
- On 6/15/02, a truck at Gravel Bin was broken into. A purse and wallet were taken.

Wildland Fire

- The Apple Fire began at 10am on 8/16/02. The Forest Service closed the river to recreation between Boulder Flat to Gravel Bin. Gravel Bin to Bogus was closed on 8/30/02- 8/31/02. The closures were for safety concerns.

Conflict between users

- No major incidents were reported on the BLM segment of the Wild & Scenic River in fiscal year 2002. Groups monitored included boaters, campers along the river, and parking areas.

Conclusion:
RMP requirements were met.

Socioeconomic Conditions

Expected Future Conditions and Outputs

Contribution to local, state, national, and international economies through sustainable use of BLM-managed lands and resources and use of innovative contracting and other implementation strategies.

Provision of amenities for the enhancement of communities as places to live and work.

Implementation Monitoring

Monitoring Question 1:
What strategies and programs have been developed, through coordination with state and local governments, to support local economies and enhance local communities?

Monitoring Requirements
Program Review

Findings:
The Jobs-in-the-Woods program is a principle strategy along with forest development and other contracting.

Conclusion:
RMP requirements were met.

Monitoring Question 2:
Are RMP implementation strategies being identified that support local economies?

Monitoring Requirements
Program Review

Findings:
Contracting of implementation projects related to RMP programs, and facilities have supported local economies.

Conclusion:
RMP requirements were met.

Monitoring Question 3:
What is the status of planning and developing amenities that enhance local communities, such as recreation and wildlife viewing facilities?

Monitoring Requirements
Program Review

Findings:
North Bank Habitat Management Area ACEC is currently undergoing planning for local recreational and wildlife viewing opportunities consistent with other ACEC objectives. Further detail of recreational or other amenities that would enhance local communities are described in the Annual Program Summary.

Conclusion:
RMP requirements were met.

Timber Resources

Expected Future Conditions and Outputs

Provision of a sustained yield of timber and other forest products.

Reduction of the risk of stand loss due to fires, animals, insects, and diseases.

Provision of salvage harvest for timber killed or damaged by events such as wildfire, windstorms, insects, or disease, in a manner consistent with management objectives for other resources.

Implementation Monitoring

Monitoring Question 1:
By land-use allocation, how do timber sale volumes, harvested acres, and the age and type of harvest compare to the projections in the RMP?

Monitoring Requirements:
Program and data base review. The Annual Program Summary will report volumes sold. The report will also summarize annual and cumulative timber sale volumes, acres to be harvested, and stand ages and types of harvest for General Forest Management Areas, Connectivity/Diversity Blocks and Adaptive Management Areas, stratified to identify them individually.

Monitoring Performed:
Program and data base were reviewed and summary prepared.

Finding:

The comparison of timber sale volumes and harvested acres reveal substantive differences compared to the RMP management action/direction ASQ of 7.0 million cubic feet (45 million board feet) and RMP assumptions regarding mix of harvest types and number of regeneration and thinning acres.

Discrepancies in this question involved the following:

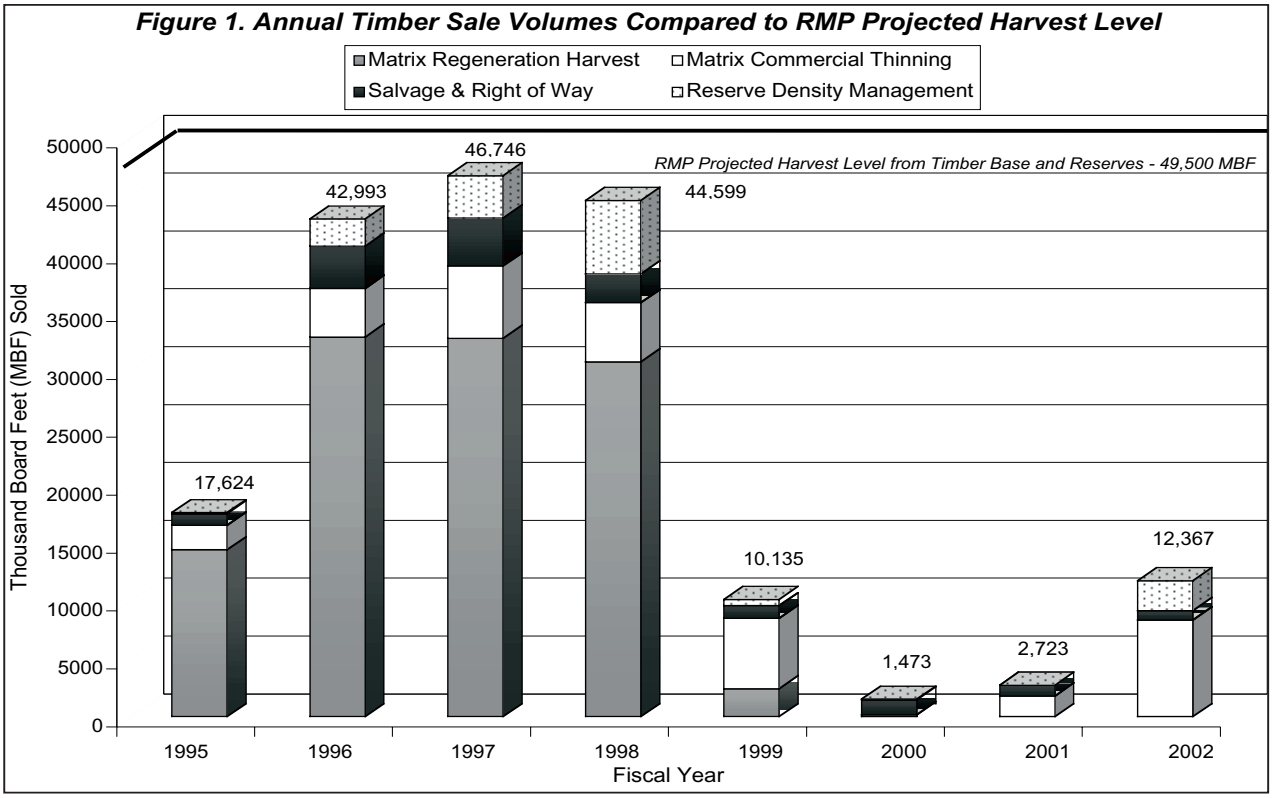
	Fiscal Year 2002	Projected	% of Projected
Total Timber Sale Vol:	11.8 MMBF	49.5 MMBF	24%
Matrix Timber Sale Vol:	8.9 MMBF	45.0 MMBF	20%
Other wood	8.3 MMBF	4.5 MMBF	196%
Key Watershed TS Vol:	0.2 MMBF	8.3 MMBF	2%
Total Regen Harvest	0 acres	1190 acres	0%
Total Comm Thinning	457 acres	84 acres	544%
Total Density Mgt	179 acres	66 acres	270%

Comment/Discussions:
Several factors have created a situation whereby the Roseburg District is falling short of producing the ASQ set forth in the Roseburg District RMP, as well as falling short of the anticipated mix of harvest types and harvest acres. By fiscal year 2002, over the seven year life of the RMP to date, the Roseburg District is at 47% of the RMP anticipated total timber sale volume, 44% of matrix harvest, 54% of RMP anticipated density management harvest in reserves, and 16% of RMP anticipated harvest in the Little River Adaptive Management Area. Because the interdisciplinary teams and management has found that thinning is easier to implement than regeneration harvests given ongoing legal and administrative challenges, the acreage of commercial thinning is at 130% of that anticipated in the RMP.

Table 18. Roseburg District Timber Sale Volume and Acres.

	1995	1996	1997	1998	1999	2000	2001	2002	1995-2002 Total	1995-2002 Annual Average	RMP/EIS Assumed Annual Average	Percent of Assumed Average
MBF												
Total Timber Sale Volume	17,624	45,993	51,783	44,726	10,135	1,473	2,723	11,755	186,211	23,276	49,500	47%
Matrix Timber Sales	17,004	41,055	42,692	37,887	9,416	1,190	2,071	8,754	160,069	20,009	45,000	44%
GFMA Regeneration Harvest	13,285	32,172	27,575	24,786	1,055	-39	0	0	98,835	12,354		
GFMA Commercial Thinning	1,657	3,016	2,907	3,451	4,022	166	1,794	4,307	21,320	2,665		
GFMA Salvage & ROW	323	1,817	3,516	1,446	438	477	277	358	8,652	1,082		
C/D Block Regeneration Harvest	1,130	629	5,123	5,869	1,353	0	0	0	14,104	1,763		
C/D Block Commercial Thinning	457	2,978	3,455	1,739	2,059	166	0	3,755	14,609	1,826		
C/D Block Salvage	153	442	117	597	488	586	0	334	2,716	339		
RR Density Management	24	2,424	2,175	811	395	55	2	868	6,754	844		
RR Salvage	245	55	3	236	140	18	1	17	715	89		
LSR Density Management	63	102	1,728	5,559	151	0	0	1,724	9,327	1,166		
LSR Salvage	204	1,162	266	123	33	210	595	36	2,629	329		
Total All Reserves	536	3,743	4,172	6,728	719	282	598	2,645	19,424	2,428	4,500	54%
Key Watersheds Matrix Timber Sales	25	8,439	18,392	12,767	2,351	681	791	201	43,647	5,456	8,700	63%
Little River AMA All Harvest Types	0	1,033	4,682	30	0	0	0	294	6,039	755	4,600	16%
Little River AMA Salvage	83	162	236	81	0	0	54	63	679	85		
Total AMA Timber Sales	83	1,195	4,918	111	0	0	54	357	6,718	840		
Acres												
Total Regeneration Harvest	386	906	836	800	56	0	0	0	2,984	373	1,190	31%
Total Commercial Thinning	113	426	568	536	411	2	87	457	2,600	325	250	130%
Total Density Management	2	216	301	483	38	0	0	179	1,219	152		
GFMA Regeneration Harvest	354	866	713	649	20	0	0	0	2,602	325		
GFMA Commercial Thinning	69	197	267	361	209	2	87	250	1,441	180		
GFMA Salvage & ROW	30	47	289	125	16	16	13	29	563	70		
C/D Block Regeneration Harvest	32	40	123	151	36	0	0	0	382	48		
C/D Block Commercial Thinning	44	229	301	175	203	0	0	173	1,125	141		
C/D Block Salvage	20	35	25	52	16	4	0	12	163	20		
RR Density Management	0	216	188	97	38	0	0	60	599	75		
RR Salvage	8	4	0	20	9	1	1	2	45	6		
LSR Density Management	2	0	113	386	0	0	0	119	620	78		
LSR Salvage	21	96	33	8	2	9	18	1	188	24		
Total All Reserves	31	316	334	511	49	10	19	183	1,452	182		
Little River AMA Regeneration Harvest	0	0	68	0	0	0	0	0	68	9		
Little River AMA Commercial Thinning	0	94	134	0	0	0	0	34	262	33		
Little River AMA Salvage	10	9	36	7	0	0	2	3	67	8		

GFMA, C/D Block & AMA Commercial Thinning totals include all intermediate harvest types
LSR & RR Density Management totals include all intermediate harvest types
Salvage totals also include timber sales designated as Right of Way (ROW) harvests



The RMP Management Action/Direction for Timber Harvest states:

"The allowable sale quantity for the resource management plan is an estimate of annual average timber sale volume likely to be achieved from lands allocated to planned, sustainable harvest. This estimate, however, is surrounded by uncertainties."

"The allowable sale quantity represents neither a minimum level that must be met nor a maximum level that cannot be exceeded. It is an approximation because of the difficulty associated with predicting actual timber sale levels over the next decade, given the complex nature of many of the management actions/direction. It represents BLM's best assessment of the average amount of timber likely to be awarded annually in the planning are over the life of the plan, following a start-up period."

Except for the District declared Allowable Sale Quantity, projections are not intended as management action/direction, but rather are underlying RMP assumptions. Projected levels of activities are the approximate level expected to support the Allowable Sale Quantity.

In fiscal year 2002 8.7 million board feet (MMBF) was sold from the Matrix. This represents 20% of the 45 MMBF allowable sale quantity. Cumulative information on timber harvest acres, volumes, and harvest types since the adoption of the RMP are provided in the Timber Resources section of the Annual Program Summary.

Short term legal, administrative, and Northwest Forest Plan implementation challenges have limited the ability to offer timber sales at the levels anticipated by the RMPs. These include:

The 9th Circuit Court of Appeals upheld Judge Rothstein's ruling in Pacific Coast Federation v. National Marine Fisheries Service (NMFS). This lawsuit invalidated numerous biological opinions written by NMFS for timber sales throughout the range of the NFP. The Roseburg District was heavily impacted by this ruling and has been unable to offer regeneration harvest timber sales. BLM and the US Forest Service are currently preparing a supplemental EIS to clarify language in the NFP to address the issues raised in the litigation.

The survey and manage (S&M) requirements of the NFP and the Roseburg District RMP have also proven difficult to implement. Species that were thought to be rare and primarily present in late successional forest habitat have been found in many of the managed commercial thinning age stands that the district has been focusing on in response to Pacific Coast Federation v. National Marine Fisheries Service. It is expected that as more is learned about some of these S&M species, they will be determined to no longer need protection. Currently their presence has caused many of the planned thinning sales on the Roseburg District to be reduced in acreage, delayed or canceled. BLM and the US Forest Service are currently preparing a supplemental EIS which may modify the S&M program.
Additional litigation concerning the impacts of forest management on the spread of the introduced pathogen Phytophthora lateralis, which infects Port-Orford cedar trees, also caused a number of planned projects to be delayed. BLM and the US Forest Service are currently preparing an EIS on Port-Orford Cedar management to address the issues raised in the litigation.

As a result of these factors, the Roseburg District timber sale program has been unable to award a timber sale containing a regeneration harvest since 1997 and has continued to focus on commercial thinning projects in fiscal 2002. A total of 11.9 MMBF was offered in advertised timber sales. (0.6 MMBF of the offered volume was on lands administered by the Eugene District and does not count towards Roseburg ASQ. The volume and associated acres are not reflected in the tables below.) An additional 0.6 MMBF was sold in small negotiated timber sales and modifications to active timber sales. The value of all timber sold in fiscal 2002 was $2,212,378. The monies associated with timber sales are paid as timber is harvested over the life of the contract, which is three years or less. Timber sale receipts collected by the Roseburg District in fiscal year 2002 from active harvesting totaled $379,763 from Oregon and California Railroad and Public Domain Lands. This relatively low level of receipts (timber sale receipts in 1998 were $17,000,000) is reflective of both the low number of timber sales available for harvest and the operating restrictions imposed during the summer of 2002 fire season.

Conclusion:
These discrepancies will be examined in a RMP evaluation scheduled for fiscal year 2004.

Monitoring Question 2:
Were the silvicultural (e.g., planting with genetically selected stock, fertilization, release, and thinning) and forest health practices anticipated in the calculation of the expected sale quantity, implemented?

Monitoring Requirement:
Program and data base review. An annual district wide report will be prepared to determining if the silvicultural and forest health practices identified and used in the calculation of the Allowable Sale Quantity were implemented. This report will be summarized in the Annual Program Summary.

Monitoring Performed:
Program and data base were reviewed and summary prepared.

Comment/Discussion:
Examination of fiscal year 2002 data indicate differences between implementation and RMP assumed levels of activity.

Differences in this question involved the following:

	Fiscal Year 2002	Projected
Brushfield/hardwood conversion	0 acres	15 acres
Site Preparation, prescribed fire	63 acres	840 acres
Site Preparation, other	0 acres	50 acres
Planting, regular stock	102 acres	290 acres
Planting, genetic stock	149 acres	1140 acres
Stand maintenance/protection	720 acres	830 acres
Stand release/precommercial thin	4283 acres	3900 acres
Pruning	1387 acres	460 acres
Fertilization	0 acres	1140 acres

Data is for contracts awarded after October 1, 1995. Data is displayed by fiscal year of contract award and does not necessarily correspond with the year the project was actually accomplished.

Brush field Conversion - To date no acres have undergone conversion. It is not expected that any attempt would be made unless herbicides were available as a conversion tool.

Site Preparation (FIRE) - The number of acres prepared with prescribed fire, both broadcast treatment and pile treatment is about 44% of planned. A continued decline in trend is likely to continue due to less than expected levels of regeneration harvest and other resource concerns.

Site Preparation (OTHER) - The number of acres prepared with alternative site preparation techniques is about 4% of planned. Factors affecting this activity are the same as for prescribed fire.

Planting (regular stock) - Total planted acres since 1995 without regard to genetic quality is at 57% of RMP assumed levels due to lack of planned RMP levels of timber harvest. Reforestation with genetically unimproved planting stock is 204% of planned. Total planting for 2002 is less than 20% of the annual level anticipated in the RMP because the Roseburg District has been unable to award a timber sale with a regeneration harvest since 1997. Regeneration harvests are the mechanism by which areas are made available for planting to start new forest stands for subsequent rotations. It is likely that in 2003 and 2004, planting will fall to less than 10% of the expected annual level because of the lack of the regeneration harvests which were anticipated in the RMP.

Planting (improved stock) - In fiscal year 2002, 67% of the acres reforested were planted with genetically improved Douglas-fir. 59% of the acres planted were in the GFMA land use allocation. Only GFMA acres are counted towards RMP monitoring goals since genetic improvement is assumed to contribute to ASQ only when done on GFMA acres. A phase in period for use of genetically improved Douglas-fir of 3 to 4 years was assumed to allow for older sales outside the GFMA land use allocation to be reforested and for seed orchards to reach production.

Planning for production of genetically improved stock has proved difficult due to the uncertainty of timber harvest timing. Seed must be sown one to three years prior to actual need. Due to decline in timber harvest overall and uncertainty in harvest timing, it is likely that this target will be approximately 13-35% of RMP levels by the end of the decade.

Maintenance/Protection - Acres of maintenance/protection treatments is currently 155% of planned levels. It is anticipated that at this rate, assumed RMP levels would be exceeded by 25-40%.

Precommercial Thinning (PCT) - Currently PCT is at assumed RMP levels. It is expected that at a minimum RMP goals will be met, or slightly exceeded over the decade.

Pruning - Currently pruning accomplishments are 132% of assumed RMP levels. Depending on funding this trend could continue. It is expected that RMP levels will be exceeded by 20 to 40% by decade's end.

Fertilization - Currently fertilization accomplishments are about 55% of assumed RMP levels. There is the potential to exceed planned RMP levels by about 20% if funding is available. However, implementation of future fertilization has been delayed by an administrative appeal of the proposed action.

Forest development, reforestation, silvicultural and timber stand improvement practices were accomplished in fiscal year 2002 through contracts valued at approximately $997,000.

Conclusion:

Differences in silvicultural practices anticipated in the calculation of the allowable sale quantity compared to actual implementation do not constitute RMP non-compliance because they are not substantive enough to result in a change in the calculation of the allowable sale quantity.

Special Forest Products

Expected Future Conditions and Outputs

Production and sale of special forest products when demand is present and where actions taken are consistent with primary objectives for the land use allocation.

Utilization of the principles of ecosystem management to guide the management and harvest of special forest products.

Implementation Monitoring

Monitoring Question 1:
Is the sustainability and protection of special forest product resources ensured prior to selling special forest products?

Monitoring Requirements:
Program review.

Monitoring Performed:
Program was reviewed.

Findings:
Use of special provisions on permits that restrict the amount of plant material or plant area to be harvested. Heavily harvested areas rotated or rested as appropriate for at least two years. None sold if special status species cannot be clearly identified to permittee.

Conclusion:
RMP requirements were met.

Monitoring Question 2:
What is the status of the development and implementation of specific guidelines for the management of individual special forest products?

Monitoring Requirements:
Program review.

Monitoring Performed:
Program was reviewed.

Findings:
Final Handbook on Guidance for Special Forest Products was published at the end of fiscal year 1996.

Conclusion:
RMP requirements were met.

GLOSSARY

AMA - Adaptive Management Area - The Roseburg District Little River AMA is managed to develop and test approaches to integrate intensive timber production with restoration and maintenance of high quality riparian habitat.

Allowable Sale Quantity (ASQ) - an estimate of annual average timber sale volume likely to be achieved from lands allocated to planned, sustainable harvest.

Anadromous Fish - Fish that are hatched and reared in freshwater, move to the ocean to grow and mature, and return to freshwater to reproduce. Salmon, steelhead, and shad are examples.

Archaeological Site - A geographic locale that contains the material remains of prehistoric and/or historic human activity.

Area of Critical Environmental Concern (ACEC) - An area of BLM administered lands where special management attention is needed to protect and prevent irreparable damage to important historic, cultural or scenic values, fish and wildlife resources, or other natural systems or processes; or to protect life and provide safety from natural hazards.

Best Management Practices (BMP) - Methods, measures, or practices designed to prevent or reduce water pollution. Not limited to structural and nonstructural controls and procedures for operations and maintenance. Usually, BMPs are applied as a system of practices rather than a single practice.

Biological Diversity - The variety of life and its processes, including a complexity of species, communities, gene pools, and ecological function.

Candidate Species - Plant and animal taxa considered for possible addition to the List of Endangered and Threatened Species. These are taxa for which the Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions.

Cavity Nesters - Wildlife species, most frequently birds, that require cavities (holes) in trees for nesting and reproduction.

Commercial Thinning - The removal of merchantable trees from a stand to encourage growth of the remaining trees.

Connectivity/Diversity Blocks - Lands spaced throughout the matrix lands, which have similar goals as matrix but have management action/direction which affect their timber production. They are managed on longer rotations (150 years), retain more green trees following regeneration harvest (12-18) and must maintain 25-30 percent of the block in late successional forest.

Cubic Foot - A unit of solid wood, one foot square and one foot thick.

Cumulative Effect - The impact that results from identified actions when they are added to other past, present, and reasonably foreseeable future actions regardless of who undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Density Management - Cutting of trees for the primary purpose of widening their spacing so that growth of remaining trees can be accelerated. Density management harvest can also be used to improve forest health, to open the forest canopy, or to accelerate the attainment of old growth characteristics, if maintenance or restoration of biological diversity is the objective.

District Designated Reserves (DDR) - Areas designated for the protection of specific resources, flora and fauna, and other values. These areas are not included in other land use allocations nor in the calculation of the ASQ.

Eligible River - A river or river segment found, through interdisciplinary team and, in some cases interagency review, to meet Wild and Scenic River Act criteria of being free flowing and possessing one or more Outstandingly Remarkable Values.

Endangered Species - Any species defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range and published in the Federal Register.

Environmental Assessment (EA) - A systematic analysis of site-specific BLM activities used to determine whether such activities have a significant effect on the quality of the human environment; and whether a formal Environmental Impact Statement is required; and to aid an agency's compliance with NEPA when no EIS is necessary.

General Forest Management Area (GFMA) (See Matrix) - This is the land use designation, on which scheduled harvest and silvicultural activities will be conducted that contribute to the ASQ.

Harvested Volume or Harvested Acres - Refers to timber sales where trees are cut and taken to a mill during the fiscal year. Typically, this volume was sold over several years. This is more indicative of actual support of local economies during a given year.

Hazardous Materials - Anything that poses a substantive present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Land Use Allocation (LUA) - Allocations which define allowable uses / activities, restricted uses / activities and prohibited uses / activities. Each allocation is associated with a specific management objective.

Late-Successional Forests - Forest seral stages that include mature and old growth age classes.

LSR - Late Successional Reserve - lands which are managed to protect and enhance old-growth forest conditions.

Matrix Lands - Land outside of reserves and special management areas that will be available for timber harvest that contributes to the ASQ.

MMBF - abbreviation for million board feet of timber

Noxious Plant/Weed - A plant specified by law as being especially undesirable, troublesome, and difficult to control.

O&C Lands - Public lands granted to the Oregon and California Railroad Company, and subsequently revested to the United States, that are managed by the Bureau of Land Management under the authority of the O&C Lands Act.

Offered (sold) Volume or Offered (sold) Acres - Any timber sold during the year by auction or negotiated sales, including modifications to contracts. This is more of a check on the district's success in meeting the ASQ than it is a socioeconomic indicator, since the volume can get to market over a period of several years.

Off-Highway Vehicle (OHV) - Any motorized track or wheeled vehicle designed for cross-country travel over natural terrain. The term, "Off Highway Vehicle" will be used in place of the term "Off Road Vehicle" to comply with the purposes of Executive Orders 11644 and 11989. The definition for both terms is the same.

Open: Designated areas and trails where Off Highway Vehicles may be operated subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343.

Limited: Designated areas and trails where Off Highway Vehicles are subject to restrictions limiting the number or types of vehicles, date, and time of use; limited to existing or designated roads and trails.

Closed: Areas and trails where the use of Off Highway Vehicles is permanently or temporarily prohibited. Emergency use is allowed.

Outstanding Natural Area (ONA) - An area that contains unusual natural characteristics and is managed primarily for educational and recreational purposes.

Outstandingly Remarkable Values (ORV) - Values among those listed in Section 1 (b) of the Wild and Scenic Rivers Act: "scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values . . ." Other similar values that may be considered include ecological, biological or botanical, paleontological, hydrological, scientific, or research.

Precommercial Thinning - The practice of removing some of the trees less than merchantable size from a stand so that remaining trees will grow faster.

Prescribed Fire - A fire burning under specified conditions that will accomplish certain planned objectives.

"Projected Acres" are displayed by age class for the decade. These age class acres are estimates derived from modeling various silvicultural prescriptions for regeneration, commercial thinning and density management harvest or are based on other assumptions.

Regeneration Harvest - Timber harvest conducted with the partial objective of opening a forest stand to the point where favored tree species will be reestablished.

Regional Ecosystem Office (REO) - The main function of this office is to provide staff work and support to the Regional Interagency Executive Committee (RIEC) so the standards and guidelines in the forest management plan can be successfully implemented.

Regional Interagency Executive Committee (RIEC) - This group serves as the senior regional entity to assure the prompt, coordinated, and successful implementation of the forest management plan standards and guidelines at the regional level.

Research Natural Area (RNA) - An area that contains natural resource values of scientific interest and is managed primarily for research and educational purposes.

Resource Management Plan (RMP) - A land use plan prepared by the BLM under current regulations in accordance with the Federal Land Policy and Management Act.

Right-of-Way - A permit or an easement that authorizes the use of public lands for specified purposes, such as pipelines, roads, telephone lines, electric lines, reservoirs, and the lands covered by such an easement or permit.

Rural Interface Areas - Areas where BLM administered lands are adjacent to or intermingled with privately owned lands zoned for 1 to 20-acre lots or that already have residential development.

Seral Stages - The series of relatively transitory plant communities that develop during ecological succession from bare ground to the climax stage. There are five stages:

Early Seral Stage - The period from disturbance to crown closure of conifer stands usually occurring from 0-15 years. Grass, herbs, or brush are plentiful.

Mid Seral Stage - The period in the life of a forest stand from crown closure to ages 15-40. Due to stand density, brush, grass, or herbs rapidly decrease in the stand. Hiding cover may be present.

Late Seral Stage - The period in the life of a forest stand from first merchantability to culmination of Mean Annual Increment. This is under a regime including commercial thinning, or to 100 years of age, depending on wildlife habitat needs. During this period, stand diversity is minimal, except that conifer mortality rates will be fairly rapid. Hiding and thermal cover may be present. Forage is minimal.

Mature Seral Stage - The period in the life of a forest stand from Culmination of Mean Annual Increment to an old growth stage or to 200 years. This is a time of gradually increasing stand diversity. Hiding cover, thermal cover, and some forage may be present.

Old Growth - This stage constitutes the potential plant community capable of existing on a site given the frequency of natural disturbance events. For forest communities, this stage exists from approximately age 200 until when stand replacement occurs and secondary succession begins again. Depending on fire frequency and intensity, old growth forests may have different structures, species composition, and age distributions. In forests with longer periods between natural disturbance, the forest structure will be more even-aged at late mature or early old growth stages.

Silvicultural Prescription -A detailed plan, usually written by a forest silviculturist, for controlling the establishment, composition, constitution, and growth of forest stands.

Site Preparation - Any action taken in conjunction with a reforestation effort (natural or artificial) to create an environment that is favorable for survival of suitable trees during the first growing season. This environment can be created by altering ground cover, soil or microsite conditions, using biological, mechanical, or manual clearing, prescribed burns, herbicides or a combination of methods.

SEIS Special Attention Species - a term which incorporates the “Survey and Manage” and “Protection Buffer” species from the Northwest Forest Plan.

Special Status Species - Plant or animal species in any of the following categories

- Threatened or Endangered Species
- Proposed Threatened or Endangered Species
- Candidate Species
- State-listed Species
- Bureau Sensitive Species
- Bureau Assessment Species

Visual Resource Management (VRM) - The inventory and planning actions to identify visual values and establish objectives for managing those values and the management actions to achieve visual management objectives.

Wild and Scenic River System - A National system of rivers or river segments that have been designated by Congress and the President as part of the National Wild and Scenic Rivers System (Public Law 90-542, 1968). Each designated river is classified as one of the following:

Wild River -A river or section of a river free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. Designated wild as part of the Wild and Scenic Rivers System.

Scenic River -A river or section of a river free of impoundments, with shorelines or watersheds still largely primitive and undeveloped but accessible in places by roads. Designated scenic as part of the National Wild and Scenic Rivers System.

Recreational River - A river or section of a river readily accessible by road or railroad, that may have some development along its shorelines, and that may have undergone some impoundment of diversion in the past. Designated recreational as part of the National Wild and Scenic Rivers System.

Acronyms/Abbreviations

ACEC	-	Area of Critical Environmental Concern
ACS	-	Aquatic Conservation Strategy
APS	-	Annual Program Summary
BA(s)	-	Biological Assessments
BLM	-	Bureau of Land Management
BMP(s)	-	Best Management Practices
CBWR	-	Coos Bay Wagon Road
CFER	-	Cooperative Forest Ecosystem Research
COPE	-	Coastal Oregon Productivity Enhancement project
CT	-	Commercial Thinning
CX	-	Categorical Exclusions
CWA	-	Clean Water Act
CWD	-	Coarse woody debris
DEQ	-	Oregon Dept. Of Environmental Quality
DM	-	Density Management
EA	-	Environmental Analysis
EIS	-	Environmental Impact Statement
EPA	-	U.S. Environmental Protection Agency
ERFO	-	Emergency Relief Federally Owned
ERMA	-	Extensive Recreation Management Area
ESA	-	Endangered Species Act
ESU	-	Evolutionarily Significant Unit
FEIS	-	Final Environmental Impact Statement
FLPMA	-	Federal Land Policy and Management Act
FONSI	-	Finding of No Significant Impacts
FS	-	Forest Service (USFS)
FY	-	Fiscal Year
GFMA	-	General Forest Management Area
GIS	-	Geographic Information System
GTR	-	Green Tree Retention
IDT	-	Interdisciplinary Teams
LSR	-	Late-Successional Reserve
LUA	-	Land Use Allocation
LWD	-	Large Woody Debris
MMBF	-	Million board feet
MOA	-	Memorandum of Agreement
MOU	-	Memorandum of Understanding
NEPA	-	National Environmental Policy Act
NFP	-	Northwest Forest Plan
NMFS	-	National Marine Fisheries Service
O&C	-	Oregon and California Revested Lands
ODF	-	Oregon Department of Forestry
ODFW	-	Oregon Department of Fish and Wildlife
OSU	-	Oregon State University
PACs	-	Province Advisory Councils
PD	-	Public Domain
PGE	-	Portland General Electric
PILT	-	Payment in lieu of taxes
PL	-	Public Law
PSQ	-	Probable Sale Quantity
RA	-	Resource Area
REO	-	Regional Ecosystem Office
RIEC	-	Regional Interagency Executive Committee
RMP	-	Resource Management Plan

RMP/ROD	-	The Roseburg District Resource Management Plan/ Record of Decision
RO	-	FS Regional Office
ROD	-	Record of Decision
RPA	-	Reserve Pair Area
RR	-	Riparian Reserve
R/W	-	Right-of-Way
SEIS	-	Supplemental Environmental Impact Statement
S&G	-	Standard and Guideline
S&M	-	Survey and Manage
SRMA	-	Special Recreation Management Area
TMO	-	Timber Management Objective(s)
TMP	-	Transportation Management Plan
TPCC	-	Timber Productivity Capability Classification
UO	-	University of Oregon
USDA	-	U.S. Department of Agriculture
USFS	-	U.S. Forest Service
USFWS	-	U.S. Fish and Wildlife Service
WC	-	Watershed Council
WFSA	-	Wildfire Situation Analysis
WQMP	-	Water Quality Management Plan

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