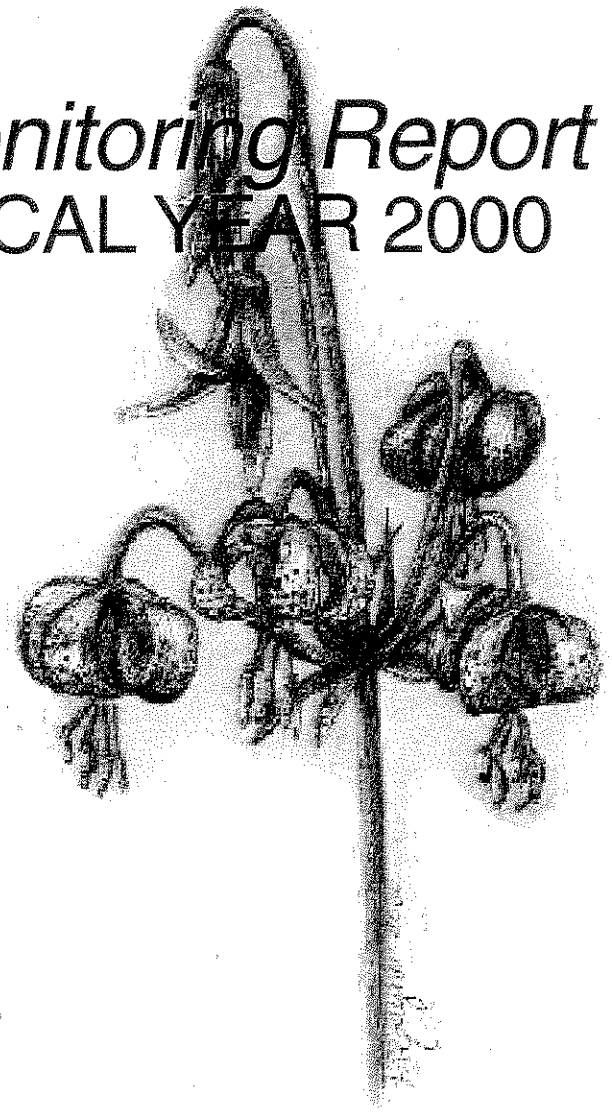
U.S. Department of the Interior
Bureau of Land Management

Roseburg District Office
777 NW Garden Valley Blvd
Roseburg, Oregon 97470

April 2001

Roseburg District *Annual Program Summary* and *Monitoring Report* FISCAL YEAR 2000



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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U.S. Department of the Interior
Bureau of Land Management

ROSEBURG DISTRICT

ANNUAL PROGRAM SUMMARY

AND

MONITORING REPORT

FISCAL YEAR 2000

April 2001

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ROSEBURG DISTRICT
ANNUAL PROGRAM SUMMARY
FISCAL YEAR 2000

Executive Summary

This document combines the Roseburg District Annual Program Summary and Monitoring Report for fiscal year 2000. 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 2000 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 uncertainty surrounding the Survey and Manage standard and guideline and ongoing litigation.

The Monitoring Report compiles the results and findings of implementation monitoring for fiscal year 2000. 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

RMP Resource Allocation or Management Practice or Activity	Fiscal Year 2000 Accomplishments	Cumulative Accomplishments 1995-2000 Timber 1996-2000 Others	Projected Decadal Practices
Regeneration harvest (acres sold)	0	3,052	11,900
Commercial thinning/density management (acres sold)	2-0	2,468-690	840 - 1,660
Site preparation (acres)	489	2,156	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)	1,441	7,622	8,300
Pre-commercial thinning (acres)	4,840	18,992	39,000
Brush field/hardwood conversion (acres)	0	0	150
Planting/ regular stock (acres)	788	3,629	2,900
Planting/ genetically selected (acres)	272	1,502	11,400
Fertilization (acres)	0	5,338	11,400
Pruning (acres)	169	2,461	4,600
New permanent road const. (miles/acres*)	1.3	19.2	65
Roads fully decommissioned/ obliterated (miles*)		1.7	87.5 -
Roads closed/ gated (miles**)	0	12.3	-
Open road density (per square mile*)	4.59	4.59	-
Timber sale quantity sold (m board feet)	1,473	153,929	495,000
Timber sale quantity sold (mm cubic feet)	0.2	25.430	70
Noxious weed control, chemical (acres)	205	331	-
Noxious weed control, other (acres)	410	1,638	

5* 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

RMP Resource Allocation or Management Practice	Activity Units	Fiscal Year 2000 Accomplishments	Cumulative Accomplishments 1995-2000
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)	8	8
Realty, road rights-of-way, permits or leases granted	(actions/miles)	20	68
Realty, utility rights-of-way granted (linear/areal)	(actions/miles/acres)	8	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	32/56
Recreation, maintained sites	(units/acres)	14/405	42/1,215
Cultural resource inventories	(sites/acres)	35/508	71/2,810
Cultural/historic sites nominated	(sites/acres)	0	0
Hazardous material sites	(incidents)	2	15

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 1999 through September 2000. 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 2000. 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 2000 represents the fifth 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 2000, Roseburg District had a total appropriation of $16,060,000. This included $890,600 for the Jobs-in-the-Woods program; $674,000 Management of Lands and Resources (MLR); $124,000 fire; $12,841,000 Oregon & California Railroad Lands (O&C); $54,000 mining law; $1,160,000 timber pipeline; and $120,000 recreation pipeline.

In fiscal year 2000, there were 158 full-time employees. and a total of 44, term or co-operative student employees. The number of temporary employees on board varied throughout the year with a total of 44 employed at some time during the year.

Total appropriations for the Roseburg District have been relatively stable during the period 1996 through 2000, with an approximate average appropriation of $13,489,000.

The number of full time employees has also been stable during this five year period, with an average of 160 full time employees.

Timber Sale Pipeline Restoration Funds

Twenty-five percent of these funds are dedicated to recreation backlog projects on O&C Districts of Western Oregon. The funds are intended to reduce infrastructure replacement or facility maintenance needs and resolve critical visitor safety or recreation management needs or issues identified in land use plans. Recreation site resource protection needs can also be met.

Total expenditure of recreation pipeline dollars for fiscal year 2000 was $122,000. The South River Field Office spent $9,200 for the design of a salmonid watchable wildlife site. In the Swiftwater Field Office, $12,250 was expended on Susan Creek Recreation Site for the slurry seal of roads and parking lots, parking lot striping, picnic tables that conform to the American Disabilities Act (ADA) and for fire grills. The Swiftwater also expended $94,650 on the Cavitt Creek Recreation Site Renovation that included electrical modifications, waterlines, tree treatments, septic system, drain pipes, gabion rock, soil fill, cultural mitigation and project inspection. In addition, the Swiftwater Field Office expended $5,900 on the Swiftwater Day-Use Area for the slurry seal of the parking lot and for a water pipeline.

Recreation Fee Demonstration Project

In March 1998, the Roseburg District received approval for establishing 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 where the fees were collected. The pilot program was to expire September 30, 2001, but was extended for one year. An account was established for deposit of fees and pavilion rentals at Susan Creek, Mill Pond, Rock Creek, Cavitt Creek, and Tyee Recreation Sites. It also includes fees from special recreation permits.

In fiscal year 2000, $54,973 was collected and deposited from fees, rentals and permits. $48,800 was reinvested in the following: Scaredman Campground upgrades, renovation of Cavitt Creek Recreation Site, phone line installation at Millpond Recreation Site, ADA upgrades to recreation sites, upgraded water system at Swiftwater Day-Use Area, campground host structure, hazard tree treatments, law enforcement support at recreation sites, recreation site paving and line stripping, interpretive brochures, recreation site storage sheds, and site project permits.

Land Use Allocations

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

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 2000, thirty-two 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. 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 2000.

Watershed analysis ongoing or proposed in fiscal year 2001 or beyond include: Middle North Umpqua, Lower Cow Creek, South Umpqua River.

Table 3 - Watershed Analysis Status

	Watershed Analysis Areas	Number of key watersheds	BLM Acres	Percent of total acres
Completed through FY00	32	11	409,697	96%
Ongoing FY01	2	0	15,303	4%
Total	34	11	425,000	100%

Watershed Restoration Projects

The aspect of watershed restoration work which consists of decommissioning roads is an ongoing process. During any given fiscal year the status of road decommissioning consists of some of the decommissioning work being completed, and some of the decommissioning work under contract to be completed. As of fiscal year 2000, approximately 101 miles of road have been completed or under contract to be decommissioned. The decommissioning of roads is dependent on complex and sensitive negotiations with permittees who have legal rights on most Roseburg District roads through Road Use Agreements. The district has continued to work towards building understanding and trust concerning the objectives of road decommissioning with permittees. that is expected to facilitate this process in future years. Road renovation and upgrading is another aspect of watershed restoration. Road renovation may include surfacing, replacing or adding culverts, improving drainage, seeding and mulching and other activities that effect water quality and habitat. The wide variety in types and intensity of road renovation limit the meaningfulness of a single total of miles accomplished. Road renovation for watershed restoration purposes is accomplished under timber sale contracts and Jobs-in-the-woods. Additional watershed work included culvert replacement or upgrading to pass 100-year floods as well as to provide fish passage and stream restoration.

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 , there was no density management or salvage that occurred in late-successional reserves. During the period of 1996 through 1999, there were 886 acres of density management and 134 acres of salvage that took place in late-successional reserves. Other activities that occurred in LSRs include planting, precommercial thinning and fertilization. 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. It reflects diverse input received from interested citizens, organizations, and agencies. 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.

The E-Mile timber sale specifically addressed the emphasis for the AMA. The challenge was to harvest timber yet maintain a high quality riparian condition. Unstable slopes were excluded from the sale area where landslide risk was high and 50% crown closure was left on moderate risk areas. Other objectives include stand health improvement, accelerating the development of late-successional conditions in the Riparian Reserve, and upgrading 2.5 miles of road. The impacts of the road upgrades to the stream network will be evaluated and point source erosion will be monitored over time.

One outstanding example of interagency cooperation is the Wolfpine Timber Sale which was completed this year. The project will develop and test methods of thinning around remaining live trees and use of prescribed fire to restore and maintain populations. An MOU was signed by the BLM, the FS, PNW, Wolf Creek Job Corp, and the Southwest Oregon Insect and Disease Technical Center for the combined timber sale and research project. The Umpqua National Forest will administer the contract. The Roseburg District and the Umpqua National Forest also implemented a companion study to evaluate techniques for establishing and monitoring sugar pine in plantations where white pine blister rust was present.

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. A gauging station was installed to provide continuous telemetered flow measurements and other data to phone or internet. Related to water quality monitoring is outmigrant smolt monitoring that has so far amassed three years worth of data on Little River. All water quality data will be linked to an interagency GIS. A water quality restoration plan (WQRP) was completed in cooperation with the Umpqua National Forest. This plan was submitted to DEQ for use in creating an overall water quality management plan (WQMP) for the Little River watershed. A WQMP and total maximum daily loads (TMDLs) are required because Little River and several of its tributaries have been listed for water pollution under Section 303(d) of the Clean Water Act.

Other projects already developed or still under development include coarse woody debris, landslide, and road inventories and 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

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 - Total, June 1995-September 2000

Prescribed Fire:	2397 acres
On district wildfires:	61 fires for a total of 36 acres - 48 lightning caused and 13 human caused
Off district wildfires:	237 district personnel accepted assignments to 146 wildfires across the nation.

Water and Soils

Water temperature was monitored at 100 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 3 stream gaging 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 will be published in the North Umpqua River Wild and Scenic Section 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 1996-2000

The Roseburg District:

- Surveyed 367 miles of streams for proper functioning condition;
- Operated 6 gauging stations;
- Five studies for sediment;
- Water temperature was monitored for 100 streams;
- 12 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 three 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 24 state-listed streams identified by the Department of Environmental Quality (DEQ). See Table 4.

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 objectives 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

Table 4 - 303(d) Listed Waterbodies in the Roseburg District

Stream or Waterbody Name	Basin/Sub Basin	Criteria for listing	Resource Area
Canton Creek	Umpqua/North Umpqua	Habitat Modification, Sediment, Temperature- Summer	Swiftwater
Cavitt Creek	Umpqua/North Umpqua	Habitat Modification, Sediment, Temperature-Summer	Swiftwater
Jim Creek	Umpqua/North Umpqua	Temperature-Summer	Swiftwater
Little River	Umpqua/North Umpqua	Habitat Modification, pH-Summer, Sediment, Temperature-Summer	Swiftwater
North Umpqua River	Umpqua/North Umpqua	Flow Modification, Temperature-Summer	Swiftwater
Northeast Fork Rock Creek	Umpqua/North Umpqua	Temperature-Summer	Swiftwater
Rock Creek	Umpqua/North Umpqua	Temperature-Summer	Swiftwater
Scaredman Creek	Umpqua/North Umpqua	Temperature-Summer	Swiftwater
Wolf Creek	Umpqua/North Umpqua	pH-Summer, Temperature-Summer	Swiftwater
Cow Creek	Umpqua/South Umpqua	pH-Summer, Temperature-Summer	South River
Deadman Creek	Umpqua/South Umpqua	Temperature-Summer	South River
East Fork Stouts Creek	Umpqua/South Umpqua	Temperature-Summer	South River
Middle Creek	Umpqua/South Umpqua	Temperature-Summer	South River
Olalla Creek	Umpqua/South Umpqua	Temperature-Summer	South River
South Fork Middle Creek	Umpqua/South Umpqua	Temperature Summer	South River
South Myrtle Creek	Umpqua/South Umpqua	Flow Modification, Temperature-Summer	South River
South Umpqua River	Umpqua/South Umpqua	Biological Criteria, Dissolved Oxygen-Cool Water Aquatic Life: May to October, Periphyton-Summer, pH-Summer, Sediment, Temperature-Summer, Water Contact Recreation (Fecal Coliform)-Fall through Spring, Water Contact Recreation (Fecal Coliform)-Summer	South River
West Fork Stouts Creek	Umpqua/South Umpqua	Temperature-Summer	South River

Table 4 - 303(d) Listed Waterbodies in the Roseburg District

Stream or Waterbody Name	Basin/Sub Basin	Criteria for listing	Resource Area
Calapooya Creek	Umpqua/Umpqua	Dissolved Oxygen-Salmonid Spawning: September though March, Flow Modification, pH-Summer, Temperature-Summer, Water Contact Recreation (Fecal Coliform)-Fall through Spring, Water Contact Recreation (Fecal Coliform)-Summer	Swiftwater
Elk Creek	Umpqua/Umpqua	Dissolved Oxygen-Salmonid Spawning: September through March, Flow Modification, Temperature-Summer Water Contact Recreation (Fecal Coliform)-Fall through Spring, Water Contact Recreation (Fecal Coliform)-Summer	Swiftwater
N. Fork Smith River	Umpqua/Umpqua	Temperature-Summer	Swiftwater
Smith River	Umpqua/Umpqua	Temperature-Summer	Swiftwater
Umpqua River	Umpqua/Umpqua	Flow Modification, Temperature-Summer, Water Contact Recreation (Fecal Coliform)- Fall through Spring	Swiftwater
Wolf Creek	Umpqua/Umpqua	Temperature Summer	Swiftwater

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 1996-2000 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 man 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 operationa feasibility. Monitoring has shown no instances in which this RMP management direction was not implemented successfully.

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 has been no regeneration harvests or commercial thinning in Connectivity/Diversity Blocks in fiscal year 2000. There has been 362 acres of regeneration harvest, 908 acres of commercial thinning, and 116 acres of salvage in connectivity/diversity blocks cumulative during fiscal years 1996-2000. Twenty-five percent of connectivity/diversity blocks is 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 manage ment 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 2000.

Late-Successional Reserve habitat improvement

There was no active habitat improvement in Late-Successional Reserve habitat through density management or prescribed burning in fiscal year 2000.

Special Status Species/Habitat, Wildlife

Survey and Manage/Protection Buffer Species

The Roseburg District has implemented the management action/direction associated with Survey and Manage and Protection Buffer species. However, survey requirements for difficult to locate and identify species, some of which require as much as five years of surveys to determine presence limited the number of activities requiring species surveys that were able to be implemented in fiscal year 2000. Surveys for the species listed in Appendix H of the ROD, also known as Survey and Manage species and Protection Buffer species, are conducted prior to ground disturbing activities. When surveys locate species listed in Appendix H, sites are managed in accordance with RMP management action/direction.

The Forest Service and Bureau of Land Management have modified the Survey and Manage standards and guidelines. A draft supplemental environmental impact statement was issued in December 1999 that presented three action alternatives that were intended to better identify species protection needed, clarify language, eliminate inconsistent and redundant direction, and establish a process that will be responsive to new information. The alternatives did not change the underlying purpose of the Northwest Forest Plan and did not address other elements of the plan. A Final Supplemental Environmental Impact Statement was published in November 2000 followed by a Record of Decision in January 2001. These changes were not in effect during fiscal year 2000, the time period of this report. Therefore, information regarding this standard and guideline reflect requirements prior to the amendment of the Survey and Manage standard and guidelines.

Mollusks

The Roseburg District contains habitat for three species of mollusks listed in Appendix H of the RMP: *Megomphix hemphilli, Prophysaon coeruleum,* and *Prophysaon dubium.* Surveys for these species began in 1997 and are continuing in the district. In fiscal year 2000, 2,234 acres were surveyed to protocol in project areas across the district. *Helminthoglypta hertleini* was located at 7 sites, *Megomphix hemphilli* at 87 sites, *Prohysaon articum crateris* was not located on the district, *Prophysaon coeruleum* was located at 221 sites, *Prophsaon. dubium* at 24 sites and. Most sites were located in timber sale project areas but some were also located in culvert and stream restoration project areas. Habitat areas (ie. buffers) have not been applied in most project areas since most projects have been postponed for later implementation. However, two habitat areas have been implemented collectively for eight *Helminthoglypta hertleini* sites and one *Prophysaon dubium* site for a total of approximately 4 acres.

Red Tree Vole

Red tree vole surveys were conducted on 8,855 acres in fiscal year 2000. District personnel assisted Pacific Northwest Research Station staff in conducting surveys in order to better define habitat characteristics.

Del Norte Salamander

A total of 1,009 acres of potential habitat were surveyed for Del Norte salamander in fiscal year 2000. No new sites were located.

Threatened/Endangered Species

A large portion of the District wildlife program's resources are directed toward gathering ai interpreting information to ensure compliance with the Endangered Species Act and the lan use plan. Consultation under Section 7 of the Endangered Species Act occurs on all activities proposed within habitat of listed species. For fiscal year 1999-2000 timber sale program formal consultation was for terrestrial species was completed in June 1998.

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 134,42 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 the Pacific Northwest Research Station's efforts in two long term demographic study areas. Results of these efforts are as follows:

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. The District released a Draft Environmental Impact Statement in December 1999 followed by a Final Environmental Impact Statement in September 2000. The Record of Decision foı this project is pending. The U.S. Fish and Wildlife Service has proposed delisting this species. 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.

Table 5. Northern Spotted Owl Survey Results for Roseburg District.

Survey Year	Sites Surveyed[1]	No. Pairs Observed[2]	Proportion of Sites Occupied
1996	328	149	45%
1997	301	123	41%
1998	302	132	44%
1999	284	115	40%
2000	263	122	46%

6[1] Sites which had one or more visits. May include some sites which did not receive 4 visits.

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 2000, 2397 acres were surveyed for marbled murrelet at 44 sites. Two of three historically occupied sites were occupied again in fiscal year 2000. One additional site was 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. By the end of the 1998 field season, three confirmed nest sites and one probable site had been located. One site is on public land. The others are on private land adjacent to public land. In fiscal year 2000, one site fledged young. The peregrine falcon was delisted in 1999. However, the species will remain on the Bureau's sensitive species list and monitoring will be continued. During fiscal year 2000, there were no proposed projects within buffer zones around the 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. Northern goshawk surveys are conducted as part of the timber sale planning process. A total of 140 acres were surveyed for goshawks in fiscal year 2000. No new sites were located.

Great Grey Owl

The great grey owl is not a bureau sensitive species but is a species which is tracked to obtain more information as to its status. The great grey owl is a protection buffer species under the Northwest Forest Plan. Most of the Roseburg District is below the elevation of

3,000 which is specified in the great grey owl survey protocol. Great grey owls have been occasionally observed on the district. Survey attempts in fiscal year 2000 located no great grey owl nest sites.

Fish Habitat

There was continued District effort during fiscal year 2000 to address fisheries issues relat to Threatened and Endangered anadromous salmonids. Major duties are divided between inventory, assessment, restoration, Watershed Analysis, NEPA documentation, timber sale review, public education, and Section 7 ESA (Endangered Species Act) consultation with th NMFS (National Marine Fisheries Service).

Fisheries Inventory and Assessment

Smolt Trapping

The District operated five rotary screw smolt traps to assess the numbers of juvenile anadro mous salmonids migrating to the ocean (smolts) from the subject watersheds (Table 1). Thi project is in its third year of implementation and helps support the Oregon Plan for Salmon and Watersheds (Oregon Plan). Information collected as part of this project will help fisheries and land managers compare smolt production between watersheds, assess the affects of watershed management on fish survival, and determine priorities for watershed restoration activities.

Traps were operated during the primary period of smolt outmigration (generally March - July) or until stream flows dropped and prevented efficient operation of the traps. A variety of fish species were captured including chinook salmon, coho salmon, steelhead trout and cutthroat trout. In all, over 48,000 fish were captured during the 2000 season. While definitive conclusions cannot be reached after only two years of data, continued smolt trapping will provide better insight into the dynamics of anadromous fish populations withi the Umpqua basin.

Table 6. Fiscal Year 2000 Smolt Trapping Information

Location	Basin Area (Acres)	Coho Smolts (Total Captured)	Chinook Smolts (Total Captured)	Steelhead Smolts (Total Captured)	Cutthroat Smolts (Total Captured)
Canton Creek	40,573	21	0	10,462	219
Little River	131,853	1,076	257	2,095	28
Lookingglass Creek	103,109	4,189	4,929	986	121
Myrtle Creek	76,036	1,756	1,485	2,090	39
Rock Creek	62,684	760	1,380	5,865	113

Fisheries personnel reviewed approximately 22 stream miles to determine the presence or absence of fish within potential timber harvest units and as part of Watershed Analysis. Information was used to accurately establish Riparian Reserve boundaries within proposed project areas and to update fish distribution for the District Fish/Hydro GIS theme.

Spawning and Snorkeling Surveys

The District conducted coho salmon spawning surveys in support of the Oregon Plan. Personnel surveyed 11 stream reaches on a weekly basis. A total of 24 stream miles were reviewed during the survey period. Surveyors observed 227 coho salmon and 187 coho salmon redds (nests). Information was coordinated with the Oregon Department of Fish and Wildlife to help estimate numbers of coho salmon returning to watersheds within the Umpqua basin. Additionally, District personnel conducted snorkeling surveys on approximately 2 miles of stream in Rock Creek.

Aquatic Habitat Inventories

The District conducted aquatic inventories on approximately 8 miles of stream in Jackson Creek and Smith River, and "Properly Functioning Condition" assessments on 367 miles of streams throughout the Umpqua basin. Information will be used to help assess the affects of stream restoration projects on local habitat conditions and provide information for various project Environmental Assessments and Watershed Analyses.

Fish Passage Assessments

District personnel conducted culvert inventories at 75 locations to evaluate fish passage conditions at these sites. Information will be used to establish culvert replacement priorities that will provide maximum benefits for fish species while taking into account cost considerations.

Aquatic Habitat Restoration

Fish Passage Restoration

The District continued to identify and sites that have historically been barriers and/or impediments to Pacific salmonid migration. In fiscal year 2000, the District replaced eight culverts and removed one dam to facilitate upstream fish migration. Culverts were located on Billie Creek, Johnson Creek, Elk Creek, Sutherlin Creek, Summit Creek and Professional Creek. Overall, these projects resulted in restoring passage to approximately 3.5 miles of spawning and rearing habitat.

Roads/Sediment Reduction

Road related activities to improve watershed health and fish habitat continued to receive focus from the District. In fiscal year 2000, the District fully decommissioned[1] approximately 0.3 miles of road. This was done to reduce the maintenance and prevent future road failure that could potentially damage fish habitat. In addition, measures[2] to reduce road sediment sources we applied to approximately 36 miles of road. This will help reduce the risk of aquatic habitat degradation from road related sources. Road work was focused in the Old Fairview, Canton Creek, and Smith River drainages.

Fisheries and Aquatic Education

District fisheries personnel continued to educate local school students on fisheries and watershed related issues. Students from the Phoenix school were taken to the field to

observe and assist in coho salmon spawning surveys on a weekly basis. Several field trips were conducted to show students how smolt traps were operated and techniques for handling, measuring and marking Pacific salmonids. In addition, fisheries personnel volunteered time and presented information at the free fishing day, forestry tours, and BLM recreation sites to educate others about fisheries resources in the Umpqua basin.

ESA Section 7 Consultation

Due to a December court ruling (dated December 20, 2000) which clarified an earlier rulin that suspended 20 Biological Opinions and their accompanying incidental take statements, the NMFS agreed to formally consult on non-timber sale projects. In fiscal year 2000, the District consulted on and received Biological Opinions for in-stream fish habitat restoratio road maintenance, culvert replacements and other non-timber sale projects. The District al completed five new Biological Assessments for timber sales that would not result in "take adverse modification of critical habitat" and were determined to "Not Likely to Adversely Affect" Oregon coast coho. There projects are expected to receive Biological Opinions fro NMFS in the second quarter of fiscal year 2001.

Special Status and SEIS Special Attention Species, Botany

Surveys for special status and special attention species are being conducted prior to ground disturbing activities. Over 21,000 acres have been surveyed for these species during fiscal years 1996-2000, including 14,000 acres in reserve land use allocations. See Tables 6, 7, a 8.

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 1500 acres of pre-disturbance clearance surveys were completed annually since th initial implementation of the RMP. Baseline fungi, lichen, and bryophyte inventories have been completed on approximately 2100 acres in District ACECs and ACEC/RNAs. Four S plants have been monitored on an annual basis to determine population trends (*Aster vialis, Calachortus umpuensis, Calachortus coxii,* and *Cimicufuga elata*). The number of special status sites known to occur on public lands within the District at the end of fiscal year 2000 are presented by category in Table 6. The number of special attention plant sites are presented by category in Table 7. The total number of special status sites at the end of fiscal year 2000 was 342 and the total number of special attention sites was 1503.

No consultation for special status plants has occurred through fiscal year 2000. Habitat restoration was attempted at two special status plant locations (for *Calochortus umpquensis* and *Calochortus coxii*). Three Conservation Strategies have been completed (*Calochortus umpquensis, Calochortus coxii*, and *Cimicifuga elata*).

Survey and Manage Species and Protection Buffer Species

There are approximately 400 species listed in the Northwest Forest Plan and Roseburg RMP as either survey and manage or protection buffer species. Each survey and manage species or protection buffer species has management requirements. Management requirements include one or more of four survey and manage strategy (Survey and Manage component) o the requirements for managing the sites. Much of the information to carry out the various strategies has been under development through the Regional Ecosystem Office with the help of species experts from throughout the northwest.

Management recommendations for all component 1 species and survey protocols for all component 2 and protection buffer species were completed and available for field use. Management recommendations were completed for all protection buffer species except for the fungus *Sarcosoma mexicana*.

The Forest Service and Bureau of Land Management have amended the Survey and Manage standards and guidelines. A draft supplemental environmental impact statement was issued in December 1999 that presented three action alternatives that were intended to better identify species protection needed, clarify language, eliminate inconsistent and redundant direction, and establish a process that will be responsive to new information. The alternatives did not change the underlying purpose of the Northwest Forest Plan and did not address other elements of the plan. A Final Supplemental Environmental Impact Statement was published in November 2000 followed by a Record of Decision in January 2001. These changes were not in effect during fiscal year 2000, the time period of this report. Therefore, information in this report regarding the species related standard and guideline reflect requirements prior to the amendment of the Survey and Manage standard and guidelines.

Table 7. Total Number of Sites by Taxa Group for Special Status Plant Species (09/30/00)

Taxa Group (#species)	Federal Listed	Federal Candidate	Bureau Sensitive	Assessment Species	Tracking Species
Fungi	0	0	0	0	0
Lichens	0	0	0	0	1
Bryophytes	0	0	1	5	0
Vascular Plants	8	0	92	23	212

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

	Status[2]				
Species Group	PB	SM1	SM2	SM3	SM4
Fungi	129	105	10	397	197
Lichens	0	56	8	56	713
Bryophytes	112	10	9	1	38
Vascular Plants	0	36	36	0	0

[2] Status: PB=Protect & Buffer
SM1=Survey & Manage Strategy 1
SM2=Survey & Manage Strategy 2
SM3=Survey & Manage Strategy 3
SM4=Survey & Manage Strategy 4

(Some special attention species are included in more than one status category)

Port-Orford Cedar

Port-Orford cedar trees growing near roads and streams are at risk for infection by a root disease caused by a water mold *Phytophthora lateralis*. Field surveys are on-going to identify new locations of healthy Port-Orford cedar, as well as the disease.

In fiscal year 2000, Port-Orford cedar trees growing on the Roseburg District were sample and their vegetative material were tested at Oregon State University for potential genetic resistance to the root disease. An associated interagency research site on the district is als annually planted to validate in a natural forest environment these laboratory results.

In fiscal year 1997, a ten acre Port-Orford cedar common-garden study site was installed ir the South River Resource Area to study the silvicultural and genetic characteristics of this conifer species. Initial results will be available in fiscal year 2001.

Special Areas

The Roseburg District has 12 special areas that total 11,323 acres. Defensibility monitorin has been conducted annually on all Areas of Critical Environmental Concern/Research Natural Area (ACEC/RNA). Habitat has been restored from unauthorized use on one ACE RNA (North Myrtle Creek) and noxious weeds have been controlled on two other ACEC/ RNAs (Bear Gulch and Myrtle Island). A checklist for vascular plants has been completed for the Myrtle Island ACEC/RNA. and is scheduled for publication in fiscal year 2001. Baseline fungi, lichen, and bryophyte inventories have been completed for six ACEC/RNA one ACEC, and one candidate ACEC. Draft management plans have been completed for four ACEC/RNAs. Final plans are scheduled for completion for three of the draft plans in fiscal year 2001. An environmental impact statement was completed for the North Bank Area of Critical Environmental Concern (ACEC) in fiscal year 2000. The Record of Decision is scheduled to be published in fiscal year 2001.

Seven ACECs were nominated by the public in the during comment period for the RMP EI Five of these nominations have been reviewed by the South River Resource Area and decisions are expected in fiscal year 2001. All nominated areas are being managed to prote the proposed relevant and important values. A feasibility report supporting the land acquisi tion proposed in the RMP to expand Beatty Creek ACEC/RNA was completed in fiscal yea 2000. A land exchange was proposed in the feasibility report and will be initiated in fiscal year 2001.

Wild and Scenic Rivers

Objective: Manage designated components of the National Wild and Scenic Rivers System by protecting their outstandingly remarkable values (ORVs) and maintain and enhance the natural integrity of river-related values.

Recreation use on the North Umpqua Wild and Scenic River was documented in the 1996, 1997, 1998, 1999, and 2000 North Umpqua River Use Report. A summary follows with emphasis on measurable units of accomplishment.

Wild and Scenic Rivers Managed: North Umpqua Wild & Scenic River, designated throug the Omnibus Oregon Wild & Scenic Rivers Act of 1988.

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

	1996	1997	1998	1999	2000
Private Boating Visits	3,605	4,405	4,343	4,313	4,311
Commercial Boating Visits	2,541	2,360	2,270	2,490	2,019
Boating Visits on BLM section	800	790	680	750	650

River Segment	BLM Miles	Classification	Miles
North Umpqua	8.4	Recreational	8.4

Outstandingly Remarkable Values (ORVs) monitored included Fish, Water, Recreation, Scenery, and Cultural Resources. Protection of the ORVs occurred between 1996 - 1998 through a coordinated monitoring plan with the Umpqua National Forest.

High-level monitoring of recreation use in the North Umpqua River was conducted daily between mid May and mid-Sept. each year 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 (13) to commercial river permittees. Employees engaged in monitoring included one full time BLM River Manager and one temporary USFS person. BLM covered the salary of the USFS temp. Objectives of the river surveys were to:

- Identify types of recreation use occurring on the river.
- Provide a BLM/USFS presence on the river to contact, inform, and educate public users.
- Document 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.

The five river segments found eligible for inclusion into the National Wild & Scenic Rivers System, three were not assessed for suitability because they did not meet minimum suitability requirements (Cow Creek, South Umpqua River, Umpqua River). The two which were assessed for suitability (Canton Creek, Smith River) were determined to be unsuitable for designation in the National Wild & Scenic River system. The corridor width for rivers found eligible or studied for suitability is defined as 1/4-mile on either side of the river. Under interim protective management, all authorized actions on BLM administered land within a +- mile wide corridor have had either a positive or neutral effect on identified ORVs that resulted in rivers being found eligible/suitable.

Interim management for Roseburg District Eligible Recreational Rivers has been to exclude timber harvest in the riparian reserves, moderately restrict development of leaseable and saleable minerals, and protect a segment's free flowing values and identified ORVs. In undesignated segments, BLM has provided interim protective management for ORVs identified on BLM-lands along river segments determined eligible but not studied for inclusion as components of the National Wild & Scenic Rivers System.

BLM actions and BLM authorized actions have been consistent during the monitoring period with protection of the ORVs of the designated North Umpqua Wild and Scenic River.

Annually, actions and research proposals within and adjacent to Wild & Scenic River corridors have been be reviewed by Resource Area specialists to determine whether the possibility of impacts on the ORVs were considered, and whether any mitigation identified as important for maintenance of the values was required. If mitigation was required, the relevant actions were reviewed on the ground, after completion, to ascertain whether it was actually implemented.

Cultural Resources

In fiscal year 2000, 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 evaluation and public projects, were undertaken under Section 110. Seventeen archeological sites wer evaluated and 1,758 acres were inventoried.

Public projects included a return to the North Bank site, participation in the Windows on th Past show sponsored by the Forest Service, the presentation of two Oregon Archeology Week sessions (in conjunction with the Forest Service), and participation in the School Forestry Tour. Approximately 2,600 people, mostly elementary school students, attended tl programs.

The District senior staff specialist again worked throughout the fiscal year with the Oregon State Cultural Database Advisory Group to develop a cultural resource database to be used by all entities with the state, including federal and state agencies, tribes and private contractors. The database was officially adopted by the State Historic Preservation Office in Marc and was finalized in September.

Visual Resources

Roseburg BLM lands were monitored to meet the following visual quality objectives:

Class	Guidance
VRM I:	Preserve the existing character of landscapes.
VRM II:	Retain the existing character of landscapes.
VRM III:	Partially retain the existing character of landscapes.
VRM IV:	Allow major modifications of existing character of landscapes.

In the Roseburg District, there is the following classification of lands:

Class	Acres
VRM I	28
VRM II	18,045
VRM III	4,385
VRM IV	396,546

District VRM specialists (outdoor recreation planners) analyzed all surface disturbing actions which contained any VRM II or III areas during the three year period. There were n actions in VRM I areas. There was one proposed action in VRM II or III areas. Twenty percent of timber sales and other substantial projects in VRM Class II or III areas were

required to be reviewed to ascertain whether relevant design features or mitigating measures would be included. The actual number of environmental assessments reviewed in the Roseburg District was 100% of all actions (not only Timber) in VRM II and III areas. In the Roseburg District the total number of environmental assessments analyzed for VRM were eleven in 1996, twelve in 1997, nine in 1998, one in 1999, and one in 2000.

As needed, the visual resource contrast rating system has been used during project level planning to determine whether or not proposed activities will meet VRM objectives.

VRM Class II lands were managed for low levels of change to the characteristic landscape. Management activities may be seen but did not attract the attention of the casual observer. Changes repeated the basic elements of form, line, color, texture, and scale found in the predominant natural features of the characteristic landscape.

VRM Class III lands were managed for moderate levels of change to the characteristic landscape. Management activities could attract attention but did not dominate the view of the casual observer. Changes should repeated the basic elements of form, line, color, texture, and scale found in the predominant natural features of the characteristic landscape.

VRM Class IV lands were managed for moderate levels of change to the characteristic landscape. Management activities could dominate the view and be the major focus of viewer attention. However, every attempt was made to minimize the effect of the activities through careful location, minimal disturbance, and repeating the basic elements of form, line, color and texture.

Rural Interface Areas

There were no projects in the Rural Interface Areas during fiscal years 1996-2000.

Socioeconomic

Employment Trends

Douglas County has continued to be a slow growing economic region of the state during 1999. Employment growth lagged statewide rates. Douglas County showed good growth in the construction and services sectors, while the transportation, communications, and utilities sector lost jobs. The manufacturing sector showed a large overall decline, about 5.5 percent.

Statewide lumber and wood products employment has continued the downward trend which began in 1989, decreasing 1,700 jobs between 1998 and 1999. Total lumber and wood products employment in 1999 averaged 57,300 jobs within Oregon. Douglas County countered the statewide trend, adding 90 jobs between 1998 and 1999.

Payments in Lieu of Taxes, O&C Payments, and Coos Bay Wagon Road (CBWR) payments were made in fiscal year 2000 as directed in current legislation. The specific amounts paid to Douglas County under each revenue sharing program in fiscal year 2000 are in the Receipts and Distributions section of this report.

New legislation (P.L. 106-393, Secure Rural Schools and Community Self-Determination Act of 2000) was signed October 30, 2000, that extends "safety-net" payments through fiscal year 2006. The law establishes a new formula for calculating payments which is based on selecting the highest three years in the eligibility period (1986-1999). The law also allows

for annual increases in the payment based on Consumer Price Index information. O&C an CBWR payments in fiscal year 2001 will be based on the new legislation.

During April 2000 the Bureau of Census completed is decadal census. It is anticipated tha this data will be released beginning April 2001 and continuing through 2003. Significant opportunities exist to compare the 2000 data to the 1990 data and to examine trends. Whe: census data was used in developing the District Resource Management Plan, opportunities will exist to update information.

See Tables 11 and 12 for detailed information on employment by industry for Oregon and Douglas County.

Receipts and Distributions

See Table 10.

Jobs-in-the-Woods

The Jobs-in-the-Woods program was established to mitigate the economic and social impa of reduced timber harvesting under the Northwest Forest Plan while investing in the ecosys tem. Budgets for Jobs-in-the-Woods on the Roseburg District have been: fiscal year 1996- $1,075,000, 1997-$1,000,000, 1998-$1,200,000, 1999-$768,000,and 2000-$890,000. Fort six projects were funded through contracts on the district under this program from 1996 to

Table 10. Receipts and Distributions

	1996	1997	1998	1999	2000	To 1996-20
Forest Development						
	$950,000	$1,150,000	$1,542,000	$804,000	$1,241,000	$5,687,0
Jobs-in-the-Woods						
	$1,075,000	$1,000,000	$1,200,000	$768,000	$890,000	$4,933,0
Timber sale collections						
O&C	$18,062,961	$9,344,885	$10,231,933	$12,656,551	$8,252,276	
CBWR	$653,889	$2,533	0	0	0	
PD	$3,796,970	$10,590	$57,210	0	$577,481	
Total	$22,513,820	$9,358,008	$10,289,143	$12,656,551	$8,829,757	$63,647,2
Payments to Douglas County						
O&C & CBWR	$18,366,586	$17,669,120	$16,971,654	$16,971,654	$15,576,724	
PILT	$231,578	$91,143	$230,399	$105,090	$99,959	
Total	$18,598,164	$17,760,263	$17,202,053	$17,076,744	$15,676,683	$86,313,9
Value of timber sales, oral auction and negotiated						
	$19,000,000	$21,102,854	$17,445,591	$12,656,551	$220,944	$70,425,9

O&C - Oregon and California Railroad Lands
CBWR - Coos Bay Wagon Road Lands
PD - Public Domain Lands
PILT - Payment in Lieu of Taxes

Table 11. Resident Labor Force, Employment by Industry, Oregon.

	1970	1980	Average 1984-88 Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Civilian Labor Force	864,500	1,295,000	1,362,400	1,491,000	1,508,000	154,200	1,596,000	1,640,000	1,656,200	1,719,700	1,727,700	1,763,700	1,760,500
Unemployment	61,700	107,000	104,800	82,000	90,000	116,000	116,000	89,000	80,100	101,600	100,700	98,600	100,400
Total Wage & Sal. Emp.	709,200	1,044,600	1,068,680	1,251,900	1,251,800	1,274,200	1,308,400	1,362,900	1,418,400	1,474,600	1,526,400	1,551,800	1,572,400
Total Manufacturing	172,300	215,100	203,240	220,300	211,700	209,000	211,700	221,300	229,300	235,800	243,600	246,100	240,800
>Lumber & Wood Prod. (& Paper)	76,200	79,900	75,060	73,200	65,800	63,800	62,700	63,300	61,300	59,800	60,200	59,000	57,300
>Other Manufacturing	96,100	135,200	128,180	147,100	145,900	145,200	149,000	158,000	168,000	176,000	183,400	187,100	183,500
Total Non-Manufacturing	536,900	829,500	865,440	1,031,600	1,039,000	1,065,200	1,096,700	1,141,600	1,189,100	1,238,900	1,282,800	1,305,700	1,331,600
>Const. & Mining	30,800	48,800	35,800	54,000	53,000	52,000	55,700	62,900	70,400	79,400	83,300	83,400	84,700
>Trans., Comm. & Utilities	48,700	60,500	58,040	64,500	65,200	65,700	66,800	68,900	71,300	73,500	74,900	76,200	77,700
>Trade	162,000	255,600	269,680	313,100	314,300	318,700	328,900	344,100	357,000	365,900	377,500	383,400	387,900
>Finance, Ins. & Real Estate	36,000	70,000	69,360	80,300	83,200	86,000	84,600	87,800	87,200	91,000	94,800	95,200	95,400
>Services & Misc.	112,700	191,400	231,180	296,200	296,900	311,800	328,300	343,200	362,900	382,600	402,800	412,100	425,400
>Government	146,700	203,200	201,360	223,500	226,400	231,000	232,600	234,700	240,200	246,600	249,500	255,300	260,500

Table 12. Resident Labor Force, Employment by Industry, Douglas County.

	1970	1980	Average 1984-88 Baseline	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Civilian Labor Force	27,630	41,780	43,306	45,520	44,660	42,310	43,010	43,990	43,280	44,490	45,150	45,880	45,240
Unemployment	2,490	5,180	4,204	3,820	4,490	5,050	5,070	3,920	3,480	3,980	3,960	4,260	4,220
Total Wage & Sal. Emp.	21,980	30,850	30,868	33,580	32,130	31,580	31,900	32,850	34,170	35,140	36,550	36,940	37,230
Total Manufacturing	8,990	9,430	9,892	9,990	8,870	8,000	7,910	7,980	8,340	8,450	8,850	8,500	8,060
>Lumber & Wood Prod.	7,490	7,600	8,240	8,230	6,920	6,020	5,970	6,020	6,070	6,110	6,310	6,270	6,360
>Other Manufacturing	1,500	1,830	1,652	1,760	1,950	2,980	1,940	1,960	2,270	2,340	2,540	2,230	1,700
Total Non-Manufacturing	12,990	21,420	20,976	23,590	23,270	23,580	23,990	24,880	25,830	26,690	27,710	28,440	29,180
>Const. & Mining	710	1,490	774	1,000	990	990	1,080	1,170	1,260	1,360	1,380	1,440	1,590
>Trans., Comm. & Utilities	1,030	1,300	1,480	1,720	1,560	1,500	1,500	1,520	1,540	1,590	1,620	1,670	1,620
>Trade	3,440	5,730	6,110	6,870	6,740	6,850	7,040	7,390	7,820	7,930	8,230	8,320	8,440
>Finance, Ins. & Real Estate	770	1,240	982	960	980	940	1,100	1,130	1,140	1,160	1,290	1,280	1,310
>Services & Misc.	2,400	4,600	5,206	6,050	5,960	6,240	6,480	6,800	6,810	7,020	7,320	7,700	8,020
>Government	4,640	7,060	6,430	7,000	7,030	7,050	7,020	6,870	7,260	7,630	7,880	8,030	8,200

2000. These projects include work such as road restoration, renovation and road decommi sioning 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 pon 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 have jobs in the forest environment.

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 "...make achieving environmental justice part of its mission by identifying and addressing .disproportionately high and adverse human health or environmental effects of it's progran 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 t acceptable levels if possible.

Recreation

2000 Recreation Program Summary

Recreation use statistics have been tracked and documented through the Recreation Management Information System (RMIS).

Number of BLM Acres on the Roseburg District:	425,588 acres
Swiftwater Resource Area	223,205 acres
South River Resource Area	202,383 acres

Extensive & Special Recreation Management Areas (ERM / SRMA)

Resource Area	ERMA Acres	SRMA / Acres
Swiftwater R.A.	219,243 ac.	North Umpqua River / 1,722 Umpqua River / 2,240
South River	200,673 ac.	Cow Creek / 1,710

North Umpqua River SRMA:

North Umpqua W&SR Area	1,620	acres
Satellite Areas:		
Millpond Rec. Site	20	
Rock Cr. Rec Site	38	
Scaredman Rec. Site	20	
Cavitt Cr. Rec Site	21	
Wolf Cr. Falls Trail	3	
Total	1,722	acres

Table 13. Developed Recreation Site Use Statistics.

	No. of Visits
Susan Creek Campground	8,000
Susan Creek Day-Use Area	13,000
Susan Creek Falls Trail	5,000
Rock Creek Recreation Site	3,500
Millpond Recreation Site	8,400
Cavitt Creek Recreation Site	0
Tyee Recreation Site	4,400
Scaredman Recreation Site	1,700
Swiftwater Recreation Area	66,100
Wolf Creek Trailhead	2,200
Swiftwater Trailhead (N. Umpqua trail)	30,000
North Bank Habitat Management Area	1,500
Lone Rock Boat Launch	1,100
E-mile Recreation Site	500
Cow Cr. Rec. Gold Panning Area	500
Osprey Boat Ramp	4,200
Miner-Wolf WW Site	900
Cow Creek Back Country Byway	20,100
Island Day Use Area	2,500
North Kiosk, Cow Ck Back Country Byway	300

Table 14. Undeveloped Recreation Area Use Statistics.

Dispersed N. Umpqua SRMA	80,500
Dispersed Umpqua River SRMA	9,990
Dispersed Cow Creek SRMA	1,000
Umpqua River SRMA	7,300
Swiftwater ERMA	78,500
South River ERMA	47,000

Recreation Use Permits issued at campgrounds: 3,292
Fees collected: $51,164
Recreation Use Permits issued for pavilion use: 26
Fees Collected: $2,210

Number of recreation visits on Roseburg District BLM lands: 378,318

Number of recreation participants on Roseburg District BLM lands: 1,028,800 (one visitor participating in several recreation activities)

Special Recreation Permits Issued - 14 commercial outfitter permits on North Umpqua River were issued by cooperative management agreement through the Umpqua National Forest, North Umpqua Ranger District. Fees: $1,195. One permit for a car show at Millpond Campground. Fees: $404

Table 15. Roseburg District Recreation Trails.

	Miles	Hiking	Horse back Riding	Disabled Access	River Frontage	Mountain Biking	Interpretive
Wolf Creek	1.2	X			X	X	
Rock Creek	0.3	X			X		
Susan Creek Picnic Trail	0.5	X			X	X	
Susan Creek Watchable Wildlife Trail	0.2	X		X	X	X	X
North Umpqua	11.0	X	X		X	X	X
Deadline Falls	0.1	X		X	X	X	X
Susan Creek Falls	0.8	X		X	X		
Miner-Wolf Creek	0.3	X		X	X		X

Off-highway Vehicle Designations Managed :

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

Partnerships / Volunteer work :

Twenty volunteer groups participated including: Eagle Scout candidates, Boy Scout Troops, School groups, Church group, Douglas County Inmates, Individuals, Job Corps, and Campground Hosts

Types of recreation projects and work completed :

Trail Maintenance: rocking, brushing, mulching and limbing trails.
Revegetating recreation sites.
Installing fences, barriers and safety railing. Splitting cedar rails for fencing..
Cleaning recreation sites and the North Umpqua River.
Building and installing benches, picnic tables and horseshoe pits.

Table 16. Fiscal Year 2000 Volunteer Statistics.

Group	Hours volunteered	Value of work
All groups excluding hosts	2,350	$ 34,629
Campground hosts	17,040	$ 170,400
All groups total:	19,390	$ 205,029

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.
Roadside cleanup.

Back Country Byways Managed :

North Umpqua Scenic Byway - 8.4 miles,
Cow Creek Back Country Byway - 20 (of 45 miles)

Recreation Projects Completed :

- Construction of the Island Day-use area and North Kiosk on the Cow Creek Back Country Byway
- Reconstruction of Cavitt Creek Falls Recreation Site
- Slurry seal parking areas and campsite asphalt at three major recreation sites
- Renovation project at E-Mile Recreation Site
- Susan Creek Falls Trailhead and restroom improvements
- Hubbard Creek OHV area clean-up
- Group BBQ grills constructed and placed at Tyee and Rock Creek pavilions
- Pipe portion of Swiftwater water system
- Rebuilt trail across major slide areas on the North Umpqua Trail
- Revegetated areas at Rock Ck, Susan Ck, N. Umpqua Trail, Millpond and Cavitt Ck Falls
- Repaired high water drainage problems on Susan Creek Falls Trail
- Completed several American Disabilities Act (ADA) upgrade projects at Susan Ck, Rock Ck, and Millpond Recreation Sites.

Hazard Tree Assessments Completed:

Inventory and management (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, and on the North Umpqua Trail - Tioga Segment. Treatment consisted of a combination of limbing trees, removing tree tops, or felling of hazard trees.

Public Fatalities or Serious Injuries at BLM Recreation Sites:

- Report of 18 month old child not breathing after eating berries at Scaredman Campground. Transported by ambulance to Roseburg Hospital.
- Report of elderly woman stepping out of trailer, falling and breaking arm at Susan Creek Campground

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 -Draft Complete.
Umpqua River SRMA Recreation Area Management Plan - Not started.

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Rock Creek	0.3	X			X		
Susan Creek Picnic Trail	0.5	X			X	X	
Susan Creek Watchable Wildlife Trail	0.2	X		X	X	X	X
North Umpqua	11.0	X	X		X	X	X
Deadline Falls	0.1	X		X	X	X	X
Susan Creek Falls	0.8	X		X	X		
Miner-Wolf Creek	0.3	X		X	X		X

Off-highway Vehicle Designations Managed :

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

Partnerships / Volunteer work :

Twenty volunteer groups participated including: Eagle Scout candidates, Boy Scout Troops, School groups, Church group, Douglas County Inmates, Individuals, Job Corps, and Campground Hosts

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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.
Roadside cleanup.

Back Country Byways Managed :

North Umpqua Scenic Byway - 8.4 miles,
Cow Creek Back Country Byway - 20 (of 45 miles)

Recreation Projects Completed :

- Construction of the Island Day-use area and North Kiosk on the Cow Creek Back Country Byway
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- Renovation project at E-Mile Recreation Site
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- Hubbard Creek OHV area clean-up
- Group BBQ grills constructed and placed at Tyee and Rock Creek pavilions
- Pipe portion of Swiftwater water system
- Rebuilt trail across major slide areas on the North Umpqua Trail
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- Repaired high water drainage problems on Susan Creek Falls Trail
- Completed several American Disabilities Act (ADA) upgrade projects at Susan Ck, Rock Ck, and Millpond Recreation Sites.

Hazard Tree Assessments Completed:

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Public Fatalities or Serious Injuries at BLM Recreation Sites:

- Report of 18 month old child not breathing after eating berries at Scaredman Campground. Transported by ambulance to Roseburg Hospital.
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Status of Recreation Plans :

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Roseburg District Off-Highway Vehicle Implementation Plan - Completed 1997
Cow Creek SRMA Recreation Area Management Plan -Draft Complete.
Umpqua River SRMA Recreation Area Management Plan - Not started.

Timber Sale Pipeline Restoration Funds

The recreation portion of these funds are directed toward backlog recreation projects.

Total expenditure of recreation pipeline dollars in fiscal year 2000 was $122,000.

The South River Resource Area spent $9,200 for the design of Salmonid Watchable Wildl Site within Cow Creek Back Country Byway corridor.

The Swiftwater Resource Area, expended $12, 250 for slurry seal of roads, spurs and park lots, parking lot stripping and ADA picnic tables and firegrills at Susan Creek Recreation Site; $94,650 for electrical modifications, waterline, tree treatment, septic system, drain p gabion rock, soil fill, cultural mitigation and project inspection for the renovation of Cavit Creek Recreation Site; $5,900 for slurry seal of parking lot, water pipeline at Swiftwater Day-Use Area.

Recreation Fee Demonstration Project

In March 1998, the Roseburg District received approval for establishing its Recreation Pil 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 mainte nance of recreation sites where the fees were collected. The pilot program was to expire September 30, 2001, but was extended one year. An account was established for deposit o fees for camping and pavilion use at Susan Creek, Mill Pond, Rock Creek, Cavitt Creek, a Tyee Recreation Sites, and special recreation permits.

In fiscal year 2000, $54,973 was collected and deposited from fees, rentals and permits. $48,800 was reinvested in the following:

Scaredman Campground upgrades, renovation of Cavitt Creek Recreation Site, phon line installation at Millpond Recreation Site, ADA upgrades to recreation sites, upgraded water system at Swiftwater Day-Use Area, campground host structure, hazard tree treatments, law enforcement support at recreation sites, recreation site paving and line stripping, interpretive brochures, recreation site storage sheds and si project permits.

Recreation Program Summary 1996 - 2000

Recreation use statistics were tracked and documented in the annual Recreation Managem Information System (RMIS). A summary of the three years follows for the Roseburg Distr BLM Recreation program.

The units of land managed as extensive recreation management areas remained constant during the 1996-2000 period, as did the lands managed as special recreation management areas (SRMA): Cow Creek SRMA - Umpqua River SRMA - North Umpqua SRMA.

The number of recreation visits on Roseburg District BLM has increased each year from 1996 through 2000.

The number of recreation participants on Roseburg District BLM lands has increased annually (one visitor regularly participates in several recreation activities) from 1996 through 2000.

Table 17. Recreation Use Statistics, Permits and Fees Collected.

	1996	1997	1998	1999	2000	Total
Number of Recreation Visits	321,345	347,580	360,100	370,900	378,318	1,778,243
Number of Recreation Participants	861,100	890,227	956,830	1,008,700	1,028,800	4,745,659
Campground Permits Issued	3,528	3,363	3,597	3,204	3,294	17,257
Campground Fees Collected	$46,649	$57,015	$51,050	$50,400	$50,400	$256,278
Pavilion Use Permits Issued	30	26	34	34	26	150
Pavilion Use Fees Collected	$1,665	$520	$1,810	$1,900	$2,200	$8,095

There were 14 developed recreation sites managed during the period. No new sites were developed. All sites were maintained and upgraded according to: public needs, safety hazards, ADA requirements, and availability of funding and personnel.

Recreation Use Permits issued at campgrounds remained approximately the same each year.

Eight recreation trails were managed during the period with a total of 14.4 miles. Major upgrades for accessibility to the disabled were made on four of the eight.

Fourteen commercial outfitter permits were issued annually on North Umpqua River through cooperative management agreement with the Umpqua National Forest, North Umpqua Ranger District. One additional SPR was issued each year for either mountain bike outfitter guide or Cycle Oregon.

No changes to Off-highway Vehicle (OHV) designations were made during the period. BLM managed 422,464 acres in the Limited category, and 3,124 acres in the Closed category. The District does not host any popular OHV riding areas outside of local use and interest.

Annual volunteer work increased each year. Partners were Eagle Scout candidates, Boy Scout Troops, School groups, Church groups, Job Corps, Douglas County Inmates, and Campground Hosts. The significant increase in hours in 1997 and 1998 resulted from more use of the Douglas County Inmates in recreation site projects.

Back Country Byways Managed :

North Umpqua Scenic Byway - 8.4 miles
Cow Creek Back Country Byway - 45 miles

Table 18. Partnership and Volunteers, Hours and Value.

Year	Partnerships	Hours volunteered	Value of work
1996	13	5,415	$50,900
1997	16	12,924	$121,500
1998	18	18,961	$178,300
1999	21	18,670	$182,217
2000	20	19,390	$205,029
Total	88	75,360	$737,946

Major Projects, Plans and Partnerships Completed Durin the 1996 - 2000 Period :

Completed renovation of Scaredman Campground, E-Mile and Cavitt Creek Falls Recrea Sites; repaving of Tyee Recreation Site and construction of new host shelter, renovation viewing platform at Susan Creek Falls, replacement of Rock Creek day-use area restroom and Cavitt Cr. Falls restroom, group BBQ grills constructed and placed at Tyee and Rock Creek pavilions.

Completed extensive reconstruction of Millpond Campground including new water syste paved campground loop and day-use area, revegetation project, and new restrooms built t ADA standards.

Developed new recreation brochures including "Thundering Waters" waterfalls brochure with the Umpqua National Forest, six campground brochures, Miner-Wolf Watchable Wildlife Site brochure and Cow Creek Back Country Byway brochure.

Hubbard Creek OHV area clean up.

Reconstruction of Island Day-use area and North Kiosk on the Cow Creek Back Country Byway.

Completed cultural inventories/evaluation at three recreation sites.

Completed ADA upgrades including accessible picnic tables, trails, restrooms and viewin area at Susan Cr. Falls, Rock Cr. Rec. Site, Scaredman, Cavitt Cr. Falls, and Millpond Campgrounds, Swiftwater Trailhead and Swiftwater Day-Use Area.

Reconstructed Susan Creek Falls Trail to meet ADA standards.

Completed major damage repairs from November Floods of 1996 at Swiftwater, Millpond Rock Creek, Miner-Wolf, Susan Creek and Osprey Boat Ramp.

Enhanced and improved access on the China Ditch Auto Tour loop.

Organized annual Free-fishing Day Event at Cooper Creek Reservoir in partnership with Oregon Dept. of Fish and Wildlife, U.S. Fish and Wildlife Service, U.S. Forest Service, ar Douglas County Parks Dept. (BLM lead)

Staffed the Colliding Rivers Information Center in Glide, OR. in partnership with the Roseburg Visitor's and Convention Bureau and the Umpqua National Forest.

Completed an OHV Implementation Plan for the Roseburg District.

Developed and implemented the recreation signing program.

Partnership with the USFS on seasonal monitoring of the North Umpqua Wild and Scenic River.

Developed five joint USFS/BLM displays for the annual Douglas County Fair and Outdoc Recreation Show.

Hazard Tree assessments were completed annually at developed recreation sites, with mo emphasis on some sites than others on a rotating basis. Treatments consisted of a combin tion of de-limbing trees, removing tree tops, or felling hazard trees.

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, approximately 81,800 acres (or 19% of the Roseburg District land base) are available for scheduled timber harvest. The Northwest Forest Plan and the Roseburg District Resource Management Plan (RMP) provide for a sustainable timber harvest, known as the Allowable Sale Quantity (ASQ), from Roseburg District administered public lands of 45 MMBF (million board feet) annually.

To meet the ASQ commitment, the Roseburg District must do timber sale planning including preparing an environmental analysis, conducting timber sale preparation through cruising, appraisals, contract preparation and timber sale advertising, and timber sale administration which includes auctioning the timber sales and ensuring contract compliance of awarded timber sales. Importantly, the Roseburg District is investing in the future of the forests through forest development and reforestation activities.

The harvesting of forest products is being used to meet other management goals. Examples of this include encouraging the development of multi-layered forest canopies, creating or improving wildlife and fisheries habitats, species diversity, and watershed conditions. Other ways that the Roseburg District is using timber harvest to meet management goals include identifying and leaving snags for cavity dwelling species, and leaving woody debris for habitat improvement.

Several factors have created a situation whereby the Roseburg District is falling short of producing the ASQ set forth in the Roseburg District RMP. The Northwest Forest Plan, signed in 1994, was declared sufficient by the courts to settle the ongoing lawsuits at that time. However, two new lawsuits have substantially impacted the District's ability to implement the Plan. The Pacific Coast Fisherman's Federation v. National Marine Fisheries Service primarily relates to implementation of the Aquatic Conservation Strategy of the Northwest Forest Plan. This lawsuit was filed as a result of proposed Bureau of Land Management (BLM) and U.S. Forest Service timber sales within the Umpqua Basin. The government is appealing Judge Rothstein's adverse ruling to the Ninth Circuit Court of Appeals. The plaintiffs in this lawsuit have filed a new complaint to include an additional 20 biological opinions, affecting a wider geographic area.

A separate lawsuit, The Oregon Natural Resources Council Action, et al. v. Forest Service and BLM was filed in the U.S. District Court of Western Washington. A settlement agreement was reached in this case. The impact of these lawsuits has caused an approximate two-thirds reduction region-wide in BLM timber sales offered in fiscal year 1999 and fiscal year 2000.

In the Roseburg District, pending resolution of the appeal to the Ninth Circuit, the impacts have been much larger. The District offered 1.4 MMBF in fiscal year 2000. No timber sale auctions were held in fiscal year 2000. Seven negotiated sales of minor volume were sold. The value of these negotiated sales was $220,994. The monies associated with these timber sales is paid as the timber is harvested over the life of the contract, which is generally three years. Timber sale collection for fiscal year 2000 from active harvesting was $8,829,758 for Oregon and California Railroad Lands (O&C) and for Public Domain Lands (PD).

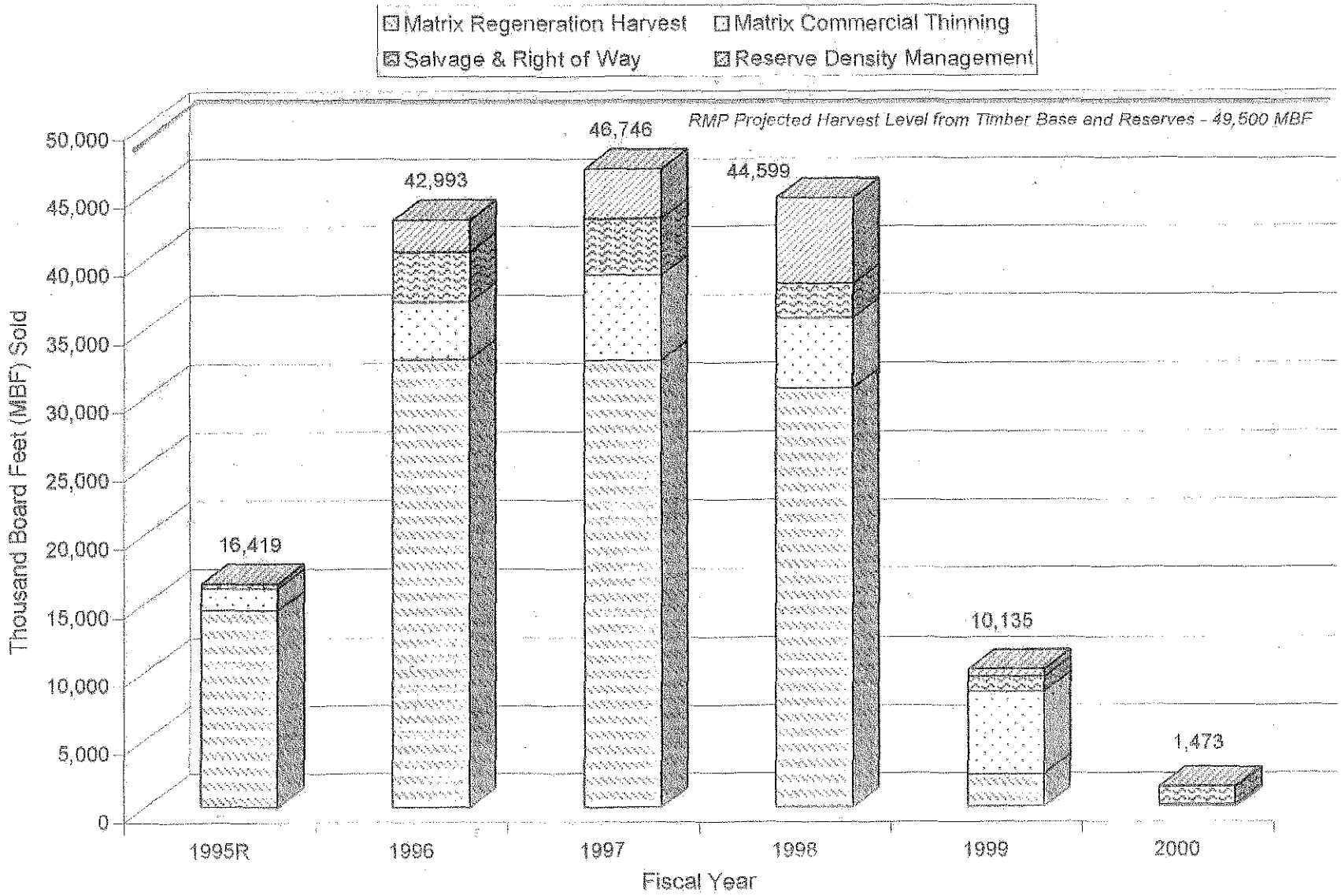
A summary by land use allocation of timber sale volumes and acres of these timber sales is found in Table 19. In addition, the harvest prescription of regeneration harvest, thinning, density management or salvage is identified. All regeneration harvest occurred in stands over minimum harvest age of 60 years. No stands in fiscal year 1996-2000 received a regeneration harvest that were less than the culmination of mean annual increment age of 80-110 years.

Table 19. Roseburg District Timber Sale Volume and Acres.

	FY 1995R[1]	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	1995-2000 Total	1995-2000 Annual Average	RMP/EIS Assumed Annual Average	Percent of Assumed Average
MBF										
Total Timber Sale Volume	16,983	45,993	51,783	44,726	10,135	1,472	171,092	32,100	49,500	65%
Matrix Timber Sales	16,825	41,055	42,692	37,887	9,416	1,190	149,065	27,967	45,000	62%
GFMA Regeneration Harvest	13,292	32,172	27,575	24,786	1,055	(39)	98,842	18,544		
GFMA Commercial Thinning	1,663	3,016	2,907	3,451	4,022	166	15,226	2,857		
GFMA Salvage & ROW	230	1,817	3,516	1,446	438	477	7,925	1,487		
C/D Block Regeneration Harvest	1,130	629	5,123	5,869	1,352	0	14,104	2,646		
C/D Block Commercial Thinning	457	2,978	3,455	1,739	2,059	166	10,854	2,036		
C/D Block Salvage	53	442	116	596	488	586	2,282	428		
RR Density Management	24	2,424	2,175	811	395	55	5,884	1,104		
RR Salvage	50	55	3	236	140	18	502	94		
LSR Density Management	63	102	1,728	5,559	150	0	7,603	1,426		
LSR Salvage	3	1,162	266	122	33	210	1,797	337		
Total All Reserves	140	3,743	4,172	6,728	719	282	15,785	2,962	4,500	66%
Key Watersheds Matrix Timber Sales	0	8,438	18,392	12,767	2,351	681	42,629	7,998	8,700	92%
Little River AMA All Harvest Types	0	1,033	4,682	30	0	0	5,745	1,078	4,600	23%
Little River AMA Salvage	17	162	236	81	0	0	496	93		
Total AMA Timber Sales	17	1,195	4,918	111	0	0	6,241	1,171		
Acres										
Total Regeneration Harvest	386	906	836	800	56	0	2,984	560	1,190	47%
Total Commercial Thinning	112	426	568	536	411	2	2,055	386	250	154%
Total Density Management	2	216	301	483	38	0	1,040	195		
GFMA Regeneration Harvest	354	866	713	649	20	0	2,602	488		
GFMA Commercial Thinning	68	197	267	361	208	0	1,102	207		
GFMA Salvage & ROW	14	47	289	124	16	16	507	95		
C/D Block Regeneration Harvest	32	40	123	151	36	0	382	72		
C/D Block Commercial Thinning	44	229	301	175	202	0	952	179		
C/D Block Salvage	4	34	25	52	16	4	135	25		
RR Density Management	0	216	188	97	38	0	539	101		
RR Salvage	0	4	0	20	8	1	34	6		
LSR Density Management	2	0	113	386	0	0	501	94		
LSR Salvage	0	96	33	8	2	8	148	28		
Total All Reserves	2	316	334	511	48	10	1,221	229		
Little River AMA Regeneration Harvest	0	0	68	0	0	0	68	13		
Little River AMA Commercial Thinning	0	94	134	0	0	0	228	43		
Little River AMA Salvage	1	9	36	7	0	0	53	10		

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
[1]FY 1995 figures only for effective dates of RMP; June - September 1995

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



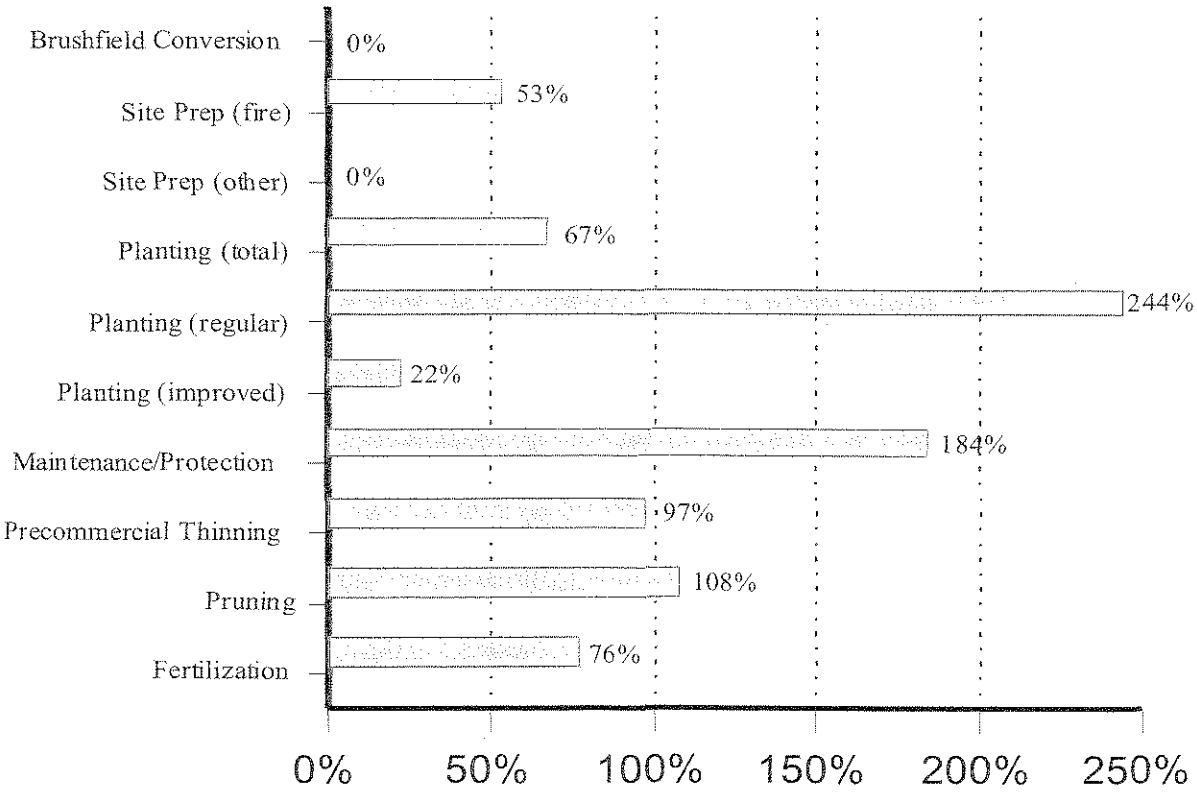
1995R: Accounts for only 0.33 of fiscal year; June - September 1995

Table 20. Roseburg District Forest Development Activities.

	FY 96	FY 97	FY 98	FY 99	FY 00	Totals to date	Average Annual	Planned Annual	Differences Actual-Planned	% of Pla To
Brushfield Conversion	0	0	0	0	0	0	0	15	(75)	
Site Preparation (fire)	304	841	151	420	489	2,205	441	840	(1,995)	
Site Preparation (other)	0	0	0	0	0	0	0	50	(250)	
Planting (total)	1,006	845	1,229	628	1,060	4,768	954	1,430	(2,382)	
Planting (regular)	819	665	1,072	196	788	3,540	708	290	2,090	2
Planting (improved stock)	187	180	157	432	272	1,228	246	1,140	(4,472)	
Maintenance/Protection	2,224	1,525	1,350	1,082	1,441	7,622	1,524	830	3,472	1
PCT	3,633	3,813	4,363	2,315	4,840	18,964	3,793	3,900	(536)	
Pruning	363	856	959	146	169	2,493	499	460	193	1
Fertilization	0	4,411	1,093	0	0	5,504	1,101	1,440	(1,696)	
Reforestation Surveys	14,563	10,736	10,830	18,472	10,048	64,649	12,930	11,750	5,899	1
Maint./Planting Ratio	2.2	1.8	1.1	1.7	1.4	1.6				

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



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 50% of planned. This trend is likely to continue due to less than expected levels of regeneration harvest and the interdisciplinary teams concern for soils protection, loss of retention trees, coarse woody debris, snags and survey and manage species.

Site Preparation (OTHER) - To date no acres have been reported. Activity in this category is expected in this decade.

Planting (regular stock) - Total planted acres without regard to genetic quality is at 67% of RMP assumed levels due to lack of planned RMP levels of timber harvest. Reforestation with genetically unimproved planting stock is 244% of planned.

Planting (improved stock) - In FY 00, 44% of the acres reforested were planted with genetically improved stock. However, only 26% of the acres planted were in the GFMA land use allocation. Only GFMA acres count 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 25-50% of RMP levels by the end of the decade.

Maintenance/Protection - Acres of maintenance/protection treatments is currently double of that assumed for the first three years. The ratio of maintenance/protection to reforested acres was highest in FY 96 and has declined dramatically each year since. In FY 96 the ratio was 2.2 to 1. In FY 00 the ratio was at 1.4 to 1. The average ratio for the RMP period is 1.6 to 1 and is expected to decline further. It is anticipated that at this rate, assumed RMP levels would be exceeded by 50%.

Precommercial Thinning (PCT) - Currently PCT is at approximately planned RMP levels. It is expected that at a minimum this level will be maintained over the decade. There is a potential to exceed this level if funding levels were to increase but the magnitude is unknown at this time. This practice is highly dependent on increasing budget levels.

Pruning - Currently pruning accomplishments are about 108% of assumed RMP levels. Depending on funding this trend could continue. At a minimum it is expected that RMP levels will be met. This practice is also highly dependent on increasing budget levels.

Fertilization - Currently fertilization accomplishments are about 76% of assumed RMP levels. There is the potential to exceed planned RMP levels by 25% if funding is available. However, implementation of fertilization is currently delayed by an appeal of the proposed action and high material costs of fertilizer.

Forest development, reforestation, silvicultural and timber stand improvement practices v accomplished in fiscal year 2000 through contracts valued at approximately $1,241,000.

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 14. The sale of special forest products follow tl guidelines contained in the Oregon/Washington Special Forest Products Procedure Handbook. There are no estimates or projections in the RMP ROD or FEIS that need to be compared to the sold quantities shown.

Noxious Weeds

The objective of the noxious weed program in the Roseburg District is to contain or reduc noxious weed infestations using an integrated pest management approach. Integrated pes management includes manual, mechanical, biological, and chemical methods which are u in accordance with BLM's Records of Decision for the 1986 Northwest Area Noxious We Control Program Environmental Impact Statement, the 1987 Northwest Area Noxious We Control Program Environmental Impact Statement Supplement, and the 1995 District Integrated Weed Control Plan Environmental Assessment. The Roseburg District continu to survey BLM-administered land for noxious weeds primarily by including noxious weec in all project clearance surveys. Approximately 1500 acres are surveyed during project clearances each year. All infestations are reported to the Oregon Department of Agricultu and the District cooperates with the department in the control of infestations.

Biological control listed in table 17 shows only acres of new introductions. However, the are thousands of acres of biological control agents established on noxious weeds througho the Roseburg District. Inventory and monitoring document the presence of biological control agents, but the extent or control achieved by the biological control agent is not quantified. Many biological control agents are well established and widespread on Roseb District administered lands. They have established on 14 noxious weed species throughou the district. Biological controls have reduced the overall population of seven noxious wee on the district to the point that other treatment is usually not needed.

These biological agents normally do not kill their noxious weed host. They slow down the spread of their host weeds by reducing seed production and weed vigor. Ideally, biologica controls reduce their target weed to the extent that the weed becomes a part of the plant community rather than dominating the community. At this point, the target weed is not causing undue damage or degradation and is no longer a management concern. For examp tansy ragwort is common throughout western Oregon, but the biological controls reduce th infestations so that livestock poisonings are rare. In contrast, 25 years ago estimated livestock losses from tansy ragwort poisonings were $25 million per year (Tim Butler, OD pers comm. 2000).

Biological controls are present on the following weeds: bull thistle, Canada thistle, gorse, Italian thistle, meadow knapweed, milk thistle, poison hemlock, purple loosestrife, rush skeletonweed, Scotch broom, slender-flowered thistle, St. Johnswort, tansy ragwort, yellov starthistle.

Table 21. Special Forest Products

Product	No. of Contracts FY96	FY97	FY98	FY99	FY00	Quantity Sold FY96	FY97	FY98	FY99	FY00	Value $ FY96	FY97	FY98	FY99	FY00
Boughs-Coniferous (lbs)	183	104	96	80	47	164,850	96,700	76,600	67,500	38,002	3,297	1,948	1,572	1,350	$780
Burls & misc. (lbs.)	9	10	15	1	15	12,900	20,200	35,275	300	24,550	505	816	1,411	12	$994
Christmas Trees (ea.)	266	245	217	159	231	266	245	217	159	231	1,375	1,225	1,085	795	$1,155
Edibles & Medicinals (lbs.)	3	3	0	1	0	1,578	1,800	0	200	0	70	72	0	10	$0
Floral & Greenery (lbs.)	120	128	89	161	57	69,120	83,100	48,525	96,136	32,300	3,458	4,019	3,305	4,745	$1,383
Mosses - Bryophytes (lbs.)	3	4	4	0	0	6,333	1,998	0	1,833	0	150	60	05	5	$0
Mushrooms - Fungi (lbs.)	56	50	25	20	2	1,572	2,524	1,048	875	1,200	393	631	262	218	$300
Transplants	7	2	1	1	28	560	450	20	140	50	480	350	5	14	$20
Wood Products/Firewood (bf)	210	460	197	219	281	267,960	600,574	352,729	63,944*	214,496*	49,111	74,436	73,901	5,380	$36,151.19
Totals	857	1,006	640	722	661						58,839	83,557	87,541	60,379	$40,783.19

* cu. ft.

Table 22. Noxious Weed Management Summary

Treatment	Species	FY 96 Acres	FY 97 Acres	FY 98 Acres	FY99 Acres	FY00 Acres
Manual/ Gorse		1	1	1	1	1
Mechanical	Scotch Broom	90	8	453	400	296
	Yellow Starthistle	21	20	1	1	12
	Rush Skeletonweed	1	-	1	1	85
	Woolly distaff thistle	-	-	1	1	1
	Thistles	-	-	152	50	2
	Tansy ragwort	-	-	6	1	-
Chemical	Scotch broom	-	-	38	66	199
	Yellow starthistle	1	1	1	1	1
	Diffuse knapweed	3	3	1	1	3
	Thistles	-	-	5	5	-
Biological	Yellow starthistle	5	-	10	0	1
	Scotch Broom	-	-	-	1	2
Total		122	33	670	529	603

Fire and Fuels Management

Under the RMP a greater amount of prescribed fire has been done through piling. Prescril burning prescription target spring-like conditions when log fuel, duff and litter consumpti and smoldering is reduced by wetter conditions and rapid mop up. Prescribed burning is implemented to improve seedling plantability and survival, reduce brush competition and reduce fuels. Prescribed fire is also used for habitat restoration or improvement. Under tl RMP to date, prescribed fire for habitat purposes has been planned but not yet implemente

During fiscal year 2000 there were 46 red carded personnel on the Roseburg District.

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.

Fiscal Year 1996

Prescribed Fire:	304 acres
On district wildfires:	21 fires for a total of 15.17 acres - 17 were caused by lightni 4 were human caused
Off district wildfires:	57 district personnel accepted assignments to 35 fires.

Fiscal Year 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.

Fiscal Year 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

Fiscal Year 1999

Prescribed Fire:	!198 acres
On district wildfires:	3 fires for a total of 3.57 acres - 2 were lightening caused and 1 was human caused
Off district wildfires:	66 district personnel accepted assignments to 29 wildfires

Fiscal Year 2000

Prescribed Fire:	530 acres (also assisted Umpqua NF, Diamond Lake RD prescribed fire program with 3 people, 1 engine and 1 palm Ir)
On district wildfires:	4 fires for a total of 2.37 acres - 2 were lightning caused and 2 were human caused
Off district wildfires:	73 district personnel accepted assignments to 43 wildfires, including 11 engines and 5 Probeye/Palm Ir's. Personnel served in Washington, Montana, Colorado, Wyoming, Utah and New Mexico.

Total, June 1995-September 2000

Prescribed Fire:	2,397 acres
On district wildfires:	61 fires for a total of 40 acres - 48 were lightning caused and 13 were human caused
Off district wildfires:	237 district personnel accepted assignments to 146 wildfires across the United States, from Oregon to Florida.

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 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.

Table 23. Access and R/W Five Year Summary.

	R/W Permit	R/W Reciprocal Agreement Assignment
Fiscal Year 1996	9	5
Fiscal Year 1997	14	3
Fiscal Year 1998	10	8
Fiscal Year 1999	15	4
Fiscal Year 2000	16	7
Total	64	27

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. I 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 2000 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.

Energy and Minerals

The Formosa Abandoned Mine Land (AML) site is an abandoned copper and zinc mine located at Silver Butte and encompasses approximately 76 acres of steep mountainous terrain. The mine operated in the early 1900's, with the majority of production occurring between 1927 and 1933. Formosa mine was reopened by Formosa Explorations, Inc. in 1990. Formosa operated the mine from 1990 to 1993 and produced copper and zinc ore at a rate of 350-400 tons per day. 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.

Upon closure of the mine in 1994, DOGAMI required Formosa to conduct mine reclamatior activities using the $1 million bond. After Formosa spent most of the bond money and satisfied most of DOGAMI's reclamation requirements, the company declared bankruptcy. In the winter of 1995-1996, the drainfield from the adits failed and began releasing acid min drainage (AMD) to Middle Creek and South Fork Middle Creek, habitat for threatened Oregon coast salmon and Oregon coast steelhead. In addition, these streams are tributaries of Cow Creek from which the city of Riddle obtains its primary source of water.

Post reclamation monitoring of South Fork Middle Creek and Middle Creek indicates that 1 stream miles have been impacted from metals contamination associated with AMD (primarily cadmium, copper, lead and zinc) from the Formosa mine site. The majority of mine workings are located on private land owned by Formosa. The second adit discharges on lan managed by the Roseburg District. Based on this situation, the DEQ and BLM have determined that this project is a high priority for further action.

In fiscal year 2000, the Roseburg District issued an action memorandum to approve time-critical Removal Actions at the Formosa Abandoned Mine Land site by the Department of

Table 24. Roseburg District Mining Related Activities.

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

Environmental Quality. The Roseburg District has the authority for this action under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

The proposed interim Removal Actions include capping and encapsulating to prevent infiltration of rain water into tailings which may contribute to Acid Mine Drainage (AMD) discharge into South Fork Middle Creek, and treating AMD from the Formosa and Silver Butte adits by routing the drainage through a pipeline into a limestone channel and then into an anaerobic treatment cell. The objective of these actions is to reduce metals loadings to approximately 18 miles of stream to below toxic thresholds for aquatic organisms.

The action memorandum is consistent with the standard format used by the U.S. Environmental Protection Agency (EPA) for time-critical removal actions under the National Contingency Plan (NCP). The removal actions are being coordinated by the Oregon Department of Environmental Quality in cooperation with the BLM.

Land Tenure Adjustments

No land exchanges occurred during fiscal year 2000. One real property acquisition totaling one acre was consummated to locate a kiosk information site for the Cow Creek Back County Byway. The district resolved eight unauthorized used including occupancy and dumping trespasses. The application the district submitted in 1999 to withdraw four recreation sites was formally approved during fiscal year 2000. Five 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 1998, a Compliance Assessment for Safety, Health and the Environment (CASHE) was conducted on all Roseburg District facilities. The assessment provided the district with a list of findings and recommendations to bring the district into compliance with Federal, State, and local environmental and hazardous materials regulations. Two projects, a washrack at the Myrtle Creek Road Maintenance Shop and a paint storage building in the warehouse are scheduled for fiscal year 2001 that will complete the implementation of the Cashe findings and recommendations.

Table 25. Hazardous Material of Incidents Requiring Response Five Year Summary.

	Incidents Requiring Response
Fiscal Year 1996	5
Fiscal Year 1997	2
Fiscal Year 1998	3
Fiscal Year 1999	3
Fiscal Year 2000	2

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. Table 20 shows the number of incidents requiring response from fiscal year 1996 through fiscal year 2000.

Coordination and Consultation

Federal Agencies

During the period of June 1995 through September 2000, significant cooperation and coordination between federal agencies has taken place. There is ongoing participation in th 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 Admin istration 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 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 proceed at an unprecedented level.

State of Oregon

The Roseburg District has continued its long term working relationship with Oregon Depar ment 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

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 effect 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 agreement 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.

Third Year Evaluation

The Resource Management Plan requires a formal evaluation at the end of every third year after implementation begins. A third year evaluation of the Roseburg District and other western Oregon BLM districts was conducted in fiscal year 1999 and continued into fiscal year 2000. Its purpose is to determine whether there is significant cause for an amendment or revision to the plan. This is done by evaluating cumulative monitoring results and accomplishments, determining if the plan's goals were realistic and achievable in the first place and whether changed circumstances or new information have so altered the levels or methods activities or expected impacts that the plan may paint a seriously different picture than those anticipated in the Roseburg District RMP. If the evaluation concludes that the plan's goals are not achievable a plan amendment or revision will be initiated. If the evaluation concludes that land use allocations or management direction need to be modified, a plan amendment or revision may be appropriate. An analysis will address the need for either.

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. The draft literature review was n the review process at the end of fiscal year 2000.

This research is 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. In addition to the normal survey work of locating or establishing property lines and corners, the cadastrals provide technical assistance in geographic positioning system (GPS) for special status species mapping, stream location, and other resource programs on the Roseburg District. In addition to the work shown in Table 21, the Cadastral survey crew set 54 monuments and made 160 public contacts.

Table 26. Roseburg District Cadastral Survey Activity

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000
Projects Completed	7	10	13	10	10
Cadastral Projects	7	7	7	7	9
Miles of Survey Line Run	35.7	58	78	41	41

Law Enforcement

Roseburg District has a full time BLM Ranger 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 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 Ranger 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 Year 1996-2000

During fiscal years 1996-2000, the Roseburg District completed approximately 74 environmental assessments, 393 categorical exclusions, 28 NEPA 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

Almost all 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, unstable soils (clumping of retention trees illegal, should give riparian reserve status), 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;
- bAverage 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 FY 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 protocal 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 [FY] 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-succes-

sional 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 suface 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.

ROSEBURG DISTRICT RESOURCE MANAGEMENT PLAN MONITORING

FISCAL YEAR 2000

Monitoring Report
Fiscal Year 2000

Executive Summary

Introduction

This document represents the fifth 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 2000. 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 2000 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 19 of the 20 land use allocations and resource programs identified for monitoring in the plan. Monitoring results also found full compliance in 49 of the 50 implementation monitoring questions contained in the plan.

Results from one monitoring question pertaining to Timber Resources found differences in some fiscal year 2000 activities and outputs compared to projected annual averages, including the allowable sale quantity. These differences were largely the result of ongoing litigation.

Recommendations

It is not possible at this time to accurately predict the effect of litigation or the amended Survey and Manage direction on the ability of the Roseburg District to meet RMP requirements and assumptions regarding timber resources. Therefore, changes to the RMP based on the failure to implement timber resources decisions and assumptions in fiscal year 2000 would be premature at this time. These circumstances will be more closely examined during the next RMP evaluation.

Conclusions

Analysis of the Fiscal Year 2000 monitoring results concludes that the Roseburg District had, on an overall basis, high compliance with RMP management action/direction. The level of activities pertaining to the timber program will continue to be monitored and will be evaluated as the uncertainty of the current litigation regarding the Northwest Forest Plan is resolved. No major changes in management direction or Resource Management Plan implementation is warranted at this time.

Monitoring Fiscal Year 2000

Introduction

This document represents the fifth 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 1999 through September 2000. 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. 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 50 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 2000 addressed the 50 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.

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 50 implementation monitoring questions contained in the plan. There were found to be discrepancies regarding one monitoring question, which was related to timber resources. Activities in 19 of 20 land use allocations and resource programs identified for monitoring in the plan were found to be in full compliance with management action/direction. This generalization, in order to be fully understood, requires a more in depth examination of the implementation monitoring questions and monitoring results which are contained in this document.

Discussion of Discrepancies

Timber Resources

In the examination of Timber Resources, monitoring question one: "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?", there were found to be substantial short-term differences. Fiscal year 2000 activities and outputs differed from average annual projections. Except for the Roseburg 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. Annual or periodic differences between projected and actual levels of activities are more closely examined during plan evaluations which are scheduled every three years after initial implementation of the RMP to determine if the goals and objectives outlined for timber resources are being met or are likely to be met.

The comparison of timber sale volumes and harvested acres for fiscal year 2000 reveal substantial 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 2000	Projected	% of Projected
Total Timber Sale Vol:	1.4 MMBF	49.5 MMBF	3%
Matrix Timber Sale Vol:	1.2 MMBF	45.0 MMBF	2%
Other wood	0.2 MMBF	4.5 MMBF	4%
Key Watershed TS Vol:	0.7 MMBF	8.3 MMBF	8%
Total Regen Harvest	0 acres	1190 acres	0%
Total Comm Thinning	2 acres	84 acres	2%
Total Density Mgt	0 acres	66 acres	0%

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. As of fiscal year 2000, over the five year life of the RMP to date, the Roseburg District is at 65% of the RMP anticipated total timber sale volume, 62% of matrix harvest, 66% of RMP anticipated density management harvest in reserves, and 23% 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, the acreage of commercial thinning during this period is at 154% of that anticipated in the RMP.

The Northwest Forest Plan, signed in 1994, was declared sufficient by the courts to settle the ongoing lawsuits at that time. However, two new lawsuits have substantially impacted the District's ability to implement the Plan. The Pacific Coast Fisherman's Federation v. National Marine Fisheries Service primarily relates to implementation of the Aquatic Conservation Strategy of the Northwest Forest Plan. This lawsuit was filed as a result of proposed Bureau of Land Management (BLM) and U.S. Forest Service timber sales within the Umpqua Basin. The government is appealing Judge Rothstein's adverse ruling to the Ninth Circuit Court of Appeals. The plaintiffs in this lawsuit have filed a new complaint to include an additional 20 biological opinions, affecting a wider geographic area.

A separate lawsuit, The Oregon Natural Resources Council Action, et al. v. Forest Service and BLM was filed in the U.S. District Court of Western Washington. A settlement agreement was reached in this case. The impact of these lawsuits has caused an approximate two-thirds reduction region-wide in BLM timber sales offered in fiscal year 1999 and fiscal year 2000.

In the Roseburg District, pending resolution of the appeal to the Ninth Circuit, the impacts have been much larger. No timber sale auctions were held in fiscal year 2000. Seven negotiated sales of minor volume were sold. The District offered 1.4 MMBF in fiscal year 2000, or about 3% of that anticipated in the RMP.

As of the writing of this report (Spring 2001), there has been no resolution of the situation that has led to the differences between RMP decisions and assumptions and actual RMP implementation regarding timber resources.

Another important issue, that was somewhat overshadowed by litigation in its effect on the ability of the Roseburg District to implement the RMP was the uncertainty associated with implementing the Survey and Manage program. During fiscal year 2000, the Survey and Manage Draft Supplemental Environmental Impact Statement was published. The Draft SEIS was followed in November 2000 by a Final SEIS and a Record of Decision was published in January 2001 which amended the Survey and Manage management action/ direcction.

It is not possible at this time to accurately predict the effect of litigation or the amended Survey and Manage direction on the ability of the Roseburg District to meet RMP requirements and assumptions regarding timber resources. Therefore, changes to the RMP based on the failure to implement timber resources decisions and assumptions in fiscal year 2000 would be premature at this time. These circumstances will be more closely examined during the next RMP evaluation.

Recommendations

Implementation and Management

On an overall basis, there was high compliance with RMP management action/direction noted in fiscal year 2000 monitoring. There were no discrepancies or inconsequential discrepancies noted in 19 of 20 land use allocations and programs. However, the discrepancies found is of concern to the management of the Roseburg District.

Implementation monitoring of the period June 1995 through September 2000 indicated that the Roseburg District is capable of implementing the RMP management action/direction regarding Timber Resources. Fiscal year 1999 and 2000 monitoring discrepancies pertaining to the timber program are largely a result of conditions that the Roseburg District does not directly control. The discrepancies relate to variations in the level of allowable sale quantity and other timber related activities compared to RMP assumptions. After uncertainties regarding Survey and Manage and ongoing litigation are resolved, the District will be in a

better position to adjust programs to more closely match RMP management direction regarding the allowable sale quantity and RMP assumptions for other timber related activities.

Clarification of Management Action/Direction

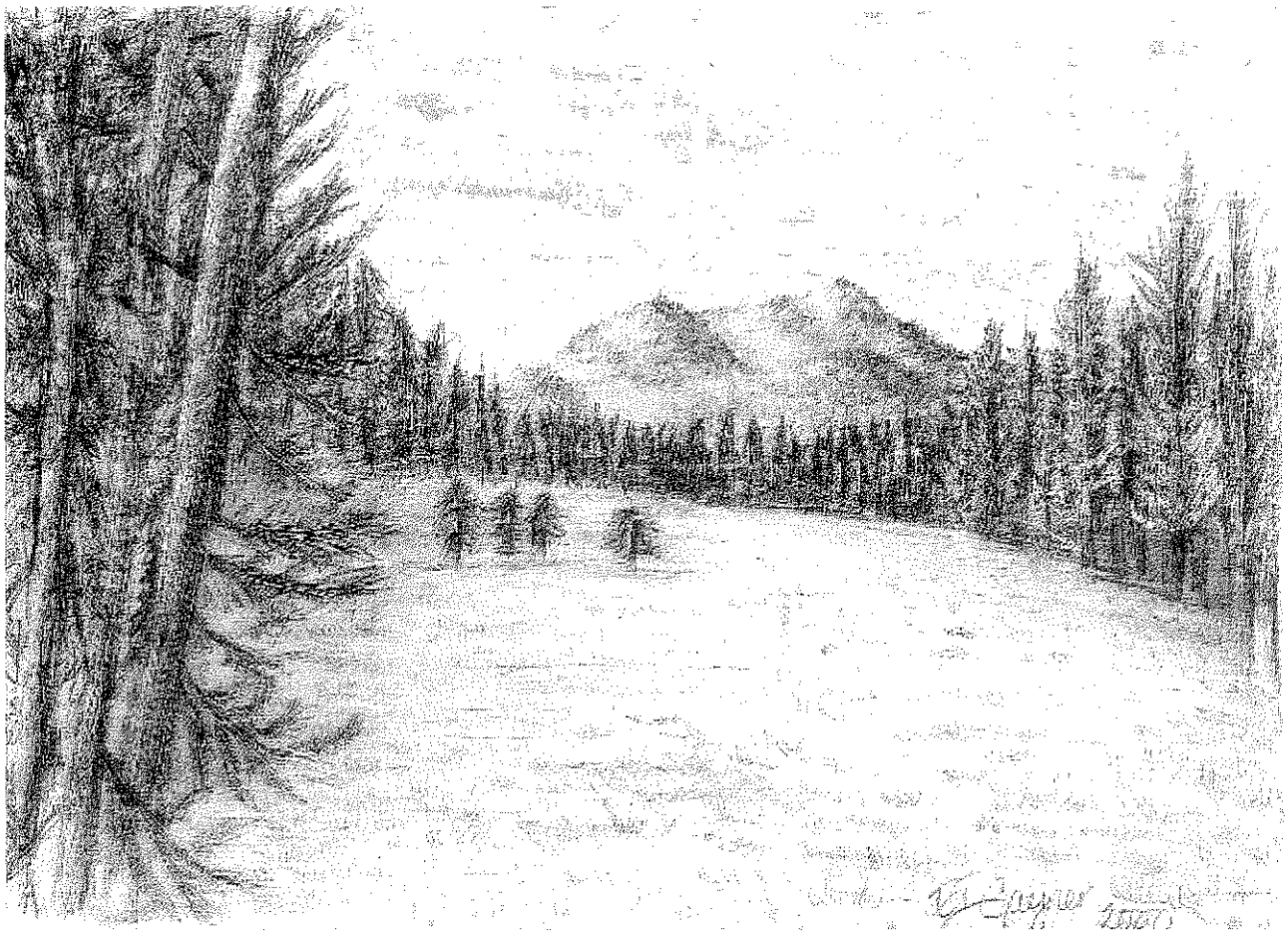
Through adaptive management, clarification and refinement of the Roseburg District RMP and Monitoring Plan has been made and as a result the difficulties related to interpretation of the plan have been reduced. Additional clarification and refinement will be made as needs are identified.

Conclusions

Of the hundreds of discrete actions that were reviewed through the 50 implementation monitoring questions, only one discrepancy was found. The circumstances that have produced the discrepancies in the outputs and activities of the Timber Resources program compared to RMP decisions and assumptions are to a large degree not within the control of the Roseburg District. A reasonable approach is to await resolution of on-going litigation and to then examine these issues in subsequent monitoring and plan evaluations.

Analysis of the fiscal year 2000 monitoring results concludes that overall the Roseburg District had high compliance with management action/direction, and no major changes in management direction or Resource Management Plan implementation is warranted at this time.

Resource Management Plan Monitoring Report



All Land Use Allocations

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 four components of species listed in Appendix H, Table H-1 (Survey and Manage) being implemented as required?

Monitoring Requirement:
At least 20 percent of all management actions will be examined prior to project initiation and reexamined following project completion.

Monitoring Performed:
West Fork Canyon Creek road decommissioning and In-stream restoration. Follow-up monitoring on Smoke Signal timber sale. Follow-up monitoring is pending on Class of 98 timber sale (sold-unawarded), Dream Weaver timber sale (sold-unawarded) and Smoke Signal timber sale (awarded-inactive).

Findings:
West Fork Canyon Creek road decommissioning and in-stream restoration.

Animals:
Five sites for Survey and Manage mollusk species were located within this project area. Suitable management has been planned to assure species at these sites.

Plants:
No special attention species were found during surveys. No mitigation required.

Follow-up Monitoring
Class of 98 timber sale and Dream Weaver timber sale remain sold-unawarded. Smoke Signal timber sale has been awarded, but only road renovation has occurred. Follow-up monitoring is pending on these sales.

Findings:
Smoke Signal timber sale

Animals:
No Survey and Manage surveys were required for this project because it was implemented prior to the requirement to survey for these species. No sites were located, no species management was required.

Plants:
Mitigation was required on two areas within the sale area for Sarcosoma mexicana (Survey and Manage Category 3) (SEIS Protection Buffer). Mitigation required the two areas be protected from ground disturbance. Total area for the two no disturbance areas consisted of approximately 8.5 acres. Minimal ground disturbance occured in one of the areas where two trees were felled into the no disturbance area and yarded out. Disturbance was limited to the canopy and removal of the two trees. The approximate area disturbed was 0.037 acres or 0.4% of the total area.

Conclusions:
The required management action for the species listed in Appendix H, Table H-1 (Protection Buffer) was implemented with a very small, inconsequential exception.

Comment/Discussion:
Although the goal was to protect 100% of the no disturbance area, the goal was deemed as essentially met because of the probable inconsequential nature of the disturbance which represented only 0.4% of the area.

Monitoring Question 2:
Is the management action for the species listed in Appendix H, Table H-2 (Protection Buffer) being implemented as required?

Monitoring Requirement:
At least 20 percent of all management actions will be examined prior to project initiation and reexamine following project completion.

Monitoring Performed:
West Fork Canyon Creek road decommissioning and in-stream restoration. Follow-up monitoring on Smoke Signal timber sale. Follow-up monitoring is pending on Final Curtin timber sale (sold-unawarded), and Class of 98 timber sale (sold-unawarded).

Findings:
West Fork Canyon Creek road decommissioning and in-stream restoration.

Animals:
No Protection Buffer wildlife species were located within the Project area.

Plants:
No Protection Buffer plant species were located within the Project area.

Follow-up Monitoring
Follow-up monitoring is pending on Class of 98 timber sale (sold-unawarded), and Final Curtin timber sale (sold-unawarded).

Findings:
Smoke Signals timber sale

Animals:
No Protection Buffer wildlife species were located within the Project area.

Plants:
Mitigation was required on two areas within the sale area for Sarcosoma mexicana (Survey and Manage Category 3, Protection Buffer). Mitigation required the two areas to be protected from ground disturbance. Total area for the two no disturbance areas consisted of approximately 8.5 acres. Minimal ground disturbance occurred in one of the areas where two trees were felled into the no disturbance area and yarded out. Disturbance was limited to the canopy and removal of the two trees. The approximate area disturbed was 0.037 acres or 0.4% of the total area.

Conclusions:
The required management action for the species listed in Appendix H, Table H-2 (Protection Buffer) was implemented with a very small, inconsequential exception.

Comment/Discussion:
Although the goal was to protect 100% of the no disturbance area, the goal was deemed as essentially met because of the probable inconsequential nature of the disturbance which represented only 0.4% of the area.

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:
Are watershed analyses being completed before on-the-ground actions are initiated in Riparian Reserves?

Monitoring Requirement:
The files on each year's on-the-ground actions will be checked annually to ensure that watershed analyses were completed prior to project initiation.

Monitoring Performed:
Program review.

Findings:

Projects Having Activity Within Riparian Reserves	Watershed Analysis	Status of W.A.
West Fork Canyon Ck road decommissioning and in-stream restoration	Canyonville/Canyon Ck	Completed

Conclusion:
RMP requirements were fully met.

Comment/Discussion:
None

Monitoring Question 2:
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:
No projects were initiated in fiscal year 2000 requiring pre-activity monitoring. Follow-up monitoring is pending on Final Curtin timber sale (sold-unawarded), Class of 98 timber sale (sold-unawarded), and Dream Weaver timber sale (sold-unawarded).

Findings:
No new projects were available for monitoring in fiscal year 2000.

Follow-up Monitoring
An accuracy of 10% is expected during layout of the sale. All measurements are reported in feet in the tables below. Transects were laid out every 300 feet and the width of the riparian reserve was measured using a string machine or tape measure.

High Noon Timber Sale:
Logging of the High Noon Timber Sale was completed in fiscal year 2000. Unit numbers 3, 5, 7, and 8 were the only units where activity was proposed adjacent to a riparian reserve. Follow-up monitoring of Unit #5 was reported in FY98, but is presented here for grouping purposes. The site potential tree height for this watershed has been determined to be 180 feet. Therefore, the required riparian reserve width on non-fish bearing streams is 180 feet. The riparian reserve adjacent to Unit #7 is a fish bearing stream that requires a Riparian Reserve width of 360 feet.

High Noon	Measurement	
	Pre-activity	*Follow-up*
Unit #3		
	186	166
	176	167
	185	200
Average	182	178

High Noon	Measurement	
	Pre-activity	*Follow-up*
Unit #5		
	212	209
	186	183
Average	199	196

High Noon	Measurement	
	Pre-activity	Follow-up
Unit #7		
	201	>360*
	402	>360*
	295	>360*
Average	299	>360*

* Retention trees were concentrated on the north and northwest section of Unit #7, thereby eliminating any activity in or adjacent to the riparian reserve.

High Noon	Measurement	
	Pre-activity	*Follow-up*
Unit #8		
	203	200
	208	207
	194	203
	228	210
	180	178
	190	204
	179	180
	86	87
	144	171
	206	220
	129	137
Average	177	182

Smoke Signal Commercial Thinning:
Unit #2 of the Smoke Signal Commercial Thinning is the only unit adjacent to or containing a riparian reserve. The site potential tree height for this watershed has been determined to be 180 feet. Therefore, the required riparian reserve width on non-fish bearing streams is 180 feet.

Smoke Signal	Measurement *Pre-activity*	*Follow-up*
Unit #2		
	195	196
	184	52
	220	225
	183	190
	197	210
	176	167
	177	176
Average	190	188

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

Comments/Discussion:
High Noon timber sale: The average distance measurements for the three units with non-fish bearing stream riparian reserves ranged from –1% to +8%. These values meet the 10% (average) accuracy requirement for layout of riparian reserve boundaries. Overall the average for the entire sale exceeded the required 180 feet riparian reserve width by 1%.

Within the sale area, Unit # 7 is the only unit in proximity to a fish bearing stream (Days Creek). Following initial layout of the unit, riparian reserve monitoring identified an inadequate riparian reserve width (<360 feet). Retention trees were concentrated on the north and northwest section of Unit #7, thereby eliminating any activity in or adjacent to the required 360 feet riparian reserve.

Conclusion:
Riparian Reserve widths have been established according to RMP management direction.
Comment/Discussion:
None.

Monitoring Question 3:
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 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:
West Fork Canyon Creek Road Decommissioning and In-stream Restoration. Follow-up monitoring is pending on the Class of 98 timber sale (sold-unawarded).

Findings:
West Fork Canyon Creek Road Decommissioning and In-stream Restoration:

Standard and Guideline (S&G) WR-1 (ROD, pg. C-37) states, "watershed restoration projects should be designed in a manner that promotes long-term ecological integrity of ecosystems, conserves the genetic integrity on native species, and attains Aquatic Conservation Strategy *(ACS)* objectives" (ROD, pg. B-11; ROD/RMP, pg. 19-20). The West Fork Canyon Creek Road Decommissioning and In-stream Restoration project was analyzed by an interdisciplinary team in keeping with recommendations discussed on page 99 of the Canyonville/Canyon Creek Watershed Analysis (1998). The project was found to be consistent with ACS objectives.

The project would specifically aid in the restoration of: 1) in-stream habitat connectivity (ACS objective #2); 2) physical integrity of the stream channel in the project area (ACS objective #3); 3) sediment regime (ACS objective #5); 4) in-stream flows (ACS objective #6); and 5) habitat to support populations of fish and other aquatic organisms (ACS objective #9). The actions would also meet objectives found in Appendix D of the ROD/RMP (pg. 138 and 141) "To prevent erosion and sedimentation of streams from unmaintained roads, and restore site productivity to roads no longer needed" and "To mitigate and minimize damage to riparian vegetation, streambanks and stream channels."

The road decommissioning and log placement was accomplished in the summer of 2000. The road decommissioning sites will be planted with conifer seedlings within the next few years.

Follow-up Monitoring:
Follow-up monitoring is pending on 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 4:
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 2000.

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:
What is the status of the preparation of assessment and fire plans for Late-Successional Reserves?

Monitoring Requirements
Status of all Late-Successional Reserve Assessments will be reported.

Monitoring Performed:
LSR Assessments were reviewed.

Findings:
All large LSRs on the Roseburg District are covered by completed LSR assessments which have been reviewed by the Regional Ecosystem Office. Many of the LSR assessments were joint efforts involving the US Forest Service and other BLM districts. Each LSR assessment includes a Fire Management Plan which guides fire management applications within each specific LSR. The District Fire Management Plan (FMP) defines the districts use of fire management activities including wildfire suppression, fuel hazard reduction, and prescribed fire application, and identifies appropriate fire management activities for Matrix, Riparian Reserves, and Late-Successional Reserves. The FMP guidance is to follow the LSR Fire Plans which are more site specific. Generally the plan is designed to protect LSR habitat through suppression of all wildland fires and the use of fuel treatments within Late-Successional Reserves as needed to reduce fire hazard.

Because of the recent emphasis on reducing risks of catastrophic fires, especially where communities are at risk, updates to the LSR fire management plans and the District FMP will likely occur. Efforts are underway to identify and map fire regimes based on plant associations, and to classify fuel condition using remote imagery. As such information becomes available, high risk areas may be identified and targeted for fuels reduction treatments. The LSR fire management plans and district FMP may be updated when new information warrants changes.

Conclusion:
RMP requirements were met.

Comment/Discussion:
None.

Monitoring Question 2:
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: Tree planting and manual maintenance.

Findings:
Within LSR#259, initial planting was completed on 242 acres. Within LSR#223, 11 acres were replanted due to inadequate stocking from a previous planting. All units were monitored during planting. A variety of species appropriate to the site were planted on all units to meet LSR objectives.

A manual maintenance project of 108 acres was done within LSR#259 and 141 acres in LSR#223. These units met the criteria of undesirable vegetation (competition) delaying attainment of late-successional conditions. All the 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.

Conclusion:
These reforestation and maintenance activities meet the criteria for exemption from REO review or are consistent with the LSR Assessment and are also consistent with the ROD and RMP.

Comment/Discussion:
None.

Adaptive Management Areas

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:
None

Findings:
No timber sales were sold in FY 2000.

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 were sold in FY 2000.

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 FY 98 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.

Findings:
The Southriver Resource Area accomplished 410 acres of prescribed burning in FY00. All burning was done under approved Smoke Management clearance from the Oregon Department of Forestry. Late fall/winter 1999 (after Oct. 1 and completed in FY00) burning of 5 units included 58 acres of machine piles and 208 acres of hand piles. Pile burning creates less emissions than broadcast burning because 1) not all fuels are piled, 2) consumption of duff and surface fuels between piles are not consumed, and 3) piles burn with high intensity with near complete combustion of the piled material, thus resulting in less emissions than a broadcast burn. The pile burning was accomplished during November and December when weather conditions favored good smoke dispersion. Smoke emissions were minimized, and clouds often obscured viewing the smoke from any distance.

Four timber sale units totaling 144 acres were broadcast burned during the spring. Short duration burns were achieved and heavy rains occurred for several weeks following the burns. Final mopup was delayed on several units as the wet weather extinguished 99% of the residual smokes. Followup mopup occurred (up to 30 days after ignition) to extinguish the few hot spots that carried over through the rains.

Several units planned for prescribed broadcast burning in the EA process were evaluated after timber harvest and the determination was made that they could be planted without burning. This further reduced particulate emissions.

Conclusion:
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 2000 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 2000 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

Monitoring Question 1:
Are site specific Best Management Practices, 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 implemented as prescribed both before and after implementation. 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:
No timber sales were sold during Fiscal year 2000. Follow-up monitoring was performed on Lean Louis timber sale units 2 & 4 (sale completed). Follow-up monitoring is pending on Dream Weaver timber sale(sold-unawarded) -97, Buck Fever timber sale(sold-unawarded)-97, and Class of 98 timber sale (sold-unawarded)-98.

Findings:
No timber sales were sold during FY00.

Follow-up Monitoring:
Follow-up monitoring is pending on Dream Weaver timber sale (sold-unawarded) -97, Buck Fever timber sale (sold-unawarded)-97, and Class of 98 timber sale.

Lean Louis timber sale (sale completed)
Units 2 & 4 were broadcast burned during spring 2000. Impacts to the soil resources were in the acceptable range after burning was completed. Standards & Guides of the RMP/ROD regarding soil productivity were met. The road into unit 2 has been tilled and access restricted, as was recommended in the EA.

Conclusion:
RMP objectives were met on Lean Louis timber sale. Monitoring is now completed on this sale.

Comment/Discussion:
None.

Monitoring Question 2:
What watershed analyses have been or are being performed? Are watershed analyses being performed prior to management activities in Key Watersheds?

Monitoring Requirement:
Watershed analysis will be reviewed for status.

Monitoring Performed:
Program review.

Findings:

Watershed Analysis	Date Completed
John/Days/Coffee	September 1995
Stouts/Poole/Shively-O'Shea	January 1996
Myrtle Creek	January 1997 (Supplement added July 1998)
Deadman/Dompier	April 1997
Cow Creek	September 1997
Olalla-Lookingglass	April 1998
Canyonville/Canyon Creek	December 1998
Upper Middle Fork Coquille	May 1999
Middle South Umpqua	November 1999
Lower South Umpqua	May 2000

Watershed analysis have been completed for the South Umpqua and Middle Creek Key Watersheds within the South River Resource Area, as of September 1997. The first iteration of watershed analysis has been completed for all of the watersheds in the South River Resource Area.

Watershed analysis has been completed for the key watersheds, Smith River and Canton Creek. The Calapooya watershed analysis was completed in October 1999.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None.

Monitoring Question 3:
What watershed restoration / rehabilitation projects are being developed and implemented?

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

Monitoring Performed:
Program review.

Findings:
The district's rehabilitation work was accomplished jointly through the BLM's maintenance program and procurement process, Job-in-the-Woods funding, and the district's timber sale program. Projects that were developed and /or implemented in FY00 include those identified as road improvements and full decommissioning, and replacement/upgrading of major culverts to pass the 100-year flood, as well as to provide fish passage, and stream channel restoration.

Following are specific watershed restoration / rehabilitation projects developed and/or implemented in FY00 that were funded independently of timber sales:

Road Decommissioning

South River:	- West Fork Canyon Creek Road Decommissioning and In-stream Restoration	2.33 miles

Road Improvements

South River:	- Kola's Ridge II	5.00 miles
	- West Fork Canyon Creek Road Decommissioning and In-stream Restoration	2.78 miles
	- Louis Creek Road Renovation	1.28 miles

Major Culvert Replacements/Removal

South River:	Bingham Culvert Replacement	2 culverts
Swiftwater (by 5th field watershed):		
	Upper Smith River	6 culverts
	Lower North Umpqua	1 culvert
	Elk Creek/Umpqua	1 culvert

In-stream Placement of Large Wood:

- West Fork Canyon Creek Road Decommissioning and In-stream Restoration	10 structures

Conclusions:
RMP objectives were met.

Comment/Discussion:
None.

Monitoring Question 4:
What is the status of development of road or transportation management plans to meet Aquatic Conservation Strategy Objectives?

Monitoring Requirement:
The Annual Program Summary will address Implementation Question 4.

Monitoring Performed:
Program review.

Findings:
The Western Oregon Transportation Management Plan has been completed (1996). Transportation Management Objectives (TMOs) have been written for most of the BLMs road system, although approximately 5% are unfinished. The written TMOs have been incorporated into the Ground Transportation Network. An up-to-date and functioning storm patrol plan is in place for the resource area.

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? If funding is insufficient to implement road mileage reductions, are construction

and authorizations through discretionary permits denied to prevent a net increase in road mileage in Key Watersheds?

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

Monitoring Performed:
Program review.

Findings:
Since the RMP was implemented, 11.13 miles of permanent road have been built throughout the South River Resource Area (3.02 miles under RMP sales, and 8.11 miles under right-of-way agreements). Of these roads, 1.81 miles have been built in a Key Watershed. An additional 0.03 miles of permanent road is proposed to be built, but not within a Key Watershed.

Since the RMP was implemented, 16.91 miles of road have been fully decommissioned (6.61 miles within Tier 1 Key Watersheds and 10.30 miles outside of Key Watersheds). An additional 2.97 miles of road are proposed to be fully decommissioned outside of Tier 1 Key Watersheds.

Through Fiscal year 2000, there has been a net decrease of 4.80 miles of road within Tier I Key Watersheds in the South River Resource Area. There has also been a slight decrease of 0.98 miles of road outside of Tier I Key Watersheds for the Resource Area.

It was reported in fiscal year 1998 that more miles of road had been permanently constructed than had been decommissioned in the Upper and Middle Smith River key watershed. This has changed as a result of decommissioning completed in fiscal year 1999.

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

Comment/Discussion:
There were no new requests for discretionary permits to build roads in Key Watersheds in FY00.

Monitoring Question 6:
Is long term soil productivity maintained or improved?

A.) In forest management activities involving ground based systems, are growth loss effects insignificant (less than one percent)? 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, is RMP management action/direction and best management practices implemented such that growth loss effects are reduced to the extent practicable? (The measurable factor for monitoring purposes related to soil productivity in the use of ground based systems is soil compaction.)

B) Was prescribed burning on highly sensitive soils (Category I) avoided?
If prescribed burning took place on highly sensitive soils, was 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:

A) All ground based activities will be assessed to determine if growth loss effects are insignificant (less than 1 percent), or in areas where there are previous management impacts, are growth loss effects reduced to the extent practicable? Ground-based skidding and ground-based site preparation activities will be assessed whether they followed the pertinent RMP management action/direction provided under water and soils, and timber.

B) All prescribed burning on highly sensitive soils carried out in Fiscal year 2000 and subject to the current RMP will be assessed to answer question 6B.

Monitoring Performed:
Smoke Signal commercial thinning for monitoring requirement 6A.
Louis Weaver timber sale (unit 5) and High Noon timber sale (unit 4) for monitoring requirement 6B.

Findings:

A) *Smoke Signal commercial thinning unit 2S*
Ground based harvest monitoring was performed on the Smoke Signal commercial thinning unit 2S. A feller buncher and grapple cat skidder operation was used on this unit. The BMP soil recommendations for ground-based harvest operations were:

a. Use existing skid trails as mush as possible instead of creating new trails
b. Keep approximately 200 feet of spacing between skid trails
c. Predesignate skid trails and fall to lead
d. Operate ground-based equipment on slopes less than 35 percent
e. Stay out of wet areas and draws
f. All jeep trails, skid roads and natural surface truck roads should be constructed, used, and fully decommissioned in the same dry season
g. Use a properly designed self-drafting subsoiler as the tillage implement
h. After roads/trails are tilled, make sure to restrict access so vehicular traffic will not damage the tilled area
i. Ground based harvesting and natural surface road activities should occur only during the dry season.

The EA analyzed for a tractor skid, falling to lead, designating skid trails with 200 feet distance between skid trails. The EA identified that previous management impacts were of such an extent, that even if all pre-existing compacted trails were tilled, long term soil productivity loss would still exceed 1 percent. The feller buncher and grapple cat skidder operation averaged about 100 feet between trails. The unit was whole tree logged which removed much slash and organic debris from within the unit to landings for burning. 3.4 miles of existing skid trails were used, cleaned of slash with the blade of a D6 cat, and tilled. About 2.1 miles of new trail were added, cleaned of slash and tilled. A winged subsoiler was used to do the tilling. The truck haul roads were blocked to prevent vehicle access. The ground-based operation was performed during the dry season on slopes less than 35 percent. There were no wet areas present at the time of harvest. One pass in and out with the feller buncher did not impact the soils enough to require tillage. The grapple cat with 5 passes or more did compact the soil enough to require tillage.

Soil productivity loss prior to harvest exceeded 1% (calculated out at 3.4%).
After harvest and tillage operations, the productivity loss was reduced to 2.2%.

Smoke Signal Commercial Thinning Unit 2N:
A harvester and forwarder operation was used on unit 2N. The BMP soil recommendations were the same as in unit 2S above. The EA analyzed for a tractor skid, hand falling to lead, designating skid trails with 200 feet between skid trails. The EA identified that previous management impacts were of such an extent, that even if all pre-existing compacted trails were tilled, long term soil productivity loss would still exceed 1 percent. The harvester and forwarder operation averaged 50 to 70 ft between trails. The harvester de-limbed the trees at the site so the slash remained in the unit. Slash placed about 12 inches thick over the soil for the forwarder to travel on resulted in minimal compaction (5%). 2.6 miles of existing skid trails were used, cleaned of slash with the blade of a D6 cat, and tilled. About 4.1 miles of new trail were added, of which 3.1 miles had minimal compaction impact due to the slash cover. The remaining 1 mile was cleaned of slash and tilled afterward. A winged subsoiler was used to do the tilling. The truck haul roads were blocked to prevent vehicle access. The ground-based operation was performed during the dry season on slopes less than 35 percent. There were no wet areas present at the time of harvest. The harvester did not impact the soils enough to require tillage, but because it could not sort the logs or bunch them, the forwarder had to make twice as many passes.

Soil productivity loss prior to harvest exceeded 1 % (calculated out at 3.0 %).
After harvest and tillage operations, the productivity loss was reduced to 1.7 %.

Smoke Signal Commercial Thinning Unit 1:
The BMP soil recommendations for this unit are the same as unit 2S above. The EA analyzed for a tractor skid, hand falling to lead, designating skid trails with 200 feet distances between skid trails. The EA identified that previous management impacts were of such an extent, that even if all pre-existing compacted trails were tilled, long term soil productivity loss would still exceed 1 percent. The feller buncher and grapple cat skidder operation used here averaged about 75 ft between trails. The unit was whole tree logged which removed slash and organic debris from within the unit to landings for burning. 1.6 miles of existing skid trails were used, cleaned of slash with the blade of a D6 cat, and tilled. About 2.4 miles of new trail were added, cleaned of slash and tilled. A winged subsoiler was used to do the tilling. The truck haul roads were blocked to prevent vehicle access. The ground-based operations were performed during the dry season on slopes less than 35 percent. There were no wet areas present at the time of harvest. One pass in and out with the feller buncher did not impact the soils enough to require tillage. The grapple cat with 5 passes or more did compact the soil enough to require tillage.

Soil productivity loss prior to harvest exceeded 1% (calculated out at 2.3 %).
After harvest and tillage operations, the productivity loss was maintained at 2.3 %.

Louis Weaver:
Monitoring was performed on Louis Weaver unit 5. This was a category 1 soil identified in the soils report of the Environmental Assessment. Rational was provided by the silviculturist for hand pile burning this unit to the Field Manager. Impacts to the soil resources were in the acceptable range. Management action/direction of the RMP/ROD regarding soil productivity were met. Four units are classed as category 1 soil in this sale. Hand pile burning occurred on unit 5, the rest were slash planted without burning.

High Noon:
Monitoring was performed on High Noon unit 4. This was a category 1 soil identified in the soils report of the Environmental Assessment. Impacts to the soil resources were in the acceptable range. Standards & Guides of the RMP/ROD regarding soil productivity were met. There were 3 units in this sale that were classified as category 1. Hand pile burning occurred on unit 4, the rest were slash planted without burning.

Conclusions:

A) Prescribed burning was avoided on highly sensitive soils. Rational was provided for burning on category 1 soils when it occurred. Soils objectives were included in the burn plans and soils objectives were met on the units burned.

B) RMP requirements to maintain or enhance soil productivity were met.

Comment/Discussion:

Eight of nine Best Management Practices were implemented as described in the environmental assessment for Smoke Signal timber sale. The BMP of 200 feet spacing for skid trails was not implemented because the use of different equipment on the project made this BMP infeasible. However on an overall basis the RMP objective of maintaining soil productivity that was intended to be addressed by the spacing of skid trails was achieved through the implementation of the remaining BMPs. RMP management action/direction and best management practices were implemented such that growth loss effects were reduced to the extent practicable on the Smoke Signal timber sale, therefore RMP requirements for units with previous management impacts that cannot be reduced to less than one percent was met.

The harvester forwarder operation on Smoke Signal timber sale appeared to be less impacting to the soil resource than the feller buncher and grapple cat skidder operaton. On both operations, soil productivity losses could have been further reduced by: 1) increasing the percent of tillage on compacted trails with stumps, and 2) pulling slash onto trails after tilling. Instead of tilling with a tractor and self-drafting subsoiler, a small excavator capable of negotiating narrow, windy trails and tilling through slash, could have been more effective.

With future harvester forwarder operations the following practices are recommended:

1) First order forwarder trails:
   Should have a uniform, minimum 12 inch covering of slash.
   Forwarder should be kept to a two pass maximum.

2) Second and third order forwarder trails:
   Should be greater than 180 feet apart.
   Compacted trails should be tilled to an 80 percent shatter
   Tilling equipment should be capable of negotiating and tilling around stumps in the trail.

Follow-up Monitoring Performed:

A.) Field reviews of the Bit-of-Honey and Right View timber sales was conducted to determine effectiveness in regards to question 6a.

B.) Program review included the Bit-of-Honey and Right View timber sales in Swiftwater R.A.

Findings:

A) Ground Based Activities: The Bit-of-Honey Timber sale was modified through a categorical exclusion (CX) to allow excavator machine piling and burning of piles of Unit #2 instead of broadcast burning. This action became necessary since road access into the unit was not constructed. Adequate road access is essential for safe broadcast burning. The CX had adequate documentation in the EA and proper follow through of BMP's into the contract. The Rightview EA and the attached soils report only covered compaction and not the woody debris retention requirements (restrict piling to predominantly the 3 to 8 inch diameter range) and the avoidance of soil and duff displacement into the piles given as BMPs in the RMP. There was no requirement for notifying the soil scientist of the start of operations. These BMP's of both sales were

anticipated to lessen productivity loss. They were anticipated to maintain less than 1% productivity loss due to compaction. The field reviews found the following results.

Bit-of-Honey Unit #2:
About 53 acres were piled using an excavator. The initial effort on two acres created compaction in excess of two percent (greater than one percent productivity loss). Most of the compaction resulted from multiple passes over moist, bare ground. In addition woody debris was piled in excess of what was needed for adequate planting spots and soil and duff were displaced into these piles in concentrations easily perceptible. Soil scalps up to a few inches deep were common. A substitute contract administrator (the normal one was away on fire) and the failure to notify and involve the soil scientist were factors contributing to the initial results. In the subsequent efforts the excavator operator, the fuels management specialist (the normal contract administrator) and the soil scientist interacted to produce passing results on the remaining 51 acres. On much of these 51 acres the soil scientist considered the results excellent-good distribution of woody debris remaining on the ground that still allowed adequate planting spots and very little compaction and soil/duff scalping.

Rightview Unit #5
On Rightview Unit 5 about 10 acres were piled using an excavator. Monitoring on the site indicates that mechanized piling created excess compaction on a portion of the unit. This compaction apparently resulted from multiple passes over bare ground and hard turns by the excavator. In addition, woody debris was piled in excess of what was needed for adequate planting spots and resulted in unnecessary displacement of soil and duff. On an overall unit basis, monitoring indicates that the excavator piling produced results that were in compliance with the RMP. Piling activities were completed prior to notification of the Soil Scientist. Because of this, no opportunity was provided to adjust piling activities to ensure more uniform conformance with RMP standards through contract administration.

Conclusion:
The RMP requirement to maintain (less than 1% productivity loss) or enhance soil productivity were met on Bit-of-Honey Unit 2 and on Right View Unit 5.

Discussion:
The RMP requirement to maintain (less than one percent productivity loss) or improve long-term site productivity is assessed at the site (unit) level. At the unit level, soil productivity loss was less than one percent, therefore RMP requirements were met. Critical elements for successful accomplishment of soil productivity objectives seem to have been the incorporation and implementation of RMP management direction, implementation of selected Best Management Practices, and close communication between the operator, contract administrator and the soil scientist.

Monitoring data for the Rightview Unit 5 indicate that productivity loss may have occurred in some areas of the unit, but that overall the standard was met. Concerns on Rightview Unit 5 resulted from a lack of effective communication between the operator, contract administrator and the Soil Scientist. Timely notification and involvement of the soil Scientist will be emphasized in future operations.

Findings:

B.) Burning on Highly Sensitive Soils -Bit-of-Honey and Right View timber sales These sales did not have any burning on "category 1" soils.

Conclusion:
RMP requirements were met.

Table 27. South River Resource Area Projects in a Key Watershed Through Fiscal Year 2000

5th Field Watershed	Status	Permanent New Road Construction (miles)	Temporary Road Construction (miles)	Semi-Permanent Road Construction (miles)	Decommission Existing Roads (miles)	Full Decommission Existing Roads (miles)	Improve Drainage &/or Rock Existing Natural Surface Road (miles)
Lower Cow Creek	Completed	0.30					
South Umpqua River	Completed	1.51	2.36	0.86	1.20	5.90	28.08
Middle South Umpqua River/ Dumont Creek	Completed		0.06			0.71	
Total	Proposed	0	0	0	0	0	0
Total	Active	0	0	0	0	0	0
Total	Completed	1.81[1]	2.42[2]	0.86	1.20	6.61	28.08

[1] 0.92 miles of the total 1.81 miles of permanent road were built by private Right-of-way holders.
[2] 0.05 miles of the total 2.42 miles of temporary road were built by private Right-of-way holders.

Table 28. South River Resource Area Projects Not in a Key Watershed Through Fiscal Year 2000

5th Field Watershed	Status	Permanent New Road Construction (miles)	Temporary Road Construction (miles)	Semi-Permanent Road Construction (miles)	Decommission Existing Roads (miles)	Full Decommission Existing Roads (miles)	Improve Drainage &/or Rock Existing Natural Surface Road (miles)
Lower Cow Creek	Completed	4.60					
Middle Fork Coquille River	Completed	0.25	1.60				6.15
Myrtle Creek	Completed	1.19	2.80			4.86	29.09
	Proposed	0.03	1.88	0.37		2.97	25.37
Middle South Umpqua River/ Rice Creek	Completed	2.20		0.13		0.11	
Olalla Creek/ Lookingglass Creek	Completed	0.60				3.00	11.22
South Umpqua River	Completed	0.48				2.33	2.78
Total	Proposed	0.03	1.88	0.37	0	2.97	25.37
Total	Active	0	0	0	0	0	0
Total	Completed	9.32[1]	4.40	0.13	0	10.3	49.24

[1] 7.19 miles of the total 9.32 miles of permanent road were built by private Right-of-way holders.

Table 29. Swiftwater Resource Area Projects in non Key Watersheds Through Fiscal Year 2000

5th Field Watershed	Status	Permanent New Road Construction (miles)	Temporary Road Construction (miles)	Semi-Permanent Road Construction (miles)	Decommission Existing Roads (miles)	Full Decommission Existing Roads (miles)	Improve Drainage &/or Rock Existing Natural Surface Road (miles)
Elk Creek	Completed	0.1	0.9		2.8	1.4	14.8
	Active	1.1	2.8			1.3	20.3
	Proposed	0.6	1.2		0.9	0.5	7.0
Upper Umpqua	Completed	0.2	1.8		1.4	3.9	18.7
	Active		0.1				8.0
	Proposed		0.2				0.5
Calapooya	Completed	0.1		1.1		0.2	2.2
	Active		0.5			0.5	2.4
	Proposed		0.3		2.3	0.8	8.7
Little River[1]	Completed		1.2	1.2		2.5	33.2
	Active	0.5	2.1		0.5	14.5	39.1
	Proposed						
Rock Creek	Completed		0.6		0.9	0.9	5.0
	Active						
	Proposed		0.8			0.3	1.7
Lower N. Umpqua	Completed		0.2		12.3	0.6	
	Active						
	Proposed						
Middle N. Umpqua	Completed	0.2	0.7		0.4	2.4	5.7
	Active						
	Proposed						
R/W Plats 95-97		5.3					
Total		8.1	13.4	2.3	21.5	29.8	167.3

[1] Figures include USFS activities in this 5th field watershed which are part of the federal land base. The USFS portion includes: Permanent Road, 0.5 mi; Temp Road, 2.0 mi; Decommission, 0.5 mi; Full Decommission, 14.8 miles; Improvement, 48.3 miles

Table 30. Roseburg District Projects in Key Watersheds through Fiscal Year 2000

5th Field Watershed	Status	Permanent New Road Construction (miles)	Temporary Road Construction (miles)	Semi-Permanent Road Construction (miles)	Decommission Existing Roads (miles)	Full Decommission Existing Roads (miles)	Improve Drainage &/or Rock Existing Natural Surface Road (miles)
South Umpqua	Completed	1.51	2.36	0.86	1.20	6.61	28.08
	Active						
	Proposed						
Middle South Umpqua River/ Dumont Creek	Completed		0.06			0.71	
	Active						
	Proposed						
Cow Creek	Completed	0.30					
	Active						
	Proposed						
Canton Creek	Completed[1]				2.0	19.3	19.3
	Active		0.1				16.7
	Proposed[2]					8.3	2.7
Upper & Middle Smith River	Completed	1.4			1.5	1.9	0.2
	Active	0.3	2.0			1.6	24.1
	Proposed				10.0	3.8	3.2
Total		3.48	2.52	0.86	4.7	28.52	47.58

[1]These figures include USFS **completed** activities which are part of the federal land base in this 5th field watershed. They include: Full Decommission, 14.4 miles; Improvement, 14.7 miles

[2]These figures include USFS **planned** activities which are part of the federal land base in this 5th field watershed. They include: Full Decommission, 7.5 miles; Improvement, 3.3 miles

0.92 miles of the total permanent roads were built by private R/W holders and 0.05 miles of the total temporary roads were built by private R/W 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:
No Regeneration harvest timber sales occurred during fiscal year 2000

Findings:
No regeneration harvest timber sales occurred during fiscal year 2000

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).

Lean Louis timber sale (sale completed).
Minimal requirements for green tree retention were met (1541 trees over 20" DBH left, 1248 required @6/acre; 1664 trees required @8/acre).

Requirements for down woody debris are not being met by the existing amount of down wood on site (24,960 lineal feet required, 14,184 lineal feet left). Additional green trees over 20" DBH (100+) beyond the minimum requirement of 6/acre were retained to allow natural attrition such as blow down to provide down wood over time.

Requirements for snag retention were met. More snags were present on the sale units after completion of the project than were marked for retention (82 marked, 164 present after treatment). This increase in snag numbers may be the result of mortality resulting from harvest or site preparation treatment. The required monitoring has now been completed on the Lean Louis timber sale.

Conclusion:
Suitable numbers of snags, coarse woody debris, and green trees were left, in a manner as called for in the SEIS Record of Decision Standards and Guidelines and RMP management direction. RMP objectives were being met.

Comment/Discussion:
All operations on this sale have been completed. The data cited in this report reflects actual retention of snags, green trees and down wood after treatment, on all units.

Unit 2 presents some questions about final retention tree numbers, in that the recorded number of green trees over 20" DBH left after treatment is significantly greater than the numbers that were marked for retention (202 marked, 257 retained). Similar increases in snag and hardwood tree numbers were noted.

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:
Calochortus coxii Habitat Restoration.

Findings:
Ground evaluation of the Calochortus coxii project area showed that potential Del Norte salamander (*Plethodon elongatus*) habitat was present in the adjacent drainage areas. The restoration project proposed to burn parts of the overall project area but no burning is planned in the Riparian Reserves. The botanist marked the desired burn areas on the ground using input from the area biologist and the location of the potential Del Norte salamander habitat. The goal was to protect the special habitat from direct impact from the fire. Post-fire evaluation showed that approximately three acres of the total 10+ acres identified for burning were burned in Fiscal year 1999. The area burned was away from the identified special habitat areas. More burning is scheduled but no burning occurred in Fiscal year 2000 due to a moratorium on prescribed burning imposed on the Roseburg District. All future burn areas will be evaluated for special habitat locations prior to burning. Approximately 1 acre of the area was treated during FY00. Douglas fir and incense cedar trees were thinned or girdled to restore habitat for Calochortus coxii. No Riparian Reserves were treated.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None.

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

Monitoring Requirement:
The Annual Program Summary will address Question 3.

Monitoring Performed:
Reviewed AWP accomplishments.

Findings:
The Area Lead Wildlife Biologist and Silviculturist began scoping for the Slimewater Creek Density Management Project in FY-98. The Environmental Analysis started in FY-99. This project is in the South Umpqua River/Galesville LSR and is designed to accelerate the development of late-successional forest components and enhance spotted owl habitat. The interdisciplinary team is concentrating on the specifics of the proposed action. Designing the silvicultural prescription that will lead to a forest stand with a multilayered canopy, large trees, canopy gaps for spatial diversity, understory development, snags, and down wood is ongoing.

Conclusions:
RMP requirements were met.

Comment/Discussion:
This project is still in the planning stage. A Decision Record has not been signed.

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:
Are fish habitat restoration and enhancement activities being designed and implemented which contribute to attainment of Aquatic Conservation Strategy Objectives?

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:
In the Swiftwater Resource Area, eight culverts were replaced to provide fish passage in the Upper Smith River, Lower North Umpqua, and Elk Creek/Umpqua watersheds.

In the Southriver Resource Area, two instream projects were designed and implemented during Fiscal year 2000 - West Fork Canyon Creek Road Decommissioning and In-stream Restoration, and Bingham Creek Culvert Replacement. ACS Objectives were considered in the project design.

West Fork Canyon Creek Road Decommissioning and In-Stream Restoration
An environmental assessment was completed during FY00 and the project was implemented and completed during the summer of 2000. The purpose of the project was to decommission 2.5 miles of road and place 10 log structures in a reach of an unnamed tributary to the West Fork of Canyon Creek. This project provides for the maintenance and restoration of the sediment regime, maintenance and restoration of in-stream flows, and maintenance and restoration of habitat, which is consistent with the Aquatic Conservation Strategy (ROD/RMP, pp.20-21). The action also meets objectives outlined in the Best Management Practices (Appendix D, ROD/RMP p.138 and 140) such as: "To prevent erosion and sedimentation of streams from unmentioned road, and restore site productivity to roads no longer needed", and "To minimize damage to riparian vegetation, streambanks and stream channels". Consultation with National Marine Fisheries Service concluded that the effects of the road decommissioning and in-stream work would be short-term and localized in nature, and that long term impacts from this project are considered to be beneficial to the fisheries/aquatic resources. RMP requirements have been met and no follow-up monitoring is required.

Bingham Creek Culvert Replacement
An environmental assessment was completed during FY00 and the project is scheduled for summer 2001, after which follow up monitoring will occur. The purpose of this project is to replace two large culverts because of the risk of near term failure. These replacements will also provide for fish passage through the new culverts.

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:
West Fork Canyon Creek Road Decommissioning and In-Stream Restoration and Bingham Creek Culvert Replacement. Follow-up monitoring on Smoke Signal timber sale. Follow-up monitoring is pending on Class of 98 timber sale(sold-unawarded), and Dream Weaver timber sale(sold-unawarded).

Findings:
West Fork Canyon Creek Road Decommissioning and In-Stream Restoration
An environmental assessment was completed during FY00 and the project was implemented and completed during the summer of 2000. The purpose of the project was to decommission 2.5 miles of road and place 10 log structures in a reach of an unnamed tributary to the West Fork of Canyon Creek. This project provides for the maintenance and restoration of the sediment regime, maintenance and restoration of in-stream flows, and maintenance and restoration of habitat, which is consistent with the Aquatic Conservation Strategy (ROD/ RMP, pp.20-21). The action also meets objectives outlined in the Best Management Practices (Appendix D, ROD/RMP p.138 and 140) such as: "To prevent erosion and sedimentation of streams from unmentioned road, and restore site productivity to roads no longer needed", and "To minimize damage to riparian vegetation, streambanks and stream channels". Consultation with National Marine Fisheries Service concluded that the effects of the road decommissioning and in-stream work on sediment would be short-term and localized in nature, and that long term impacts from this project are considered to be beneficial to the fisheries/aquatic resources. RMP requirements have been met and no follow-up monitoring is required.

Bingham Creek Culvert Replacement
An environmental assessment was completed during FY00 and the project is scheduled for summer 2001, after which time follow up monitoring will occur. The purpose of this project is to replace two large culverts because of the risk of near term failure. These replacements will also provide for fish passage through the new culverts.

Follow-up Monitoring:

Smoke Signal timber sale
This timber sale was located in the Coquille River Basin above natural anadromous fish barriers and no resident fish were present within the project area. No project mitigation measures were identified because of the lack of fish presence. Riparian Reserves of 180 feet around streams were maintained to protect aquatic resources. RMP requirements have been met. All monitoring has been completed on this sale.

Conclusions:
RMP objectives have been met.

Comment/Discussion:
None.

Special Status and SEIS Special Attention 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:
Are special status species 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 special status species, are steps taken to mitigate or avoid disturbances?

Monitoring Requirement:
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 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:
West Fork Canyon Creek Road Decommissioning and In-Stream Restoration. Followup monitoring on Smoke Signal timber sale (sale completed). Followup monitoring is pending on Dream Weaver timber sale (sold-unawarded) and Class of 98 timber sale (sold-unawarded).

Findings:
West Fork Canyon Creek Road Decommissioning and In-Stream Restoration.

Animals:
Five sites for Survey and Manage mollusk species were located within this project area. Suitable management has been planned to assure persistence of the species at these sites.

Plants:
No Special Status Species were found during surveys. No mitigation was required.

Follow-up Monitoring
Smoke Signal timber sale

Animals:
No surveys for Strategy 2 Survey and Manage mollusk species were conducted for this project, as per direction from agency management, because it was implemented prior to the requirement of surveys for these species. Since no sites were located, no species management was required.

Plants:
Bensoniella oregona (Special Status Species) Mitigation required two areas within the unit protected from ground disturbance. These requirements were fully met.

Conclusions:
Special status species are being addressed in deciding whether or not to go forward with forest management and other actions and steps are being taken to adequately mitigate disturbances.

Comment/Discussion:
None.

Follow-up Monitoring:
Bit of Honey timber sale

Findings:

Special Status Animals - No follow-up necessary.

Special Status Plants - No follow-up necessary.

Special Status Fish
As stated in the FY96 (pg 72) and FY97(pg 78) monitoring report, special status fish species (coho salmon and coastal cutthroat trout) were identified in the fisheries report and also the EA (pg 7).

The EA for the Bit of Honey timber sale contained two mitigation measures for Hydrology/Fisheries concerns. Concern# 6 dealt with new road construction and avoiding adding sediment into the draw. Due to consultation issues, the road was never built; therefore mitigation was followed to a greater extent. Also in Concern #6, additional buffers to riparian areas were included in unit 34D. The east draw was to receive a 20 ft no-touch buffer; the west draw at the natural topographic break. This has been implemented on the ground and mitigation completed. Concern #7 involved temporary roads. With the switch to helicopter logging, these roads were not built. Mitigation was expanded.

Modifications were added in response to re-initiation of Section 7 consultation. Helicopter logging of all units allowed for the deletion of road building from the contract. This has been completed

Conclusion:
RMP requirements were met.

Monitoring Question 2:
Do management actions comply with plans to recover threatened and endangered species?

Monitoring Requirement:
Review currently approved recovery plans for Bald Eagle, Peregrine Falcon, Marbled Murrelet and Columbian White-tailed Deer and draft recovery plan for the Northern Spotted-owl.

Monitoring Performed:
Programs were assessed for compliance with recovery plans.

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

Conclusions:
RMP requirements were met.

Comment/Discussion:
None

Monitoring Question 3:
What coordination with other agencies has occurred in the management of special status species?

Monitoring Requirement:
The Annual Program Summary will address Implementation Question 3.

Monitoring Performed:
Program review

Findings:
BLM, ODFW, USFWS, NMFS, and USGS FRESC have coordinated efforts in research and public education.

Conclusions:
Appropriate coordination with other agencies has occurred in the management of special status species.

Comment/Discussion:
None.

Cultural Resources Including American Indian Values

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
West Fork Canyon Creek Road Decommissioning and In-Stream Restoration.

Findings:
A cultural project tracking form under the Oregon BLM/State Historic Preservation Office (SHPO) cultural resource protocol was completed. 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". 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 FY00 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 2000 actions.

Findings:
There were no major actions or timber sales in fiscal year 2000 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 2000 projects.

Findings:
No actions occurred within rural interface areas as identified in the RMP.
There is no pending followup monitoring.

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:
The Cow Creek Recreation Management Plan has been completed by an interdisciplinary team in draft form and has been presented to the Field Manager for approval. Signs for the Cow Creek Back Country Byway north kiosk have been designed and are being constructed at the Rawlins BLM sign shop. Planning for the watchable wildlife Day-Use Sites continues.

In the North Umpqua and Umpqua Special Recreation Management Area, facility upgrades and renovations continue to be implemented through Recreation Pipeline Restoration Funds under the existing North Umpqua Recreation Area Management Plan and Roseburg RMP.

Conclusion:
RMP requirements were met.

Comment/Discussion:
None.

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. No major action or uses, all actions and uses consistent with objectives and management direction. Defensibility monitoring has been conducted annually on all ACEC/RNAs. Habitat has been restored from unauthorized use on one ACEC/RNA and noxious weeds have been controlled on two other ACEC/RNAs. A checklist for vascular plants is currently in preparation for publication for the Myrtle Island ACEC/RNA. Baseline fungi, lichen, and bryophyte inventories have been completed at six ACEC/RNAs, one ACEC, and one candidate ACEC. Baseline fungus inventories are currently being conducted.

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:
Draft management plans have been completed for four ACEC/RNAs.

Seven ACECs were nominated by the public in the Final RMP. Five of these nominations are being reviewed by the South River Field Area. All nominated areas are being managed to protect the proposed relevant and important values. Land acquisition proposed in the Final RMP to expand the Beatty Creek ACEC/RNA has not been pursued.

Conclusion:
RMP requirements were met.

Wild and Scenic Rivers

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 North Umpqua River was conducted daily between May 20 and Sept 20, 2000 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 (13 0f 15) to commercial river outfitters. Employees engaged in monitoring included one full time BLM River Manager and one temporary USFS person. Objectives of the 2000 river survey were to:

- Monitor the five outstanding remarkable values on the North Umpqua Wild and Scenic River of fish, water, recreation, scenery and cultural resources.
- Provide a BLM/USFS presence on the river to contact, inform, and educate public users.
- Document 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:
Fiscal year 2000 use:

- Boating Use: 650 visits (BLM segment only, down from 750))
- Fishing Use: 2,345 visits (BLM segment only, up from 2,100)
- For entire W&S River: Commercial Adjusted Use - 2,019 visits;
  Private adjusted use - 4,311 visits.

- Conflict between users: No major incidents were reported on the BLM segment of the Wild & Scenic River in fiscal year 2000. Groups contacted include: Boaters, campers along the river, anglers, fly-fishermen.
- Issue: Extending six Special Recreation permits while analysis and NEPA was completed for re-issuance of the commercial rafting outfitter guides permits. The preferred alternative included an additional 100 user days and reduced the use season by two weeks (September 15). The final decision is to be approved after public comment in fiscal year 2001.

Interim management for Roseburg District Eligible Recreational Rivers is to exclude timber harvest in the riparian reserves, moderately restrict development of leasable and salable minerals, and protect a segment's free flowing values and identified ORVs. In undesignated segments, BLM has provided interim protective management for ORVs identified on BLM-lands along river segments determined eligible but not studied for inclusion as components of the National Wild & Scenic Rivers System.

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 2000	Projected	% of Projected
Total Timber Sale Vol:	1.4 MMBF	49.5 MMBF	3%
Matrix Timber Sale Vol:	1.2 MMBF	45.0 MMBF	2%
Other wood	0.2 MMBF	4.5 MMBF	4%
Key Watershed TS Vol:	0.7 MMBF	8.3 MMBF	8%
Total Regen Harvest	0 acres	1190 acres	0%
Total Comm Thinning	2 acres	84 acres	2%
Total Density Mgt	0 acres	66 acres	0%

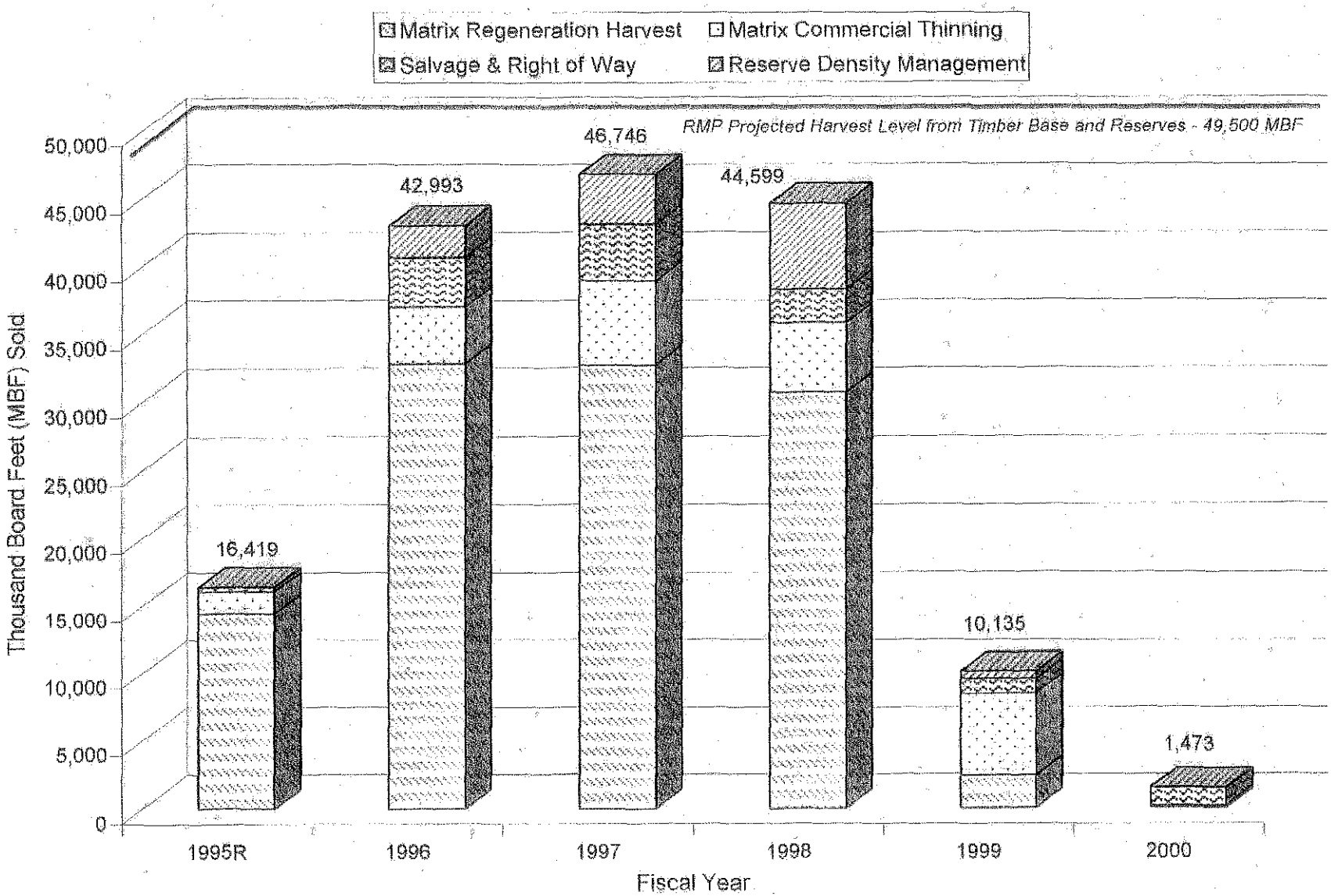
Comment/Discussions:
Several factors have created a situation whereby the Roseburg District is falling short of producing the ASQ set forth in the Roseburg District RMP, as well as falling short of the anticipated mix of harvest types and harvest acres. By fiscal year 2000, over the five year life of the RMP to date, the Roseburg District is at 65% of the RMP anticipated total timber sale volume, 62% of matrix harvest, 66% of RMP anticipated density management harvest in reserves, and 23% 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, the acreage of commercial thinning is at 154% of that anticipated in the RMP.

Table 19. Roseburg District Timber Sale Volume and Acres.

	FY 1995R[1]	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	1995-2000 Total	1995-2000 Annual Average	RMP/EIS Assumed Annual Average	Percent of Assumed Average
MBF										
Total Timber Sale Volume	16,983	45,993	51,783	44,726	10,135	1,472	171,092	32,100	49,500	65%
Matrix Timber Sales	16,825	41,055	42,692	37,887	9,416	1,190	149,065	27,967	45,000	62%
GFMA Regeneration Harvest	13,292	32,172	27,575	24,786	1,055	(39)	98,842	18,544		
GFMA Commercial Thinning	1,663	3,016	2,907	3,451	4,022	166	15,226	2,857		
GFMA Salvage & ROW	230	1,817	3,516	1,446	438	477	7,925	1,487		
C/D Block Regeneration Harvest	1,130	629	5,123	5,869	1,352	0	14,104	2,646		
C/D Block Commercial Thinning	457	2,978	3,455	1,739	2,059	166	10,854	2,036		
C/D Block Salvage	53	442	116	596	488	586	2,282	428		
RR Density Management	24	2,424	2,175	811	395	55	5,884	1,104		
RR Salvage	50	55	3	236	140	18	502	94		
LSR Density Management	63	102	1,728	5,559	150	0	7,603	1,426		
LSR Salvage	3	1,162	266	122	33	210	1,797	337		
Total All Reserves	140	3,743	4,172	6,728	719	282	15,785	2,962	4,500	66%
Key Watersheds Matrix Timber Sales	0	8,438	18,392	12,767	2,351	681	42,629	7,998	8,700	92%
Little River AMA All Harvest Types	0	1,033	4,682	30	0	0	5,745	1,078	4,600	23%
Little River AMA Salvage	17	162	236	81	0	0	496	93		
Total AMA Timber Sales	17	1,195	4,918	111	0	0	6,241	1,171		
Acres										
Total Regeneration Harvest	386	906	836	800	56	0	2,984	560	1,190	47%
Total Commercial Thinning	112	426	568	536	411	2	2,055	386	250	154%
Total Density Management	2	216	301	483	38	0	1,040	195		
GFMA Regeneration Harvest	354	866	713	649	20	0	2,602	488		
GFMA Commercial Thinning	68	197	267	361	208	0	1,102	207		
GFMA Salvage & ROW	14	47	289	124	16	16	507	95		
C/D Block Regeneration Harvest	32	40	123	151	36	0	382	72		
C/D Block Commercial Thinning	44	229	301	175	202	0	952	179		
C/D Block Salvage	4	34	25	52	16	4	135	25		
RR Density Management	0	216	188	97	38	0	539	101		
RR Salvage	0	4	0	20	8	1	34	6		
LSR Density Management	2	0	113	386	0	0	501	94		
LSR Salvage	0	96	33	8	2	8	148	28		
Total All Reserves	2	316	334	511	48	10	1,221	229		
Little River AMA Regeneration Harvest	0	0	68	0	0	0	68	13		
Little River AMA Commercial Thinning	0	94	134	0	0	0	228	43		
Little River AMA Salvage	1	9	36	7	0	0	53	10		

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
[1]FY 1995 figures only for effective dates of RMP; June - September 1995

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



1995R: Accounts for only 0.33 of fiscal year; June - September 1995

The Northwest Forest Plan, signed in 1994, was declared sufficient by the courts to settle the ongoing lawsuits at that time. However, two new lawsuits have substantially impacted the District's ability to implement the Plan. The Pacific Coast Fisherman's Federation v. National Marine Fisheries Service primarily relates to implementation of the Aquatic Conservation Strategy of the Northwest Forest Plan. This lawsuit was filed as a result of proposed Bureau of Land Management (BLM) and U.S. Forest Service timber sales within the Umpqua Basin. The government is appealing Judge Rothstein's adverse ruling to the Ninth Circuit Court of Appeals. The plaintiffs in this lawsuit have filed a new complaint to include an additional 20 biological opinions, affecting a wider geographic area.

A separate lawsuit, The Oregon Natural Resources Council Action, et al. v. Forest Service and BLM was filed in the U.S. District Court of Western Washington. A settlement agreement was reached in this case. The impact of these lawsuits has caused an approximate two-thirds reduction region-wide in BLM timber sales offered in fiscal year 1999 and fiscal year 2000.

In the Roseburg District, pending resolution of the appeal to the Ninth Circuit, the impacts have been much larger. The District offered 1.4 MMBF in fiscal year 2000. No timber sale auctions were held in fiscal year 2000. Seven negotiated sales of minor volume were sold.

As of the writing of this report (Spring 2001), there has been no resolution of the situation that has led to the differences between RMP decisions and assumptions and actual RMP implementation.

Conclusion:
The RMP acknowledged uncertainty associated with the ASQ. Compliance with RMP direction for timber resources may be better determined as uncertainties are resolved and actual long-term trends are confirmed.

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 2000 data indicate differences between implementation and RMP assumed levels of activity.

Differences in this question involved the following:

	Fiscal Year 2000	Projected
Brushfield/hardwood conversion	0 acres	15 acres
Site Preparation, prescribed fire	489 acres	840 acres
Site Preparation, other	0 acres	50 acres
Planting, regular stock	788 acres	290 acres
Planting, genetic stock	272 acres	1140 acres
Stand maintenance/protection	1441 acres	830 acres
Stand release/precommercial thin	4840 acres	3900 acres
Pruning	169 acres	460 acres
Fertilization	0 acres	1140 acres

The projected figures are an annual average for the first decade of the plan and as such the actual annual level of activity would vary from year to year.

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 50% of planned. This trend is likely to continue due to less than expected levels of regeneration harvest and the interdisciplinary teams concern for soils protection, loss of retention trees, coarse woody debris, snags and survey and manage species.

Site Preparation (OTHER) - To date no acres have been reported. Activity in this category is expected in this decade.

Planting (regular stock) - Total planted acres without regard to genetic quality is at 67% of RMP assumed levels due to lack of planned RMP levels of timber harvest. Reforestation with genetically unimproved planting stock is 244% of planned.

Planting (improved stock) - In Fiscal year 2000, 44% of the acres reforested were planted with genetically improved stock. However, only 26% of the acres planted were in the GFMA land use allocation. Only GFMA acres count 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 ot 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 25-50% of RMP levels by the end of the decade.

Maintenance/Protection - Acres of maintenance/protection treatments is currently double of that assumed for the first three years. The ratio of maintenance/protection to reforested acres was highest in FY 96 and has declined dramatically each year since. In FY 96 the ratio was 2.2 to 1. In Fiscal year 2000 the ratio was at 1.4 to 1. The average ratio for the RMP period is 1.6 to 1 and is expected to decline further. It is anticipated that at this rate, assumed RMP levels would be exceeded by 50%.

Precommercial Thinning (PCT) - Currently PCT is at approximately planned RMP levels. It is expected that at a minimum this level will be maintained over the decade. There is a potential to exceed this level if funding levels were to increase but the magnitude is unknown at this time. This practice is highly dependent on increasing budget levels.

Pruning - Currently pruning accomplishments are about 108% of assumed RMP levels. Depending on funding this trend could continue. At a minimum it is expected that RMP levels will be met. This practice is also highly dependent on increasing budget levels.

Fertilization - Currently fertilization accomplishments are about 76% of assumed RMP levels. There is the potential to exceed planned RMP levels by 25% if funding is available. However, implementation of fertilization is currently delayed by an appeal of the proposed action and high material costs of fertilizer.

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:
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:
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.

Noxious Weeds

Expected Future Conditions and Outputs

Containment and/or reduction of noxious weed infestations on BLM-administered land using an integrated pest management approach.

Avoidance of the introduction or spread of noxious weed infestations in all areas.

Implementation Monitoring

Monitoring Question 1.
Are noxious weed control methods compatible with Aquatic Conservation Strategy Objectives?

Monitoring Requirements:
Program review.

Monitoring Performed:
Program was reviewed.

Findings:
The noxious weed program for the district that is compatible with Aquatic Conservation Strategy Objectives and Integrated Pest Management, Northwest Noxious Weed EIS.

Conclusions:
RMP requirements were met.

Fire/Fuels Management

Expected Future Conditions and Outputs

Provision of the appropriate suppression responses to wildfires in order to meet resource management objectives and minimize the risk of large-scale, high intensity wildfires.

Utilization of prescribed fire to meet resource management objectives. (This will include, but nor be limited to, fuels management for wildfire hazard reduction, restoration or desired vegetation conditions, management of habitat, and silvicultural treatments.)

Adherence to smoke management/air quality standards of the Clean Air Act and State Implementation Plan standards for prescribed burning.

Implementation Monitoring

Monitoring Question 1:
What is the status of the preparation and implementation of fire management plans.?

Monitoring Requirement:
Program review.

Monitoring Performed:
Program was reviewed.

Findings:
Late-successional reserve assessments are completed and Little River Adaptive Management Area Plan is in draft. These assessments and plan address fire and fuels.

Conclusions:
RMP requirements were met.

Monitoring Question 2:
Are Wildfire Situation Analyses being prepared for wildfires that escape initial attack?

Monitoring Requirement:
Program review.

Monitoring Performed:
Program was reviewed.

Findings:
Wildfire Situation Analyses are prepared for escaped fire situations from slash burns. Douglas Forest Protection Agency (DFPA) is contracted for wildfire suppression and prepares similar analyses.

Conclusions:
RMP requirements were met.

Monitoring Question 3:
Do wildfire suppression plans emphasize maintaining late-successional forest habitat?

Monitoring Requirement:
Program review.

Monitoring Performed:
Program was reviewed.

Findings:
Wildfire suppression plans include protecting multiple resources including late-successional habitat. The plans and assessments for Late-Successional Reserves and the Little River Adaptive Management Area address this issue.

Conclusions:
RMP requirements were met.

Monitoring Question 4:
What is the status of interdisciplinary team preparation and implementation of fuel hazard reduction plans?

Monitoring Requirement:
Program review.

Monitoring Performed:
Program was reviewed.

Findings:
Fuels and Fire Management Plans are . Analyses has been done in conjunction with Late-Successional Reserve Assessments.

Conclusions:
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

[1]Roads that were determined to have no future need and were sub-soiled or tilled, seeded, mulched, and planted to reestablish vegetation. Cross drains, fills in stream channels, and potentially unstable fill areas were removed where appropriate to restore natural hydrologic flow. Roads were closed with an earthen barrier or similar equivalent.

[2]Roads where extra drainage structures were added and/or surfaced in order to raise the road to current RMP standards, effectively reduce sedimentation, and increase infiltration of intercepted flows.

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