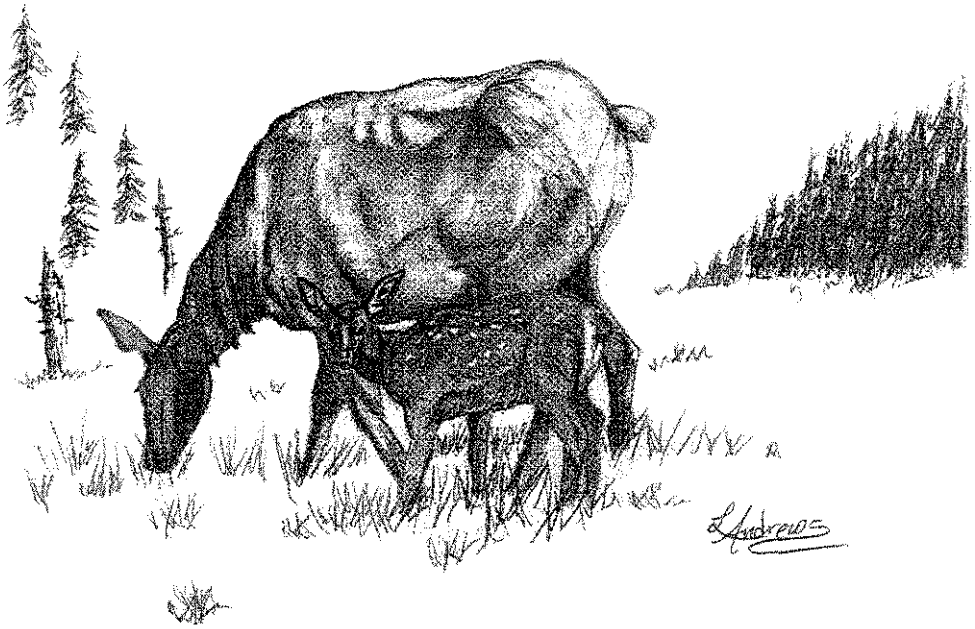
U.S. Department of the Interior
Bureau of Land Management

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

April 1998

Annual Program Summary and Monitoring Report

for Fiscal Year 1997



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 Interior
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ROSEBURG DISTRICT

ANNUAL PROGRAM SUMMARY

AND

MONITORING REPORT

FISCAL YEAR 1997

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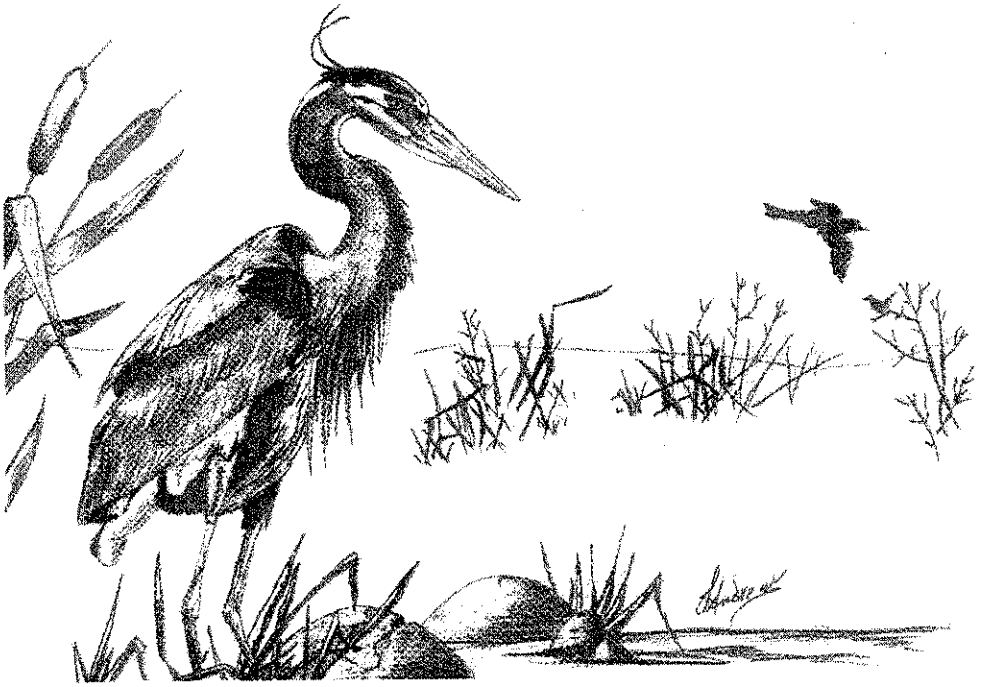
ROSEBURG DISTRICT ANNUAL PROGRAM SUMMARY FISCAL YEAR 1997



Executive Summary

This document combines the Roseburg District Annual Program Summary and Monitoring Report for fiscal year 1997. The Annual Program Summary addresses the accomplishments of the Roseburg District is 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. Program outputs and activities appear to be at the level anticipated by the Final Environmental Impact Statement for the Roseburg District RMP. The results of the Annual Program Summary show that the Roseburg District is fully and successfully implementing the Resource Management Plan and Northwest Forest Plan.

The Monitoring Report compiles the results and findings of implementation monitoring for fiscal year 1997, the second full fiscal year of implementation of the Roseburg District Resource Management Plan (RMP). The monitoring plan has been modified through plan maintenance in accordance with recommendations from the 1996 Annual Program Summary and Monitoring Report. 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.

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 1996 through September 1997. 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 1997. This report addresses the accomplishments of the Roseburg District is 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 1997 represents the second 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.

There are important aspects of the BLM's implementation of the Northwest Forest Plan which are not easily measured in numbers. Although there is much more to learn and do, our workforce on the Roseburg District has gained much valuable experience in both the organizational as well as the scientific aspects of ecosystem management. There has been a consistent and strong interagency effort in many projects such as the South Cascades Late-Successional Reserve Assessment and activities within the Little River Adaptive Management Area. Ongoing work with the Southwest Oregon Provincial Advisory Committee continues to strengthen understanding and cooperation among agencies. Cooperation with the Fish and Wildlife Service, the National Marine Fisheries Service have developed efficiencies for Endangered Species Act consultation. On a broader scale, the BLM is in strong partnership with the State of Oregon with the Oregon Coastal Salmon Restoration Initiative which is a cooperative effort to restore salmon and steelhead habitat. These and other efforts that do not lend themselves to statistical summaries require enormous effort but are enormously rewarding and contribute significantly to the success of implementing the Northwest Forest Plan on the Roseburg District.

Budget

In fiscal year 1997, Roseburg District had a total appropriation of $12,463,000. This included $1,000,000 for the Jobs-in-the-Woods program; $288,000 Management of Lands and Resources (MLR); $148,000 fire; $11,116,000 Oregon & California Railroad Lands (O&C); $61,000 mining law.

There were 161 full-time employees, and at times as many as 19 temporary employees.

Riparian Reserves

Restoration projects, density management, culvert and road upgrade are described under the programs of Water and Soils, Jobs-in-the-Woods, and Road Maintenance. In addition to these other programs, timber sales are also a means to accomplish ecosystem management objectives of watershed restoration through density management, road upgrade, road restoration, or renovation to benefit watersheds, and culvert replacements to aid fish passage and to better accommodate water flows associated with large storms.

Late-Successional Reserves

LSR assessment for late-successional reserve RO 268 located in the northwest part of the district has been completed and reviewed by the Regional Ecosystem Office. LSR assessments for late-successional reserves RO 222 and RO 223 were submitted for review to the Regional Ecosystem Office. These late-successional reserve assessments were joint efforts involving the US Forest Service and the BLM. Another interagency, interdistrict LSR assessment underway is a project that is a combined assessment for RO 251, 155, 257, 259, 260, 261, 263, 254, 265, and 266. Activities in late-successional reserves which were analyzed under initial late-successional reserve assessments included site preparation, precommercial thinning of plantations, density management, salvage, and facility maintenance.

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.

The E-Mile timber sale specifically addresses 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 sold without protest. 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.

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 is proposed that would 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.

Other projects already developed or still under development include coarse woody debris, landslide, and road inventories and research that investigates the endangered mariposa lily, sugar pine restoration, 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.

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 timber harvest. The Northwest Forest Plan and the Roseburg District Resource Management Plan provide for a sustainable timber harvest, know as the Probable Sale Quantity (PSQ), from Roseburg District administered public lands of 45 MMBF (million board feet) annually. The district offered 47.6 MMBF in fiscal year 1997.

Beginning in fiscal year 1998, all BLM timber sales will be measured, sold, and reported in volumes of hundred cubic feet (CCF). The cubic foot measurement takes into account the taper in logs and offers a more accurate, consistent measurement that accounts for lumber, chips, and the sawdust that is produced from logs of all sizes. Volumes in board feet will continue to be reported for informational purposes.

To meet the PSQ 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.

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.

In fiscal year 1997, Roseburg District sold 10 timber sales at auction and 31 negotiated sales of minor volume. The value of these sold timber sales was over $19,900,000. The monies associated with these timber sales is paid as the timber is harvested over the life of the contracts, which is generally three years. Timber sale collection for fiscal year 1997 from active harvesting was $9,344,885 for Oregon and California Railroad Lands (O&C), $10,590 for Public Domain Lands (PD), and $2,533 for Coos Bay Wagon Road Lands (CBWR).

Below is a summary by land use allocation of timber volume and acres of these timber sales. 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 FY 1997 were harvested that were less than the culmination of mean annual increment age of 80-110 years.

Total Timber Sale Vol.	47.6 MMBF
Matrix Timber Sale Vol.	36.2 MMBF
GFMA Regen Timber Sale Vol.	24.1 MMBF
GFMA Comm. Thin TS Vol.	0.2 MMBF
GFMA Salvage TS Vol.	3.5 MMBF
C/D Block Regen TS Vol.	7.4 MMBF
C/D Block Comm Thin TS Vol.	0 MMBF
C/D Block Salvage TS Vol.	0 MMBF
RR Density Mgt TS Vol.	0 MMBF
RR Salvage TS Vol.	0 MMBF
LSR Density Mgt TS Vol.	1.6 MMBF
LSR Salvage TS Vol.	0.7 MMBF
Key Watershed TS Vol.	14.9 MMBF
Little River AMA TS Vol	4.7 MMBF
Little River AMA Salvage Vol.	0 MMBF

Total Regeneration Harvest	815 acres
Total Commercial Thinning	25 acres
Total Density Management	114 acres
GFMA Regeneration Harvest	622 acres
GFMA Commercial Thinning	25 acres
GFMA Salvage	363 acres
C/D Block Regen. Harvest	193 acres
C/D Block Comm. Thinning	0 acres
C/D Block Salvage	0 acres
RR Density Management	0 acres
RR Salvage	0 acres
LSR Density Management	114 acres
LSR Salvage	25 acres
Little River AMA Regeneration Harvest	68 acres
Little River AMA Thinning	25 acres
Little River AMA Salvage	0 acres

Below is a summary of various forest development, reforestation, silvicultural and timber stand improvement practices that were accomplished in fiscal year 1997. This work was accomplished through twenty contracts valued at approximately $1,150,000.

Brushfield/hardwood conversion	0 acres
Site Preparation, prescribed fire	846 acres
Site Preparation, other	0 acres
Planting, regular stock	725 acres
Planting, genetic stock	372 acres
Stand maintenance/protection	1525 acres
Stand release/precommercial thin	3903 acres
Pruning	858 acres
Fertilization	4278 acres

Special Forest Products

The following table shows the Special Forest Product sales for fiscal year 1996 on the Roseburg District.

Product	No. of Contracts	Quantity Sold	Value
Boughs-Coniferous	104	96,700 lbs	$1,948
Burls & misc.	10	20,200 lbs	$816
Christmas Tress	245	245 trees	$1,225
Edibles & Medicinals	3	1,800 lbs	$72
Floral & Greenery	128	83,100 lbs	$4,019
Mosses-Bryophytes	4	1,998 lbs	$60
Mushrooms-Fungi	50	2,524 lbs	$631
Transplants	2	450 plants	$350
Wood Products/Firewood	460	600,574 bd ft	$74,436
Totals		1,006	$83,557

Fire/Fuels Management

Site Preparation, prescribed fire: 872 acres

On district fires: 4 for a total of 1.61 acres; 1 escaped prescribed fire, 1 vehicle exhaust, 1 caused by smoking.

District personnel and resources were not dispatched to any fires for the 1997 fire season. One employee was detailed to the Redmond Hot Shots for the fire season.

Water and Soils

Survey and monitoring work included: surveyed 90 miles of stream for proper functioning condition, operated 49 temperature monitoring stations, 6 gauging stations, collected sediment samples, one United States Geological Survey site on the North Umpqua Wild & Scenic River for continuous water quality.

Additional watershed work included 490 acres of brushed conifer reestablishment and density management in riparian areas, 7 environmental assessments in areas that plan to improve riparian vegetation, 2 monitoring

studies for timber fertilization and a monitoring plan for timber fertilization in the Little River Adaptive Management Area, 5 monitoring studies for sediment, water temperature, water chemistry, Cooperative water quality, and stream flow monitoring. 2 hydro mulching projects to reduce sediment yield,

Watershed analysis has been described as a building block or foundation for management actions like timber sales, roads, and stream enhancement that are planned in a particular watershed. The watershed analyses provide managers a sound basis for management decisions. The watershed analysis process involves several steps. Some of the steps include identifying existing and desired conditions, identifying processes that explain the causes and effects of current conditions, and identifying restoration opportunities. Watershed analyses are dynamic documents, in that once they are "done", subsequent revisions or iterations can be expected to be added to provide additional information needed by managers to make informed decisions, or respond to changed circumstances or new information.

As of the end of fiscal year 1997, twenty-three 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, Deadman Creek, and Cow Creek. These watershed analyses involved a total of 862,924 acres, including 289,522 acres of public land administered by the BLM. This watershed analysis effort has encompassed 68% of the Roseburg District by the end of fiscal year 1997.

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 1997, approximately 3.1 miles of road have been decommissioned, and an additional 16.4 miles are under contract to be completed. 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. In fiscal year1997, 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.

Wildlife Habitat

Monitoring northern spotted owls continued to be an important component of the overall wildlife program. Working with the team from the Pacific Northwest

Research Station, two northern spotted owl demographic study areas were maintained. These demographic study areas are a part of the overall effectiveness monitoring program being developed for the Northwest Forest Plan. Monitoring sites within the study areas as well as other sites within the district provides valuable information for project planning and day to day operations. Other listed threatened or endangered species surveyed or monitored within the district were marbled murrelet, peregrine falcon, and bald eagle.

Staff work was completed on a draft management plan for the North Bank Habitat Management Area, Area of Critical Environmental Concern. The interdisciplinary team for North Bank was also an interagency team consisting of individuals from BLM, US Fish and Wildlife Service, and Oregon Department of Fish and Wildlife.. The plan will be finalized in February 1998 after formal consultation with US Fish and Wildlife Service. The management area is becoming know and popular with horseback riders, hikers, mountain bikers and hunters. Youth hunts for blacktail deer have been increased with opportunities for archery hunters and two seasons for rifle hunters during the 1997 seasons. Opportunities will be increased during the 1998 seasons with the addition of a late season hunt. Research to determine competition between black-tailed and Columbian white-tailed deer is ongoing and is being coordinated by Oregon Department of Fish and Wildlife. Field work for research into habitat use by Columbian white-tailed deer was completed and data is in the process of being analyzed. Both of these research projects are master's degree work by Oregon State University graduate students. Some funding by BLM has aided both research efforts. Materials for five big game guzzlers was obtained. Installation will begin in 1998 after the management plan is finalized.

As the Northwest Forest Plan implementation dates arrive and protocols become available, additional survey and management species and protection buffer species are being inventoried. Project areas and high potential habitat were surveyed for great grey owls, red tree voles and mollusks. The BLM continued to fund cooperative inventories for sensitive species in cooperation with Pacific Northwest Research Station, Oregon Department of Fish and Wildlife, Oregon State University, US Forest Service, and US Geological Survey. Wildlife crews continued to monitor the northern goshawk, a bureau and state sensitive species, and a federal candidate species. Three Coast Range nesting sites were monitored, as well as other sites within the district with historical observations.

Neo-tropical birds are of increasing concern in North America, across the nation and in the Northwest. The migratory avian productivity and survivorship protocol, and point count stations were employed to monitor non-game and neo-tropical migrant birds. The district received a section of land from a private donor. Past management and wildfire has left much of the area open brush and grass, providing habitat for a number of neo-tropical migratory birds. Management and monitoring on the area will emphasize these birds

During the past five years, marbled murrelet crews in the Roseburg District have also beeninventorying neotropical birds in late-successional reserves. The Roseburg murrelet crews have located the furthest inland murrelet nesting site in the northwest and identified 67 neotropical bird species in the Coast Range and Klamath Provinces.

Fish Habitat

There was a marked increase by the district in fiscal year 1997 to address fish and fish habitat issues, spurred by the listing of the Umpqua River Cutthroat Trout in the previous fiscal year. The district has increased its fisheries staff from three full-time fish biologists and two half-year biological technicians two years ago, to five full-time fish biologists and three full-year biological technicians in FY97.

Smolt trapping

The district purchased an additional eight five-foot rotary smolt traps 1) to determine and compare the relative importance of the sampled subbasins to each other in terms of fish production, species diversity and timing and magnitude of migrations, and 2) to make known more areas of confirmed fish presence and fish absence. This expanded effort of the program is a beginning step toward identifying presently unknown, as well as refining already known, important salmonid habitat areas.

Snorkeling

District fish biologists snorkeled approximately seven miles of streams in FY97. Snorkeling was utilized to obtain estimates of fish use and relative abundance. Like smolt trapping, this work is helping to identify and refine important salmonid habitat areas.

Aquatic Habitat Surveys

Since 1990, the district has co-funded aquatic habitat surveys conducted by the Roseburg office of the Oregon Department of Fish and Wildlife. A total of seventy-five miles of streams in the Umpqua Basin were surveyed in FY97. Approximately 1,500 miles of streams have now been surveyed.

Road Decommissioning

In fiscal year 1997, the district began a concentrated effort at examining road decommissioning to improve watershed health and, as a result, fish habitat. Decommissioning is now being incorporated in timber sale designs and other district actions. In addition, the district has identified and prioritized several miles of candidate roads and roads segments for decommissioning. The extent to which decommissioning is done is contingent on approval from reciprocal right-of-way agreement holders and funding availability. See above Water and Soils section for additional information concerning road decommissioning.

Culvert Replacements

The district continued to identify and replace culverts that have been barriers to fish passage. In fiscal year 1997, six culverts were replaced, which resulted in fish having unimpeded access to approximately ten additional miles of rearing and spawning habitat.

Tree lining

The district did its first-ever tree lining project in fiscal year 1997. Twenty conifer trees (Douglas fir, Western hemlock, Western red cedar) ranging in size

from 20-50+ inches dbh were pulled into a one-mile stretch of the South Fork Smith River.

The project was designed so that each site would provide in-channel habitat complexity; collection points for leaf packs and coarse particulate organic matter; substrate and food sources for aquatic macro-invertebrates; overhead cover, scour and/or plunge pool habitat for fish; and gravel/sediment retention sites. The benefits of this project may not be evident for years as any one, or all of these habitat features may take many years to develop.

Special Status and SEIS Special Attention Species

Surveys, Monitoring, Consultation, and Restoration:

Surveys for Special Status (SS) and Special Attention (SA) species are being conducted prior to all ground disturbing activities. Roughly 1500 acres of preproject clearance surveys have been completed annually since publication of the RMP. Baseline fungi, lichen, and bryophyte inventories have been completed on approximately 2100 acres in District ACECs and ACEC/RNAs. Four SS plants have been monitored on an annual basis to determine population trends. Preproject surveys and monitoring have been accomplished by a botanical staff of five permanent and two temporary (NTE) botanists. The number of SS plant sites known to occur on public lands within the District at the end of 1997 are presented by status category in Table 1. The number of SA plant sites are presented by status category in Table 2. There are a total of 180 SS sites and 318 SA sites.

Table 1. Number of Sites by Species Group for Special Status Plant Species.

Species Group	Status[1] FP	FC	BS	AS	TR
Fungi	—	—	—	—	—
Lichens	—	—	1	—	—
Bryophytes	—	—	—	7	—
Vascular Plants	2	5	45	8	113

1 Status: FP=Federal Proposed
FC=Federal Candidate
BS=Bureau Sensitive
AS=Assessment Species
TR=Tracking Species

Table 2. Number of Sites by Species Group for Special Attention Plant Species.

Species Group	Status[2] PB	SM1	SM2	SM3	SM4
Fungi	5	2	—	26	—
Lichens	0	34	4	33	18
Bryophytes	26	2	—	2	196
Vascular Plants	—	12	12	—	—

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)

No consultation has been initiated for SS plants. Habitat restoration has been attempted at one SS plant location. Two Conservation Strategies have been completed and three more are in preparation.

C-3 Process Overview:

There are approximately 400 species listed in Table C-3 in the Northwest Forest Plan Record of Decision (pp. C-49 - C-61). These species are known as Survey and Manage Species and each has management requirements that are listed as requiging one or more of four survey and manage strategies in the Northwest Forest Plan Record of Decision. 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 fungi and bryophytes have been completed and are now available for field use. Management recommendations for lichens and vascular plants should be available to the field in the spring of 1998.

Survey protocols for component (strategies) 2 bryophyte species have been completed. Survey protocols are currently in preparation for other species groups and should be available for field use in 1998. Training in survey protocols has been scheduled for the spring of 1998 for bryophytes and lichens.

Special Areas

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 inventoriesare currently being conducted. Draft management plans have been completed for two ACEC/RNAs and two more management plans are in preparation.

Seven ACECs were nominated by the public in the Final RMP. Four of these nominations are currently being reviewed by the South River Resource 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.

Cultural Resources

The Roseburg District conducted an excavation of a American Indian archeological site at North Bank Habitat Management Area which involved 70 volunteers.

Socio-economic

Timber sale collections	
Oregon and California Railroad Lands (O&C):	$9,344,885
Coos Bay Wagon Road Lands (CBWR):	$2,533
Public Domain Lands (PD)	$10,590
Payments to Douglas County	
Oregon and California Railroad Lands (O&C):	$17,601,518
Coos Bay Wagon Road Lands (CBWR)	$67,602
Payment in Lieu of Taxes (PILT):	$91,143
Total paid to O&C counties from O&C receipts	$70,265,541
Value of forest development contracts (contracts):	$1,150,000
Value of timber sales, oral auction (11) and negotiated (28):	$21,102,854

Jobs-in-the-Woods Report

The Jobs-in-the-Woods program was established to mitigate the economic and social impacts of reduced timber harvesting under the Northwest Forest Plan while investing in the ecosystem. Fiscal year 1997, which was the fourth year for this program, consisted of a budget of $1,000,000 on the Roseburg District. Seven contracts were funded on the district under this program in fiscal year 1997 to accomplish projects such as road restoration, renovation or upgrade to benefit watersheds, culvert replacements to aid fish passage and to better accommodate water flows associated with large storms, and placement of trees in creeks to enhance spawning gravel and resting ponds for fish. The Roseburg District continues to work closely with partnerships to accomplish the work and provide displaced workers with longer term, high skill family-wage jobs.

Overall in western Oregon, BLM was allocated $7.8 million to continue the program for watershed restoration and job creation for displaced timber workers. Approximately 90% of the funds have been spent for projects and the remaining dollars will carry over and be spent in fiscal year 1998 to complete ongoing projects.

The Jobs-in-the-Woods program saw some change in emphasis, and as a result additional opportunities for BLM. The Oregon Coastal Salmon Restoration Initiative and a ten party (federal) Memorandum of Understanding (MOU), with the State of Oregon to support and participate inwatershed councils will provide opportunities for JITW funding. Additionally, the Wyeden Amendment to the fiscal year 1997 appropriations process that allows BLM to spend money on private lands for restoration work which benefits BLM-administered lands, has provided opportunities to work closer with those who have common goals and priorities to better address restoration needs across whole watershed systems.

Recreation

Recreation use statistics have been tracked and documented through the Recreation Management Information System (RMIS). A summary follows. Full documentation is maintained by the District Recreation Planner.

1. Number of BLM Acres on the Roseburg District : 425,588 acres
   OR 104 Swiftwater Resource Area 223,305 acres
   OR 105 South River Resource Area 202,383 acres

EXTENSIVE AND SPECIAL RECREATION MANAGEMENT AREAS (ERMA; SRMA)

RESOURCE AREA	ERMA[1] ACRES	SRMA[2] / ACRES
Swiftwater R.A.	219,243 ac	North Umpqua River / 1,722[3]
Swiftwater R.A.	———	Umpqua River / 2,240
South River	200,673 ac.	Cow Creek / 1,710

[1] Extensive Recreation Management Area
[2] Special Recreation Management Area
[3] Breakdown: 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

2. Number of recreation visits on Roseburg District BLM lands: 347,580

Number of recreation participants on Roseburg District BLM lands: 890,227 (one visitor may participate in several recreation activities)

3. Developed Recreation Sites and Use Statistics:

Developed Sites: 14	**No. of Visits**
Susan Creek Campground	10,000
Susan Creek Day-Use Area	15,000
Rock Creek Recreation Site	3,400
Millpond Recreation Site	8,200
Cavitt Creek Recreation Site	3,300
Tyee Recreation Site	5,700
Scaredman Recreation Site	3,000
Swiftwater Recreation Area	90,000
Wolf Creek Trailed	1,200
Swiftwater Trailed	45,000
Lone Rock Boat Launch	2,000
Cow Cr. Rec. Gold Panning Area	4,030
Osprey Boat Ramp	3,800
Miner-Wolf WW Site	880

4. Recreation Use Permits Issued for Camping: 3,636
Fees Collected: $57,015.00

5. Recreation Use Permits Issued for Picnicking (Pavilion): 26
Fees Collected: $520.00

6. Recreation Trails Managed: 8 Trails; 14.4 miles total.

	Miles	Hiking	Horseback Riding	Disabled Access	River Frontage	Mountain Biking	Interpretive
Wolf Creek	1.2	X			X	X	
Rock Creek	.3	X			X		
Susan Creek Picnic Trail	.5	X			X	X	
Susan Creek Watchable Wildlife Trail	.2	X		X	X	X	X
North Umpqua	11.0	X	X		X	X	X
Deadline Falls	.1	X		X	X	X	X
Susan Creek Falls	0.8	X		X	X		
Miner-Wolf Creek	.3	X		X	X		X

7. 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. BLM collected $830.27 in use fees.

8. Off-highway Vehicle designations Managed:
   Limited areas: 422,464 acres
   Closed areas: 3,124 acres

9. Partnerships entered: (Volunteers):
   Total partnerships - 16
   Total hours donated - 12,924
   - 8 Eagle Scout, scout troops, church groups, school groups. Hours: 760
   - 2 Interagency. Hours: 1,133
   - 2 Local community groups. Hours: 1,511
   - 8 Recreation Site Hosts. Hours: 9,520

10. Byways Managed:
    a. North Umpqua Scenic Byway - 8.4 miles,
    b. Cow Creek Back Country Byway - 45 miles

11. Major Projects Completed:
    a. Cavitt Cr. Falls Day-Use Area restroom
    b. Susan Creek Falls Accessible Trail
    c. Rock Creek Day-Use Area restroom
    d. Damage repairs from November Floods of 1996 at Swiftwater, Millpond, Rock Creek, Miner-Wolf, Susan Creek and Osprey Boat Ramp.

12. Hazard Tree assessments were completed at all developed recreation sites on the District. 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, Miner-Wolf Watchable Wildlife Site, and on the North Umpqua Trail - Tioga Segment. Treatment consisted of acombination of limbing trees, blasting tree tops, or felling of hazard trees as deemed necessary.

13. Reported public fatalities or serious injuries in 1997: none.

14. Status of recreation plans:
    a. North Umpqua Wild and Scenic River Management Plan - Completed June 1992.
    b. North Umpqua SRMA Recreation Area Management Plan - Completed 1988.
    c. Cow Creek SRMA Recreation Area Management Plan - Partially Complete.
    d. Umpqua River SRMA Recreation Area Management Plan - Not started.

Noxious Weeds

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

Noxious weed management summary for 1997

Treatment	Species	Aces
Manual	Gorse	1
	Scotch Broom	8
	Yellow Starthistle	20
Chemical	Diffuse Knapweed	3
	Yellow Starthistle	1

Port Orford Cedar

Extensive road side surveys have been conducted to determine the extent of infestations of the root rot fungus, Phytophthora lateralis.

There are two outplanting sites for Port Orford Cedar being developed on the district.

One ten acre site will be a "Common Garden Study" site to test for how much genetic variation is silvicultural characteristics in this species from seedlings collected from across its range. The site will accommodate 10,000 seedlings. This is one of five similar sites. The other four sites are located on the Forest Service.

One six acre site will be a field verification site. Vegetative material (cuttings) have been taken of various parent trees. The vegetative material is inoculated in a laboratory with the fungus Phytophthora lateralis which causes a root rot disease that kills Port Orford cedar. The inoculated specimen is observed as

how quickly the fungus is taken up in order to identify potential genotypicresistance. Seeds are collected from potentially resistant parent trees identified through the testing process. Seedlings from the parent trees are then transplanted into this field verification site, which is naturally heavily infected with the disease, to determine if the seedlings display resistance.

Many of the actions described above will be near or at completion at the end of fiscal year 1998.

Access

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 or assigned. Additional rights-of-way have been granted for the construction of driveways, utility lines for servicing residences, domestic and irrigation water pipelines, legal ingress and egress, etc.

In fiscal year 1997, fourteen temporary right-of-way permits were granted. In addition, there was the assignment of three right-of-way agreements. When right-of-way agreements are assigned, the Roseburg District exercises its right to update these agreements to reflect current regulations.

Roads

The Roseburg District has approximately 3,000 miles of roads which are controlled or improved by the BLM. Timber sales are often designed such that the purchasers have responsibility for maintaining those BLM roads that are used in execution of the contract. In addition, road maintenance is accomplished on a regular basis by the district road maintenance crew. The Roseburg District road maintenance crew maintained approximately 850 miles of road in fiscal year 1997. This is somewhat lower amount of roads miles maintained than average due to the need to address significant storm damage. The maintenance crew completed twenty-five storm damage projects valued at $455,000. In addition, six other storm damaged areas were repaired under a contract valued at $301,000. Other work included the maintenance of fifteen bridges and extensive road side brush cutting.

Energy and Minerals

There were no Plan of Operations submitted, 1 mining notices received and reviewed, 116 mining claim compliance inspections performed, no notices of non-compliance issued, 47 community pit inspections, work performed in rehabilitation of Middle Creek and the Mighty Fine Mine.

Hazardous Materials

Two incidences required response. An Hazardous Material Contingency Plan was written and issued. Hazardous Materials issues and program are handled

though a coordinator stationed in the Coos Bay District under a zoning concept for both Coos Bay and Roseburg.

Planning and NEPA

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.

Previous plan maintenance was published in the 1996 Roseburg District Annual Program Summary. The following additional items have been implemented on the Roseburg District as part of plan maintenance during fiscal year 1997. These 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. Complete and detailed descriptions are available at the Roseburg District Office by contacting Phil Hall at 440-4931 ext. 242. 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 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 herbivore (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 protocol and are included within the definition of "ground disturbing activity".

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

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

S&G C-5 of NFP ROD and Management Action/Direction 2.c., page 22 of the RMP ROD states that "surveys must precede the design of activities that will be implemented in [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) willbe 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 land 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.

8. Clarification and refinement of the RMP monitoring plan implementation questions and requirements.

As a result of the fiscal year 1996 monitoring effort, the Roseburg District gained valuable experience in the use of the RMP monitoring plan and recognized that refinements and clarifications were needed. The Annual Program Summary and Monitoring Report for 1996 contained recommendations that improvements be made to the existing monitoring plan. Those recommendations have been carried out, and the monitoring plan has been refined and clarified for fiscal year 1997. This refinement for fiscal year 1997 monitoring corrected implementation questions that did not result in meaningful imformation, the elimination of effectiveness-type of monitoring questions in the implementation section, elimination redundant questions, elimination of questions that were not directly related to RMP management action/direction, and the addition of a question relating to long term site productivity of soils. This effort has resulted in the streamlining of the RMP monitoring plan by reducing from 86 to 50 the number of implementation monitoring questions. Questions have also been rewritten for clarification. The adaptive management application of experience gained in monitoring has resulted in this plan maintenance of the original implementation monitoring plan. For purposes of comparison with the refined monitoring plan for 1997, the 1996 version has been included in the appendix.

Third Year Evaluation

In addition to being routinely monitored, the RMP will be formally evaluated at the end of every third year after implementation begins. Fiscal year 1998 will be the third full year of implementation for the Roseburg District RMP which was signed in June 1995. Additional information concerning the third year evaluation can is found in the Roseburg RMP and Record of Decision, pp 78-79.

Simultaneously with other western Oregon BLM districts, Roseburg District has initiated the collection of supplemental information and analyses required for evaluation the RMP. The evaluation will be based on the implementation actions and plan and project monitoring from the June 1995 through September 30, 1998. BLM staff have already taken actions to determine if there has been any significant change in the related plans of other federal agencies, state or local governments, or Indian tribes or whether there is other new data of significance to the plan. Meetings have been held in which key staff and managers from western Oregon districts consolidated and refined a list of internal issues as well as developing a strategy and process for accomplishing the third year evaluation. The public was subsequently invited to participate in briefings or discussions concerning the third year evaluation as well as to provide pertinent comments to the district on expected evaluation issues, analytical tools, new information, or changed circumstances that could be important in the evaluation.

Supplemental analyses on regional, provincial, watershed or other level will be made available for public review as they are completed. All of the supplemental analyses and RMP evaluations are expected to be completed by the summer of 1999, when they will be made available for public review prior to approval by

BLM's Oregon/Washington State Director. The State Director's findings will indicate whether or not the western Oregon RMPs are individually or collectively still valid for continued management direction or require plan amendments or revisions, together with appropriate environmental analyses and public participation.

Other planning and NEPA related activities include the following:

Approximately 30 environmental assessments were either begun, ongoing or completed during fiscal year 1997. Environmental assessments vary in complexity, detail and length depending on the project involved. Almost all Roseburg District timber sale environmental assessment decision records were protested and appealed. Protest and appeal issues have challenged compliance with the RMP ROD, compliance with NEPA, analyses, assumptions and conclusions.

The Off-Highway Vehicle Implementation Plan was finalized and adopted in fiscal year 1997.

All recommendations contained in the Annual Program Summary and Monitoring Report for 1996 have been implemented.

Research

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.

Results of some of this research has begun to be available. One project which was published in the Canadian Journal of Forestry Research, "Density, ages, and growth rates in old-growth andyoung-growth forests in coastal Oregon", compares stand densities and growth between old and young stands in the Coast Range. The results indicate that old growth densities were much lower than current young-growth stands regenerated after harvest, and that thinning in younger stands may be needed to help speed development of old-growth characteristics. Another project (still in a review draft), "Effects of thinning on structural development in 40-100 year old Douglas-fir stands in western Oregon", indicates that thinning young Douglas-fir stands will hasten development of multi-story stands, shrub layers, and increased understory conifer regeneration. These studies suggest management activities including thinning in younger forest stands can enhance development of older forest structure and help achieve Biodiversity and habitat conditions found in older forests.

This research is a forerunner to 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.

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 to increase efficiency and effectiveness.

Interagency Cooperation Efforts

Ongoing participation in the southwest Oregon Provincial Executive Committee (includes heads of federal agencies in southwest Oregon). Ongoing interagency effort on Little River Adaptive Management Area. Continued interagency effort on three late-successional reserve assessments. Interagency discussions begun on an Umpqua Basin Assessment. Endangered Species Act consultation process involving Bureau of Land Management, US Fish and Wildlife Service, US Forest Service, and National Marine Fisheries Service.

Cadastral Survey

Cadastral Survey Crews completed 10 projects during fiscal year 1997. Seven projects were Cadastral Surveys with a total of 35 miles of survey line run, 58 monuments set, and 14.5 miles of federal boundaries marked. Five of these surveys were for proposed timber sales, one was a corrective survey, and one was a cooperative survey with half the cost paid by the adjoining land owner.

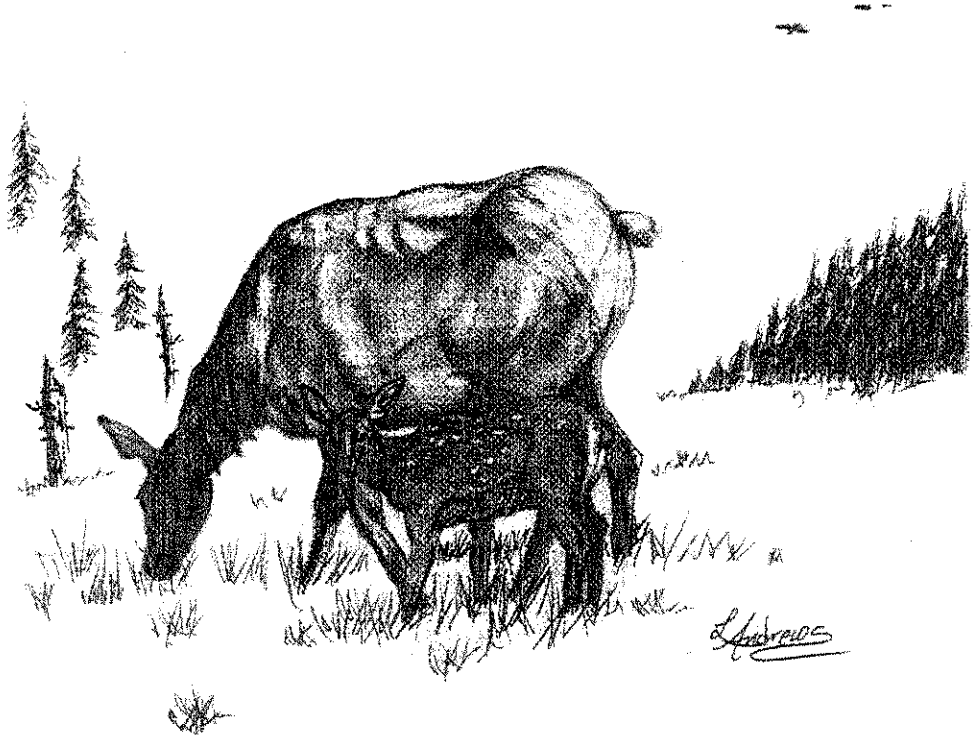
Cadastral Survey crews also completed 3 administrative surveys for the resource areas totaling 1.75 miles of survey line with 1.75 miles of boundary marked. The Cadastral crew also served as the District Lead for GPS, holding two training sessions and several one on one sessions. The Cadastral crew assisted in the mapping of diseased stands of Port Orford Cedar in the Roseburg and Medford Districts using GPS equipment from a helicopter. Also there were numerous questions as to surveying procedures, status of surveys, and information about corners by private land owners, timber companies, surveyors as well as district personnel.

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 at Roseburg, Salem and Medford Districts 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, assistance to the United States Attorney's Office with legal issues involved in searching BLM lands in the Roseburg District for a homicide victim, 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.

ROSEBURG DISTRICT RESOURCE MANAGEMENT PLAN MONITORING

FISCAL YEAR 1997



Monitoring Report
Fiscal Year 1997

Executive Summary

Introduction

This document represents the second 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 second full fiscal year of implementation of the Resource Management Plan, Fiscal Year 1997. 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 1997 addressed the 50 implementation questions relating to the 20 land use allocations and resource programs contained in the Monitoring Plan. Although there are a total of 50 implementation monitoring questions, hundreds of discrete and specific actions were reviewed and evaluated in addressing the 50 questions. The implementation questions for fiscal year 1997 have been refined, clarified and modified through the adaptive management process based on the experience of fiscal year 1996 monitoring. This plan maintenance action of the RMP implementation monitoring plan is further explained in the annual program summary.

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. An interagency task group under the Regional Ecosystem Office and Research and Monitoring Committee is currently working on effectiveness monitoring strategy for the Northwest Forest Plan.

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 47 of the 50 implementation monitoring questions contained in the plan.

One monitoring question related to Riparian Reserves found two instances or discrepancies in which RMP requirements were not met. These discrepancies involved projects for which watershed analysis was not completed as required. Initial analysis of these two discrepancies did not indicate adverse affects to resources or programs as a result of these deviations from RMP management direction.

One discrepancy in conformance with RMP management direction affected two monitoring questions, one concerning riparian reserves and another concerning

special status species. This discrepancy involved a thinning project in which Best Management Practices were not fully implemented. Initial analysis of this discrepancy did not indicate significant adverse affects to resources or programs that would effect long term achievement of RMP goals and objectives.

Recommendations

No need for major management or program adjustments are recommended as fiscal year 1997 monitoring results indicate very high compliance with management action/direction. In the instances where monitoring revealed that RMP requirements were not met, the situation will be analyzed and necessary adjustments made to avoid similar discrepancies in the future.

Conclusions

Of the hundreds of discrete actions that were reviewed through the 50 implementation monitoring questions, only a few actual discrepancies were found. Although the discrepancies will receive close examination to determine if procedures need to be changed, overall the monitoring results indicate a very conscientious implementation of the plan by highly informed and knowledgeable staff and managers.

Monitoring Fiscal Year 1997

Introduction

This document represents the second 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 second full fiscal year of implementation of the Resource Management Plan. Included in this report are the projects that took place from October 1996 until September 1997. 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 as refined through plan maintenance. 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) initiated a regional-scale pilot Implementation Monitoring Program. An interagency work group has completed implementation monitoring for fiscal year 1997 but has not yet published its results. The random sample projects for the regional implementation monitoring did not include any Roseburg District projects.

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. This process was implemented in adjusting the Roseburg District monitoring plan for the fiscal year 1997 effort. 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

Each Resource Area is 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 monitoring report. When combined with the Annual Program Summary, there may be 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 1997 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 easilycharacterized. 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, while some 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 were found to be discrepancies in three of the 50 implementation monitoring questions contained in the plan in which RMP requirements were not met. 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. These generalizations require a more in depth examination of the implementation monitoring questions and monitoring results in order to be fully understood.

Discussion Of Discrepancies

Riparian Reserves

There was two monitoring questions in which actions did not meet RMP requirements.

Monitoring question number one for Riparian Reserves: "Are watershed analyses being completed before on-the-ground actions are initiated in Riparian Reserves?" revealed two discrepancies. In two instances of the thirteen projects which represent all action within riparian reserves in fiscal year 1997, watershed analyses were not completed as required. Interim watershed analyses were completed for the watersheds, Olalla-Lookinglass and Kent/Rice Creek, however fertilization was not mentioned in them. Due to oversight, the interim watershed analyses were not amended to include the fertilization project. No adverse environmental effects are indicated as a result of these discrepancies.

Monitoring question three for Riparian Reserves: " "Are management activities in Riparian Reserves consistent with the SEIS Record of Decision standards and guidelines, RMP management direction, and Aquatic Conservation Strategy Objectives?"revealed a discrepancy. The project with instances of non-compliance was part of 1996 follow up monitoring, required after on-the-ground implementation of certain activities, for Sampson Butte commercial thinning.. The discrepancies consisted of failure to fully implement one of the Best Management Practices that were part of the project design. The practice was that logs would be felled away from and yarded away from stream channels

except where yarding across the stream would be allowed as provided in the environmental assessment. In addition, it was provided that, trees that accidently felled into the defined stream would be left and not yarded. Some trees were felled across a small stream that was not readily identifiable to the contractor. The trees in question that were felled across the stream were subsequently yarded. No significant or long term effect is indicated as a result of this disrepancy.

Special Status and SEIS Special Attention Species Habitat

Monitoring question number one which includes the requirement: "During forest managment and other actions that may disturb special status species, are steps taken to adequately mitigate disturbances?" revealed the same discrepancy in the same project as revealed in question number three for Riparian Reserves. Because the Best Management Practices which was not fully carried out was also intended to protect special status fish, the discrepancy on that project, Sampson Butte commercial thinning, is also listed under this program.

Timber Resources

In two questions having to do with timber resources, Fiscal Year 1997 activities and outputs differed from average annual projections. Except for the Roseburg declared Allowable Sale Quantity, projections are not intended as management action/direction requiring strict conformance. Projected levels of activities are the approximate level expected to support the Allowable Sale Quantity and are expected to vary from year to year. Annual or periodic differences between projected and actual levels of activities will be examined during third year evaluation to determine if the goals and objectives outlined for timber resources are being or are likely to be met. Although figures are displayed, a year by year analysis of differences is of little utility and would only be discussed in this summary if differences were significant. Complete program analysis of activity levels compared to projections will take place during the Third Year Evaluation.

Timber Resource key monitoring question number one is: "By land use allocation, how do timber sale volumes, harvested acres, and the age and type of regeneration harvest stands compare to projections in the SEIS Record of Decision, Standards and Guidelines and RMP management objectives?". Projections are taken from the Roseburg District Final EIS/RMP, 1994. Differences in activity levels and projections are shown below:

	Fiscal Year 1997	Projected
Total Timber Sale Vol:	47.6 MMBF	49.5 MMBF
Matrix Timber Sale Vol:	36.2 MMBF	45.0 MMBF
Other wood	2.2 MMBF	4.5 MMBF
Key Watershed TS Vol:	14.9 MMBF	8.3 MMBF
Total Regen Harvest	815 acres	1190 acres
Total Comm Thinning	25 acres	84 acres
Total Density Mgt	114 acres	66 acres

The differences between fiscal year 1997 timber volumes and the projected average annual rates does not constitute non-compliance with management

action/direction. Management action/direction for timber resources states: "During the first several years, the annual allowable sale quantity will not likely be offered for sale. The Resource Management Plan represents a new forest management strategy. Time will be required to develop new timber sales that conform to the Resource Management Plan."

Timber Resource key monitoring question number two is: "Were the silvicultural (eg., planting with genetically selected stock, fertilization, release, and thinning) and forest health practices anticipated in the calculation of the expected sale quantity, implemented?". Differences in activity levels and projections are shown below:

	Fiscal Year 1996	Projected
Brushfield/hardwood conversion	0 acres	15 acres
Site Preparation, prescribed fire	846 acres	840 acres
Site Preparation, other	0 acres	50 acres
Planting, regular stock	725 acres	290 acres
Planting, genetic stock	372 acres	1140 acres
Stand maintenance/protection	1525 acres	830 acres
Stand release/precommercial thin	3903 acres	3900 acres
Pruning	858 acres	460 acres
Fertilization	4278 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. The most signifcant difference in fiscal year 1997 levels versus projections is the fertilization program. This represents the delay of implementing the program from past years because of funding and administrative appeals.

The planting of regular stock and the planting of genetic stock difference is based on the start-up time lag at seed orchards in producing available genetic seed and seedlings. This situation is expected to be corrected in a few years. Since the planting of genetic stock has not contributed to the allowable sale quantity calculated for this decade, there is no program or resource effect resulting from this discrepancy.

The difference in projected and fiscal year 1997 levels of stand maintenance/protection is a reflection of the high number of acres planted prior to this plan. The large amount of acres available for stand maintenance/protection resulting from actions previous to this plan will be eliminated over the next five years. Treatments will then more closely reflect acres projected under the current plan.

None of the differences between projected levels of activity and the fiscal year 1997 levels indicate the need for program adjustment. Activity levels compared to projections will be further analyzed as part of the third year evaluation.

Recommendations

Implementation and Management

As a result of observed very high compliance with management action/direction in the fiscal year 1997 monitoring, no implementation, management, or program adjustments are recommended.

In the instances where monitoring revealed that RMP requirements were not met, the situation should be analyzed and necessary adjustments made to avoid similar discrepancies in the future.

Conclusions

Of the hundreds of discrete and specific actions that were reviewed under the 50 implementation monitoring questions, only a few specific actions failed to meet RMP requirements. Those specific instances where RMP requirments were not met will be closely examined to determine if adjustments in procedures or process need to be made. The results of fiscal year 1997 implementation monitoring indicate a very high degree of compliance with the management action/direction of the Resource Management Plan, and accordingly the standards and guidelines of the Northwest Forest Plan. Differences in some of the fiscal year 1997 activity and output levels in the timber program compared to the average annual projections were either insignificant, within the range of variation provided by management action/direction, and/or had no immediate consequence requiring resource or program adjustment.

Overall, the monitoring results indicate a remarkable achievement in implementing a new and complex plan and indicate a very conscientious effort by highly informed and knowledgeable staff and managers.

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

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 reguired.

Monitoring Requirement:

At least 20 percent of all management actions will be examined prior to project initiation (on the ground action) and re-examined following project completion.

Monitoring Performed:

Dream Weaver timber sale, Smoke Signal timber sale, Ward Creek thinning, *Calochortus umpquaensis* habitat restoration project.

Findings:

Dream Weaver timber sale:
Three known sites (mollusks) were located in one unit of this sale and thus required protection as a known site. During project design, the biologist and ID team agreed to site buffers to fit on-the-ground conditions. Based on an area-wide analysis of suitable habitat for the red tree vole as described in official survey protocol, none of the basins in the South River Resource Area require surveys based on the current extent of suitable habitat available. No known sites of Component 1 plants. Field surveys for Component 2 known or suspected plant species on the Roseburg District were conducted, no species identified. Standardized protocols for Component 3 are being developed and limited surveys are being conducted.

Smoke Signal timber sale:
No surveys were required for Component 2 species. Spot searches conducted throughout the units did not reveal any Survey and Manage sites. One Component 1 plant known site, unit boundary was moved during project design to remove the population and habitat from the timber sale. Surveys identified a Component 2 species, areas were "tagged out" to protect the population and habitat. Standardized protocols for Component 3 being developed, limited surveys being conducted.

Ward Creek commercial thinning/density management:
No Survey and Manage vascular plants were observed as a result of conducted surveys. Two Survey and Manage Component 1 fungi were observed in the project area: *Helvella compressa* and *H. elastica*. These species were located in portions of units that are proposed to be cable logged with one-end suspension. The level of ground disturbance and modification of microclimatic conditions will likely be minimal. Recent information about these species has been provided that is relevant to the recommended management action (Castellano, M.A. and T. O'Dell, 1997. Management Recommendations for Survey and Manage Fungi). *H. Compressa* is a candidate for removal from the Survey and Manage species list because it is commonly found in disturbed, non-forested habitat across its range. *H. elastica* has been recommended for a status change

from Component 1 (manage known sites) to Component 3 (conduct extensive surveys).

***Calochortus umpquaensis* habitat restoration project.**
Wildlife clearances that included survey and manage species were conducted prior to project implementation in compliance with RMP requirements. There were no known sites for component 1 species recorded for the project area.

Conclusion:

The management action for the four components of species listed in Appendix H, TableH-1 (Survey and Manage) is being implemented as required. RMP requirements met.

Comment/Discussion:

None.

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 (on the ground action) and re-examined following project completion.

Monitoring Performed:

Final Curtin timber sale, Smoke Signal timber sale, Ward Creek thinning, *Calochortus umpquaensis* habitat restoration project.

Findings:

Final Curtin timber sale:
Units with suitable habitat for Great Grey Owl (as described in protocol) received two years of protocol surveys with no detections. Protection Buffer species, *Binsoniella oregana,* was identified in the timber sale area. During project design, a nearby riparian reserve was extended to include the species.

Smoke Signal timber sale:
Surveys to determine the presence of suitable habitat for the Del Norte salamander in the timber sale units found no Del Norte salamander habitat Protection Buffer species, *Sarcosoma mexicana,* (fungus) was identified in sale units. Project design included two areas "tagged out", and remaining areas with the species mitigated by directional falling, maintaining coarse woody debris, no broadcast burning, use of designated skid trails. Protection Buffer species, Buxbaumia viridis, (moss) was identified in sale units. Project design included maintaining decay class 3, 4, and 5 logs, maintain greater than 70% closed-canopy forest for shade at known locations.

Ward Creek commercial thinning/density management:
No known sites. Although surveys were not required, Protection Buffer species, *Buxbaumia viridis,* was searched for with none observed.

***Calochortus umpquensis* habitat restoration project:**
No known sites. No surveys required.

Conclusion:

The management action for the species listed in Appendix H, Table H-2 (Protection Buffer) is being implemented. RMP requirements are met.

Comment/Discussion:

None.

Riparian Reserves

Expected Future Conditions and Outputs

See Aquatic Conservation Strategy Objectives.

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

Implementation Monitoring

Question 1 - Are watershed analyses being completed before on-the-ground actions are initiated in Riparian Reserves?

Monitoring Requirements:

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:

All files reviewed.

Findings:

Projects Having Activity Within Riparian Reserves	Watershed	Status of W.A.
Red Top II	Deadman/Dompier	Completed
	Myrtle Creek	Completed
Fertilization	John/Days/Coffee	Completed
	Stouts/Poole/Shively-O'Shea	Completed
	Myrtle Creek	Completed
	Deadman/Dompier	Completed
	Cow Creek	Completed
	Olalla-Lookingglass	In Progress
	Kent/Rice Creek	Not Started
Emile Regeneration Harvest	Little River	Completed
Little Wolf Density Mgt.	Radar-Wolf-Cougar	Completed
Ward Ck Comm. Thinning	East Elk	Completed
Smith River Tree Pulling	Smith River	Completed

Conclusion:

In two instances out of thirteen projects within riparian reserves, watershed analysis was not completed prior to project initiation. Watershed analyses were not completed for Olalla-Lookingglass and Kent/Rice Creek watersheds prior to initialization of the Fertilization project. Interim watershed analyses were completed for these watersheds for pre-commercial thinning and plus tree cleaning, however fertilization was not mentioned in them. Due to oversight, the interim watershed analyses were not amended to include the fertilization project.

Comment/Discussion:

This instance in which RMP requirements were not met will be reviewed and examined to determine what appropriate adjustments to process and procedures may be necessary.

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 re-examined following project completion to determine whether the width of the riparian reserves were maintained.

Monitoring Performed:

High Noon timber sale, Smoke Signal timber sale, Dream Weaver timber sale, Yoncalla West regeneration harvest, Ward Creek commercial thinning/density management.

Findings:

An accuracy within 10% of the width is expected. Measurements were taken using a string machine, logger's tape, and/or range finder.

High Noon timber sale

The results below for High Noon are the same as reported for FY-96. No activity has occurred on any unit that is adjacent to or contains a Riparian Reserve. The site potential tree height for this watershed has been determined to be 180 feet. The Riparian Reserve adjacent to Unit # 7 is a fish-bearing stream that requires a Riparian Reserve width of 360 feet.

Unit # 3	Measurement
	186
	176
	185
Average	182

Unit # 5	Measurement
	212
	186
Average	199

Unit # 7	Measurement
	201
	402
	295
Average	299

Unit # 8	Measurement
	203
	208
	194
	228
	180
	190
	179
	86
	144
	206
	129
Average	177

Signal Tree Thinning

Unit # 2	Measurement
	195
	184
	220
	183
	197
	176
	177
Average	190

Dream Weaver

Unit #1	Measurement
	179
	170
	163
	147
	142
	126
	220
Average	164

Unit #2	Measurement
	160
	157
	159
	168
Average	161

Unit #3	Measurement
	128 (162)*
	90 (120)*
Average	109 (141)*

** Measurements in parentheses include the width of the road*

Unit #4	Measurement
	160
	154
	167
	162
Average	161

As mentioned above, the measurements for High Noon are the same as last year, since no harvesting has taken place on any of the units that were monitored.

The results for Signal Tree are within the 10% accuracy for Riparian Reserve widths. The site potential tree height for this watershed is 180 feet.

Three of the four Dream Weaver units were also within the 10% accuracy of 160 feet, which is the site potential tree height for this watershed. Unit #3 did not fall within the 10% accuracy due to an existing road. (See comment/discussion).

Conclusion:

Riparian Reserve widths have been established according to RMP management direction. RMP requirements were met.

Comment/Discussion:

Some explanations for unit #3 include the fact that there was a road encroaching on the stream in the Riparian Reserve, and the unit was laid out with this road as the boundary. Extending the Riparian Reserve across the road at the uppermost portion of the stream would probably not have added greatly to the integrity of the Riparian Reserve, as the road is the major impact at this point. Only the upper portion of this stream is adjacent to the unit, with most of the stream length extending downslope and away from this unit. Only two measurements were able to be taken 200 feet apart because of the small length of the stream that was actually adjacent to the unit. There are two measurements for unit #3 in the table. The first measurement is to the fill slope of the road, where the unit is tagged. The second measurement includes the width of the road to the cutbank. When the width of the road is included, the Riparian Reserve is within 12% of the required width.

Yoncalla West

Harvest Area	Transect #	Distance (ft)	Average Distance (ft)	Comments
1	1	330		Reserved because of unstable ground
1	2	363	363	Fish Bearing
1	3	180		Non-Fish Bearing
1	4	201		Non-Fish Bearing
1	5	188		Non-Fish Bearing
1	6	193		Non-Fish Bearing
1	7	180	188	Non-Fish Bearing
2	1	187		Non-Fish Bearing
2	2	200		Non-Fish Bearing
2	3	192		Non-Fish Bearing
2	4	230	202	Non-Fish Bearing

Findings:

Documents were referenced to confirm tracking of mitigations from the EA to the Timber Sale (TS)Contract. The Ward Creek Environmental Assessment (EA, p. 5) states riparian widths equal to two site potential trees on each side of perennial or intermittent non-fish bearing streams are specified by the Standards and Guides (S&G, p. C-30) and the Roseburg District Record of Decision and Resource Management Plan (RMP, p. 24). Data from inventory plots and heights of site potential trees for the Elk Creek watershed indicate the equivalent of 200 feet slope distance would be the standard for this projects site potential tree height. Therefore, boundaries would be approximately 200 feet from the edge of non-fish bearing streams and 400 feet for fish bearing streams. Note: There are no fish bearing streams within the project area.

Conclusion:

Riparian reserve widths were established according to RMP management direction. RMP requirements were met.

Comment/Discussion:

None.

1996 Riparian Reserve Follow-up Monitoring, Question 2

Monitoring Performed:

Idleyld Timber Sale, Unit #2

Follow-up Findings:

Logging and burning of slash has been completed. The unit boundaries remain intact. Thus the Riparian Reserve measurements from the 1996 monitoring report have been maintained.

Conclusion:

RMP requirements were met.

Comment/Discussion:

None.

Question 3 - Are management activities in Riparian Reserves consistent with SEIS Record of Decision Standards and Guidelines, RMP management direction, and Aquatic Conservation Strategy Objectives?

Monitoring Requirement:

At least 20 percent of the activities that are conducted or authorized within Riparian Reserves will be reviewed in order to identify whether the actions were consistent with the SEIS Record of Decision Standards and Guidelines, 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 Preformed:

Red Top Salvage II, Ward Creek commercial thinning/density management.

Findings:

Red Top Salvage II:

Red Top Salvage II was the only fiscal year 1997 project with proposed operations in Riparian Reserves. The Timber Management S&G (ROD/S&G, p. C-32) states; "salvage trees only when watershed analysis determines that present and future coarse woody debris needs are met and other Aquatic Conservation Strategy objectives are not adversely affected". The Deadman/ Dompier Watershed Analysis (p. 23) states that "stream reaches needing large woody debris should be identified as part of watershed restoration". In a memo dated July 9, 1997 from Frank Oliver, Wildlife Biologist, it states that the amount of blown down timber resulted in an excess of large woody debris (LWD), which is beyond the amount needed for wildlife in the area. Actual levels of LWD in the project area will be greater after salvage than before the blow down event. No restoration of LWD is necessary in the project area.

The project was designed with a 90 foot no touch buffer along draws having a defined channel and annual scour or deposition. The existing LWD in that buffer would continue to provide current levels of protection to the fisheries resource as well as the physical complexity and stability of the channel. In addition, in the outer portion of the Riparian Reserve approximately one quarter to one third of the blow down will be reserved to provide for present and future LWD. No roads would be built in Riparian Reserves for this project. The proposed salvage in Riparian Reserves is consistent with SEIS Record of Decision Standards & Guidelines (S&G). This project has not been completed on the ground and thus has not been "re-examined".

In order to analyze how the project maintains or restores ACS objectives, the team developed a table which evaluated each objective, what the potential impacts (both beneficial and adverse) related to that objective would be, and how the adverse impacts would be mitigated. Each ACS objective would be met by maintaining the necessary features and none were adversely affected.

Operations within the riparian reserve are intended to "[accelerate development of large conifers of various forms and structure for large trees and future recruitment of coarse woody debris. . ." (Decision Record [DR], p. 1;EA, p. 3; S&G, p B-32). The EA prescribes the practice of ecosystem management and dictates avoidance of any damage toriparian ecosystems, provision for habitat with "both late-successional and younger forests", etc. (EA, p 3; RMP, pp. 19, 33, & 40). The EA required: A)Trees within 100 feet of the riparian reserve to be felled and yarded away from or parallel to the riparian reserve (EA, p. 6). The contract was altered to ensure that trees are felled and yarded in this manner. B)20 to 180 foot no cut buffer along intermittent and perennial streams(EA, p. 11). The contract was altered to ensure that yarding operations would not occur within these no cut buffer areas as specified on the Exhibit A (Prospectus, Sec. 41(B)). The no cut buffer widths varied from unit to unit in accordance to the study design.

Conclusion:

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

Comment/Discussion:

None.

1996 Riparian Reserve Follow-up Monitoring, Question 3

Monitoring Performed:

Sampson Butte Commercial Thinning, 2 units

Follow-up Findings:

The Sampson Butte Commercial Thinning is in the Little River Adaptive Management Area (AMA), and because this AMA has the objective of "Development and testing of approaches to integration of intensive timber production with restoration and maintenance of high quality riparian habitat," much debate occurred on what could be done within riparian reserves for this sale. As was finalized in the EA, thinning and road building activities were allowed within riparian reserves. The EA makes recommendations for protection of riparian resources through five Best Management Practices which were to be incorporated on the ground. These are:

1) No road construction or log hauling on unsurfaced roads between October 15 and May 15. These dates could be slightly modified depending on weather conditions.

2) All newly constructed roads would be built to minimum width standards and outsloped.

3) After logging is completed, roads are to be waterbarred, blocked, scarified, and seeded.

4) Logs would be felled away from and yarded away from stream channels except where yarding across the stream would be allowed as provided in the environmental assessment. Yarding corridors through the stream areas would be limited to 15 feet or less. Logs would be fully suspended across the stream areas when possible.

5) Trees with branches that overhang the stream channel would be reserved for

retention.

Results after the contract were completed:

1. A review of the Contract administrators files indicated that log hauling was permitted beyond the October 15 deadline. A waiver was granted that permitted log hauling on road #27-2-32.5 through November 21, 1996. Log hauling was allowed beyond the October 15th deadline on this road because the purchaser added rock surfacing on approximately 200 feet of the road. With this modification, the contract administrator did not anticipate damages to the environment any greater than was allowed in the EA for natural surfaced roads with dry season restrictions.

2. All roads appeared to be built to minimum width standards, and were outsloped except for a few short sections.

3. After the logging was completed, the temporary roads were waterbarred, blocked and seeded. According to inspections reports, the roads in unit 1 and 2 were scarified after logging was completed although it did not appear that the roads in unit 1 were scarified. Because of late summer and fall rains the roads scarified in unit 1 were too wet to obtain the desired results from scarification. A field visit by the contract administrator in the spring verified that grass seed germination was successful on all roads.
4. There are several records in the Contract Administrator file that indicate that some trees were felled across streams (e.g. September 5, 1997), contrary to contract stipulations. In other places in the files, it is made clear by the contract administrator documents that he told the purchaser to fall trees away from the streams. In addition, the contract stated that trees accidentally felled into the defined stream would be left and not yarded. The stream involved in this falling situation was not readily identifiable by the contractor because of its small size. The trees in question were subsequently yarded. A review of the logging plan shows that the streams had contract administrator approved yarding corridors across them, which were provided for in the envrironmental assessment.

5. A field review determined that trees with branches that would have overhung the channel have been cut for purposes of yarding corridors. The contract administrator estimated the there were 16 of these types of trees cut along streams designated for no cutting, but that these trees were part of yarding corridors allowed for in the environmental assessment.

Conclusion:

Best Management Practice 4 was not entirely met because some trees that were accidently felled into the stream were subsequently yarded. With this one minor discrepancy with no discernable environmental effects, the RMP requirements were met.

Comment/Discussion:

The instance in which RMP requirements were not entirely met will be reviewed and examined to determine what appropriate adjustments to process and procedures may be necessary.

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 Requirements:

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:

No plans of operations were filed during fiscal year 1997.

Findings:

Not applicable.

Conclusion:

RMP compliance.

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

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:

All LSR assessments were reviewed for status.

Findings:

LSR assessment for RO 268 located in the northwest part of the district has been completed and reviewed by the Regional Ecosystem Office. LSR assessments are underway for RO 222, 223, (251, 255, 257, 259, 260, 261, 263, 254, 265, 266). The LSRs in parenthesis are being analyzed under one LSR assessment. The assessment for RO 222 is being completed as part of a large assessment that includes RO 222, 224, 225, 226, and 227. All of these LSR assessment will address the issue of fire plans or fire management.

Conclusion:

RMP requirements are being met.

Comments/Discussion:

None.

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 with 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:

Manual maintenance, broadcast burning on Olalla Wildcat timber sale, Little Wolf Density Management.

Findings:

Olalla Wildcat manual maintenance:
A manual maintenance project of 378 acres was done within the Late-Successional Reserves. Manual maintenance projects, or as the REO calls them - release for survival, were exempt from REO review provided they met the criteria provided. The treatments met the criteria of: undesirable vegetation (competition) delaying attainment of late-successional conditions, reforestation to reach late-successional conditions, and promoting natural species diversity, including hardwoods, shrubs, and forbs. All the manual maintenance units were reviewed so that they met the treatment specifications. The treatments were modified to meet the objectives of the LSR. Certain species were reserved from cutting. Sprouting hardwood clumps were cut to one main sprout to maintain the hardwood component. Reserve islands were flagged out within one 40 acre unit where no brush or hardwoods were cut.

Olalla Wildcat broadcast burn:
Site preparation by broadcast burning was completed on 235 acres of the Olalla Wildcat timber sale in FY 97. This timber sale was sold prior to the implementation of the ROD. Even though this timber sale contract was operational under the previous management plan, burn plans were modified to consider LSR objectives. For site prep, modifications were made to retain the LSR components of down wood and snags.

Little Wolf Density Management:
This research project timber sale within LSR was reviewed and approved by REO.

Two stream enhancement projects were conducted in key watersheds within LSRs in Smith River and Canton Creek.

Smith River Tree Pulling EA/project as well as the Pass Creek Instream Log Placement project were both within Management Action/Direction.

These projects were either covered under a research exemption through REO Research and Monitoring Committee or under a late-successional reserves assessment that was under current REO review.

Conclusion:

The actions were consistent with SEIS Record of Decision Standards and Guidelines, RMP management direction and Regional Ecosystem Office review requirements.

Comment/Discusion:

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

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?

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 January, 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.

Conclusion:

RMP requirements are being met.

Comment/Discussion:

None.

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

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:

Ward Creek commercial thinning, Dream Weaver timber sale, and Fast Buck timber sale were reviewed for compliance by conducting an independent calculation of acres by block using the final traversed acres in the timber sale Exhibit A's the GIS acres of current forest condition for each block.

Findings:

Ward Creek commercial thinning:
This commercial thinning did not reduce existing late-successional forest condition in the connectivity/diversity block.

Dream Weaver Timber Sale:
Current Status: Sale area includes connectivity block # 22 - T28S, R3W, Section 32.

Total area block # 22:	633 acres
Total acres > 80 years:	277 acres
Percent > 80 years:	43.7 %

Post Harvest Status:	
Harvest Acres:	27 acres
Total acres > 80 years:	250 acres
Percent > 80 years:	39.5 %

Fast Buck Timber Sale:
Current Status: Sale area includes connectivity block # 26 - T29S, R3W, Section 11.

Total area block # 26:	612 acres
Total acres > 80 years:	236 acres
Percent > 80 years:	38.5%

Post Harvest Status:	
Harvest Acres:	63 acres
Total acres > 80 years:	173 acres
Percent > 80 years:	28.2%

Conclusion:

RMP requirements were met.

Comment/Discussion:

None.

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 will be reviewed to determine if harvest occurred in fifth-field watersheds with less than 15% late-successional forest or if harvest reduced late-successional forest to less than 15%.

Findings:

No regeneration harvest timber sales have been planned or occurred in fifth field watersheds with less than 15% late-successional forest or reduced the late-successional forest to less than 15%.

Conclusion:

RMP requirements were met.

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

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

Monitoring Requirements:

At least twenty percent of prescribed burn projects carried out in fiscal year 1997 and subject to the current RMP will be randomly selected for monitoring to assess what efforts were made to minimize particulate emissions.

Monitoring Performed:

Texas Gulch unit no. 4, Idleyld timber sale, three units

Findings:

Texas Gulch unit no. 4:

This 14 acre unit was the only RMP unit prescribe burned in fiscal year 1997. The prescribed broadcast burn was conducted under approved Smoke Management clearance from the Oregon Department of Forestry on May 5, 1997. Ignition commenced at 1000 hrs and was completed 7 hour and 45 minutes later. A slow ignition sequence was utilized to avoid damage to the retention trees. Conditions at the time of ignition as reported in the smoke management report included: 10 hour fuel moisture of 17%, 1000 hour fuel moisture of 35%, temperature of 67 degrees F, relative humidity of 48%, and wind speed of 2 MPH from 220 degrees. A hygrothermograph was utilized on the site for several weeks prior to ignition to monitor 24 hour temperature and humidity, as well as rain fall. _ inch or more of rainfall occurred 8 days prior to ignition. Mopup commenced the day following ignition and continued for several days, until the unit was smoke free. Several smokes were found during subsequent patrols over a several week period and were immediately mopped up. The unit was scanned with infrared equipment (probeye) from a helicopter on 2 occasions. The unit was officially declared 100% out on June 26.

Frequent pre-burn monitoring occurred over a several week period in order to schedule this ignition at the earliest possible opportunity to minimize risk to retention trees. The prescribed burn occurred within one or two days of 10 hour time lag fuels drying into parameters. The unit was burned at the wet extreme of the fuel moisture parameters in the burnplan. A short duration and low intensity fire was achieved with no damage to residual trees. Duff, litter, and punky logs were minimally reduced as a result.

Idleyld timber sale:

Prescribed Burning: Successful efforts were made to minimize particulate emissions from prescribed burning. Smoke management approval for burning

the three units was secured. Weather conditions featuring unstable air masses were present the days of ignition. This provided us with good vertical lifting and mixing, aiding in rapid dispersion of the smoke (particulate emissions). These units were burned in the Fall of 1997 after several inches of rain had soaked the ground and duff layers. Specific efforts to reduce fuel consumption and lower the emission factor included:

- Portions of two (2) units were machine piled and burned during periods of advantageous weather.
- In portions of two units, hand piles and heavy slash concentrations were targeted for ignition, leaving large stumps and logs untouched.
- Broadcast burning occurred on less than 30% of the total area treated.

More intense rains fell soon after the burns were completed. This rain and unstable air mass extinguished the fires and reduced residual smoke that might normally persist for days. No smoke was put into the local Designated Areas monitored by the Douglas Forest Protection Agency.

Conclusion:

Particulate emissions were minimized from prescribed burns through ignition timing and aggressive mop-up. RMP requirements were met.

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

Monitoring Requirements:

At least twenty percent of the construction activities and commodity hauling activities carried out in fiscal year 1997 and subject to the current RMP will be monitored to determine if dust abatement measures were implemented.

Monitoring Performed:

Old Dillard timber sale, Kernal John timber sale, Louis Weaver timber sale, Idleyld timber sale.

Findings:

Old Dillard timber sale, Kernal John timber sale, Louis Weaver timber sale:
All 3 sales, Old Dillard, Kernal John, and Louis Weaver, have Exhibit C specification 601 which requires the use of water to abate dust during the construction phase of the contract. In addition, all three sales have provisions which require the application of asphalt surfacing and/or dust pallative near residences in order to abate dust during periods of timber hauling.

Idleyld timber sale:
For road construction dust abatement operations were not required, nor were they implemented on this Sale. Typically, dust abatement operations are used only if significant amounts of dust is produced during hauling, and if local residences are being impacted. Hauling operations occurred during the summer and fall of 1997, no local residences were impacted. Three (3) short natural surface road spurs were constructed and completed by June 1996. Soil moisture was high enough for easy packing of the road surfaces. Little dust was produced during this operation. Overall, impacts on air quality were of short duration, local in nature, and produced limited impacts on regional air quality.

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 Aquat Conservation Strategy Objectives.

Improvement and/or maintenance of water quality in municipal water system

Improvement and/or maintenance of soil productivity.

Reduction of existing road mileage within Key Watersheds or at a minimum nc net increase.

Implementation Monitoring

Question 1 - Are site specific Best Management Practices, identified as applicable during interdisciplinai 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 silvicultura practices, Best Management Practices, and beneficial uses likely to be impacted where possible given the monitoring sample size.

Monitoring Performed:

Yoncalla West Regeneration Harvest, District Fertilization Project, Dream Weaver timber sale, Buck Fever timber sale, 1996 follow-up: Lean Louis timber sale, Curtin Creek timber sale, Coon Creek commercial thinning.

Findings:

Dream Weaver timber sale, Buck Fever timber sale, 1996 follow-up: Lean Louis timber sale:

Project design was carried forth in project in all cases except Units B and C of Buck Fever. Recommendation for full suspension was in the EA but did not carry forth to the decision document on these specific units. Other recommendations included clumping trees, tillage of compacted areas and dry season harvest. These projects have not been implemented on the ground. Followup monitoring after execution will determine if project design features are implemented as recommended.

District Fertilization Project:

All environmental assessment mitigation measures were implemented.

Yoncalla West Regeneration Harvest:

The project design features which identify Best Management Practices to mitigate impacts to water and soils were carried from the environmental assessment into the timber sale contract. Follow-up monitoring after execution will determine if project design features are implemented.

Coon Creek commercial thinning:
Best Management Practices were carried forward from the environmental assessment into the design and contract. Follow-up monitoring after execution will determine if project design features are implemented.

Conclusion:

RMP objectives have been met.

Comment/Discussion:

The soils recommendation for full suspension on Buck Fever timber sale units B and C was not possible due to the topography and lack of deflection. In this case a yarding system capable of one end suspension was identified as applicable and is required in the contract specifications.

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 analyses will be reviewed for status.

Findings:

As of the end of fiscal year 1997, twenty-three 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, Deadman Creek, and Cow Creek. These watershed analyses involved a total of 862,924 acres, including 289,522 acres of public land administered by the BLM. This watershed analysis effort has encompassed 68% of the Roseburg District by the end of fiscal year 1997.

Conclusion:

RMP requirements being met.

Comment/Discussion:

None.

Question 3 - What watershed restoration projects are being developed and implemented?

Monitoring Requirement:

Restoration projects will be reviewed for status.

Monitoring Performed:

Fiscal year 1997 review of restoration projects.

Findings:

In fiscal year 1997, a major emphasis was the identification and correction of storm damaged roads in the resource area. This work was accomplished jointly

through the BLM's maintenance program and procurement process. Storm repair work will continue in fiscal year 1998. In addition, two major procurement contracts in a key watershed accomplished full road and quarry decommissioning, road restoration and improvement, and road hardening to reduce the required level of road maintenance. Additional road improvement and full decommissioning was accomplished through the timber sale program. A riparian fencing project was completed. Projects that are in the planning and contracting phases for implementation in fiscal year 1998 include road restoration and full decommissioning, pond maintenance, upgrading of major culverts to pass the 100-year flood, as well as to provide fish passage, and stream channel restoration.

Conclusion:

RMP requirements met.

Comments/Discussion:

None.

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

Monitoring Requirement:

Road or transportation plans will be reviewed for status.

Monitoring Performed:

Road or transportation plans were reviewed for status.

Findings:

The Western Oregon Transportation Management Plan was completed in 1996. The South River Resource Area is in the process of creating Transportation Management Plans [TMP] that identify road closure and improvement opportunities by watershed. The Upper South Myrtle Watershed has been completed and TMP's for seven additional watersheds are near completion. All road closure and improvement opportunities, as well as road maintenance levels for the resource area, are projected to be completed by the end of FY98. An up-to-date and functioning storm patrol plan is in place for the resource area. The Swiftwater Resource Area has completed the plan. Specific road management objectives are being developed through watershed analysis.

Conclusion:

RMP requirements met.

Comment/Discussion:

None.

Question 5 - What is the status of closure or elimination 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:

Road closures or eliminations will be reviewed for status.

Monitoring Performed:

Road closures or eliminations were reviewed for status.

Findings:

South River Resource Area:

Some of the FY 97 projects have not been sold and/or awarded yet. Also, some projects are in progress and road construction and/or decommissioning has not been completed. Therefore, the following table will have three categories. The first category will be completed, where the contract and all of the road construction and/or decommissioning has been completed. The completed category will also include roads that have been built and/or decommissioned and approved under a contract that is still active. The second category will be active, which is all of the projects where the contract has been awarded, but there is still time left on the contract and the construction and/or decommissioning has not been completed or approved. The final category will be proposed, which are FY 97 projects where the contract has not been awarded yet. The numbers below are cumulative for all projects implemented under the RMP, and include private roads built on BLM land after April, 1994.

Fifth Field Watershed	Status	Permanent New construction~	Decommission	Full Decommission
Myrtle Creek	Completed	0.43		
	Active			1.47
	Proposed			0.22
South Umpqua*	Completed	1.29		3.08
	Active		1.10	2.76
	Proposed			0.41
M.F. Coquille	Proposed	0.12		
Olalla Lookingglass	Completed	2.05		
	Active			1.99
Cow Creek	Completed	2.00		
Cow Creek*	Completed	0.13		
	TOTAL	**6.02**	**1.10**	**9.93**

* Tier I Key Watershed
~ Does not include temporary or semi-permanent road construction that will be fully decommissioned with the associated project

The next table contains all types of roads built and decommissioned by watershed and project

5th Field Watershed	Roads Built (miles)			Roads Decommissioned		FY 97 Projects
	Perm.	Semi-perm	Temporary	Full~	Other	
Myrtle Creek			0.63	0.22		Dream Weaver^
Myrtle Creek		0.37	0.31	0.64		Buck Fever
Myrtle Creek			0.94			Final Curtin^
South Umpqua*			1.91	0.41		Red Top I^
Upper SUmpqua*			0.06			Red Top II^
Myrtle Creek			0.29			Red Top II^
M. F. Coquille			1.11			Smoke Signal
M. F. Coquille	0.12		0.27			Burma Shave^
South Umpqua*				2.97		Jobs in Woods
TOTAL	**0.12**	**0.37**	**5.52**	**4.24**		
TIER I			**1.97**	**3.38**		
						Pre-97 Projects
Myrtle Creek			0.20			Curtin Creek
Myrtle Creek	0.43		0.83	0.83		Lean Louis
Olalla Look.	1.62		0.13	1.99		Old Dillard
South Umpqua*	0.89	0.64	0.61	2.76	1.10	High Noon
Myrtle Creek			0.96			Louis Weaver
South Umpqua*				0.11		Texas Gulch #4
						Private R/W
Olalla Look.	0.43					Lone Rock
Cow Creek2.00						RRC
Cow Creek*	0.13					RRC
South Umpqua*	0.40					RRC
CUMULATIVE	**6.02**	**1.01**	**8.25**	**9.93**	**1.10**	
TIER I	**1.42**	**0.64**	**2.58**	**6.25**	**1.10**	

* Tier I Key Watersheds
^ These projects are planned or have not been awarded yet
~ This is existing road mileage, temporary road mileage is not included in this column

Currently, a total of 6.02 miles of permanent road have been built throughout the South River Resource Area by RMP sales or under right-of-way agreements since the RMP was implemented. 1.42 of these miles have been built in a Tier I Key Watershed.

9.87 miles have been planned for full decommissioning. These are existing roads that were built before the RMP was implemented. 6.19 miles of this total are being fully decommissioned within a Tier I Key Watershed. Currently, 3.02 miles have been fully decommissioned within a Tier I Watershed, with the remaining road mileage to be fully decommissioned with an active or proposed contract.

For FY 97 projects, 0.12 miles of permanent new road construction is planned outside of Key Watersheds, but has not yet been built. No new permanent road construction is planned within Key Watersheds.

Also for FY 97 projects, 4.18 miles of full decommissioning has been planned, with 3.32 miles within Tier I Key Watersheds. So far, 2.91 miles have been fully decommissioned within Tier I Watersheds. The remaining mileage will be decommissioned with contracts that are either active or proposed.

From the above numbers, it can be seen that total road mileage will decrease within Tier I Key Watersheds, and there will be a slight increase in road mileage outside of Tier I Watersheds after the FY 97 projects have been fully implemented. For the Tier I Watersheds, total road mileage will decrease by 4.77 miles, and there will be an increase of 0.92 miles of permanent road outside of Tier I Watersheds.

Swiftwater Resource Area:

KEY WATERSHEDS	
Smith River	
-FY95-97 Permanent Roads from R/W Permit New Construction	1.1 Miles
-FY95-97 Decommissioning of Roads	0 Miles
Canton Creek	
-FY95-97 Permanent Roads from all New Construction	0 Miles
-FY95-97 Decommissioning of Roads	0 Miles
NON KEY WATERSHEDS	
-FY95-97 Permanent Roads from all New Construction	5.3 Miles
-FY95-97 Decommissioning of Roads	0.6 Miles

Conclusion:

On an overall basis for the district, overall road mileage in key watersheds is being reduced as decommissioning exceeds road construction. However, as shown in the above findings two key watersheds have thus far shown an increase in road mileage. RMP requirements not met in the interim for the period of fiscal year 1995-1997 for two key watersheds (1.1 mile increase in Smith River, 0.13 mile increase in Cow Creek). RMP requirements were met for the remainder of key watersheds.

Comment/Discussion:

It is expected that as road decommissioning plans are implemented all key watersheds will meet RMP requirements in the future. In the RMP or Northwest Forest Plan there is no specific time frame in which to meet the goal of reducing overall road mileage in key watersheds, or the goal of no net increase in road mileage if funding is insufficient.

Question 6 - Is long term site productivity maintained or improved?

A.) In forest management activities involving ground based systems, are growth loss effects insignificant (less than one percent)?

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). 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 FY 97 and subject to the current RMP will be assessed to answer question 7.B.

Monitoring Performed:

Program review.

Findings:

South River Resource Area:

A). All ground based systems for these sales are designed to achieve less than one percent growth loss. No activities have been implemented on the ground. Followup monitoring will be done upon completion of the sales. The following table includes all fiscal year 1997 planned units which will have ground based activities.

Sale Name	Unit No.	Ground Based Activity Planned
Sweet Pea	P	Tractor Yarding
Buck Fever	Q (SE corner)	Tractor Yarding
Final Curtin	4	Tractor Yarding & Excavator Pile/Burn
Red Top Salvage 1	1 (portion of)	Tractor Yarding
Red Top Salvage 2	1,2,4,5,6	Tractor Yarding
Smoke Signal	1,2	Tractor Yarding

B.) The following table includes all fiscal year 1997 planned units which included category 1 soils.

Sale Name	Unit No.	Use of Prescribed Burning
Buck Fever	B, C	Broadcast Burn
Buck Fever	O, S	No Burning
Dream Weaver	L,T, U	No Burning

Of the seven units with category 1 soils two are planned for broadcast burning and 5 are planned for no prescribed burning. Rationale as to why burning was planned on Buck Fever units B and C is documented in the EA (it was discussed as an issue), and in the decision record. The soils report stated that "units B and C would be the least sensitive to burning and units T and U, most sensitive". The silviculture report identified the need to burn all 4 units to increase the number of planting spots, improve planting quality by removal of slash and brush, and provide short term control of competing vegetation. The decision was to broadcast burn units B and C, the least sensitive and not burn on units T and U, the most sensitive. The burn plan for these units will be developed with the objective of minimizing impacts on soil properties.

There were no prescribed burns on category 1 soils conducted in FY 97. Follow up monitoring will be required on Buck Fever units B and C upon completion of the sale.

Swiftwater Resource Area:
A.) Ground Based Activities: All of the FY 97 timber sales planned to have some aspect of ground based activity had adequate documentation in the EA and proper follow thru of BMP's into the contract. These BMP's are anticipated to maintain less than 1% productivity loss and keep this project within standards and guidelines. The BMP requirements in each EA will need to be followed-up in the field.

B.) Burning on Highly Sensitive Soils - Idleyld Timber Sale, three sale units totaling 86 acres of prescribed burns. The Idleyld EA did not identify any Category 1 (highly sensitive) soils on this sale.

Other timber sales have planned burning on Category 1 soils and were mitigated by hand pile and burn methods instead of broadcast burn to minimize soils impacts. It is anticipated that these management practices will stay within standards and guidelines. Strong rationale was not always given for the use of fire but heavy plant competition was probably the reason.

Conclusion:

RMP requirements were met.

Comment/Discussion:

None.

Wildlife Habitat

Expected Future Conditions and Outputs

Maintenance of biological diversity and ecosystem health to contribute to healthy wildlifepopulations.

Implementation 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 and RMP management.

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:

Dream Weaver timber sale, Sweet Pea timber sale, Yoncalla West Regeneration Harvest, (Lean Louis timber sale, Four Gates timber sale, Lower Conley timber sale monitored in fiscal year 1996 are still pending completion and will require follow up monitoring).

Findings:

Dream Weaver timber sale, Sweet Pea timber sale:

The ROD/RMP calls for 6-8 trees per acre on GFMA and 12-18 trees per acre on Connectivity/Diversity Blocks. Two additional trees per acre were marked to provide for the lack of snags and down wood on both sales. Snags and down wood were marked to be reserved on both sales, however, not enough were present to satisfy the ROD.

	RETENTION TREES / ACRE	
SALE NAME	GFMA	CONNECTIVITY
Dream Weaver	9.6	14.8
Sweet Pea	9.7	N/A

Dream Weaver timber sale:

Green trees:

The sale is currently being protested, and so no units have been harvested to date. According to cruise data on green tree retention, the following numbers and size classes of green trees were marked for retention:

Three units of this sale were in GFMA. A total of 1050 green trees over 20" DBH were marked for retention on 109 acres. This averages 9.6 trees per acre(TPA).

One of these green trees per acre was retained to provide future snag recruitment. The remaining number (8.8 TPA) of green trees retained exceeds the minimum (6-8 TPA) required by the ROD for GFMA lands.

One unit of this sale was in Connectivity/Diversity Blocks. A total of 372 trees greater than 20" DBH were marked for retention in this unit of 25 acres. This averages 14.8 trees per acre(TPA). One of these green trees per acre was retained to provide future snag recruitment. The remaining number (13.8 TPA) of green trees retained exceeds the minimum (12-18 TPA) required by the ROD for Connectivity lands.

Analysis of the sale as a whole for large diameter trees and the structure they provide for wildlife shows the following information. Of the retention trees marked, a total of 241 were greater than 40" DBH. This equates to 1.8 TPA. The original stands had 5 TPA over40" DBH. The proportion of 40+" trees/total trees over 20" in the retention stands was 17%. The proportion of 40+" trees/total trees over 20" in the original stands was 14%.

Snags:
Of the original 104 snags in the 134 acres of harvest units, a total of 37 snags were marked for retention. Of the original .7 snags per acre, .3 snags per acre were retained. The ROD requires that, in order to manage for 40% of the avian cavity dweller population, 1.2 existing snags per acre be retained. An existing deficit of snags in the original stand was further reduced by this action. Short term deficits in existing snag numbers were mitigated through retention of 1 additional green trees per acre to provide a total future component of 1.3 snags per acre.

Sweet Pea timber sale:
Green trees:
The sale is currently being protested, and so no units have been harvested to date. According to cruise data on green tree retention the following numbers and size classes of green trees were marked for retention:

A total of 58 green trees over 20" DBH were marked for retention over 6 acres. This averages 9.7 trees per acre(TPA). One of these green trees per acre was retained to provide future snag recruitment. The remaining number (8.7 TPA) of green trees retained exceeds the minimum (6-8 TPA) required by the ROD for GFMA lands.

Of the retention trees marked, a total of 8 were greater than 40" DBH. This equates to 1.3 TPA. The original stand had 4 TPA over 40" DBH.

The proportion of 40+" trees/total trees over 20" in the retention stands was 14%. The proportion of 40+" trees/total trees over 20" in the original stands was 8%.

Snags:
The only snag in the 6 acres of harvest area was marked for retention. The ROD requires that, in order to manage for 40% of the avian cavity dweller population, 1.2 existing snags per acre be retained. For this sale, 1 green tree per acre was marked for retention in order to make up the existing deficit.

Dream Weaver timber sale , Sweet Pea timber sale:
Coarse Woody Debris:
Contract stipulations required all decay class three, four and five logs be retained on the site after harvesting. Decay class one and two logs were not

marked or required to be retained and may be removed. However, one additional green tree per acre is marked for retention with the assumption that this will be adequate to meet the minimum requirement of 120 linear feet of decay class one and two down logs per acre. In the short term, the down log requirements post harvest may not be met using this rationale, and may not be adequate until subsequent death and blowdown of green trees occurs.

Yoncalla West Regeneration Harvest:

	Pre-Harvest Marking		RMP Post Harvest
	Unit #1	Unit #2	Required
Green Retention Trees (Greater Than 20")	8.8/acre	9.5/acre	6-8/acre
Snags (Greater Than 20")	1.0/acre	0.5/acre	1.2/acre
Coarse Woody Debris Reserved	70ft/acre	28ft/acre	120ft/acre

It is expected that the extra retention trees will provide the missing/needed recruitment of snags and CWD within the units after harvesting is completed.

Conclusion:

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

Comment/Discussion:

CWD Standards and Guidelines for matrix lands under the Northwest Forest Plan were clarified in Instruction Memorandum No. OR-95-028, Change 1. Marking additional retention trees and allowing natural forces (primarily windthrow) to provide infusions of trees into CWD decay classes 1 and 2 over time is one of two acceptable strategies which may be used to meet the required post-harvest levels of decay class 1 and 2 logs. The Standards and Guidelines recognize that the linear feet of decay class 1 and 2 logs present on a post-harvest unit may range from zero to several hundred linear feet. Although less than 120 linear feet of decay classes 1 and 2 may exist on the ground in the short term, requirements are met in the long term through natural attrition of standing reserved trees including those marked additional.

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:

Dream Weaver timber sale, Final Curtin timber sale, Sweet Pea timber sale, Yoncalla West Regeneration Harvest (Lower Conley timber sale, monitored in fiscal year 1996 is still pending completion and will require follow up monitoring).

Findings:

No special habitats were identified in these timber sales.

Conclusion:

RMP requirements were met.

Comment/Discussion:

None.

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

Monitoring Requirements:

Review program for status of restoration projects.

Monitoring Performed:

Program was reviewed for status of restoration projects.

Findings:

No wildlife restoration projects were planned or developed in fiscal year 1997.

Conclusion:

RMP requirements were met.

Comment/Discussion:

A status report is required only. There is no RMP management direction for certain levels wildlife restoration activities.

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

Question 1 - Are fish habitat restoration and enhancement activities being designed and implemented which contribute to attainment of Aquatic Conservation Strategy Objectives?

Monitoring Requirements:

Review program for the status of the design and implementation of fish habitat restoration and habitat activities.

Monitoring Performed:

Program was reviewed for the status of the design and implementation of fish habitat restoration and habitat activities.

Findings:

South River Resource Area:
During fiscal year 1997, no instream aquatic habitat projects were designed in the South River Resource Area. Areas are being identified for potential enhancement activities in future years.

A major culvert, located in Fate Creek, was replaced during the summer of 1997 to accommodate fish passage and the 100 year flood. By replacing this culvert, fish passage was restored and upstream habitat made accessible to the resident cutthroat trout population located downstream of the road crossing.

Swiftwater Resource Area:
Restoration Projects implemented: Smith River Tree Pulling (FY97) instream structure diversification in S. Fork Smith River (20 trees pulled); Pass Creek instream log placements (ODFW, FY97); Culvert Replacements (FY97) in Cleghorn Creek, So. Fork Smith River (3), Hardenbrook Creek, Woodstock Creek

Restoration Planned: Culvert Replacements (FY98) in S. Fork Smith River (2), Deer Creek (Smith River, 2); Smith River risk reduction and restoration (EA, FY98); Identify major culverts with fish concerns for replacement.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

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 DecisionStandards 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:

Smoke Signal timber sale, Dream Weaver timber sale, Yoncalla West timber sale, Emile Regeneration Harvest, Ward Creek commercial thinning, Follow up monitoring on Dead Dog timber sale, monitored in 1996.

Findings:

South River Resource Area:
Potential adverse impacts to fish habitat and fish stocks are being identified during the interdisciplinary team process. Most adverse impacts on the fisheries resource from the proposed action (i.e. sedimentation, increase in peak flows, ground based yarding, etc...) are mitigated through the standards and guidelines (S&G's) in the SEIS ROD and the Best Management Practices (BMP) in the Roseburg District RMP/ROD.

Smoke Signal timber sale:
Current Status of Project: This sale has been sold and awarded, but no action has taken place at this time.

There are no fish-bearing streams adjacent to the two proposed harvest units. Nonfish-bearing streams will have a Riparian Reserve width of 180 feet on each side of the stream. Approximately 1.3 miles of temporary road will be constructed with this project and approximately 0.58 mile of maintenance/ upgrading. There would be no increase in road miles associated with this project in the watershed.

Watershed analysis for the Middle Fork Coquille River was not completed at the time of this project. Since watershed analysis was not complete, no activities were planned within the Riparian Reserves.

Special Note: This activity is located in the Middle Fork Coquille River watershed. Currently, there are no threatened or endangered fish species within the watershed. However, at the time of completing the EA for this action, Oregon Coast (OC) steelhead trout were proposed as threatened species under the Endangered Species Act (ESA) by the National Marine Fisheries Service (NMFS). Since the completion of the environmental assessment, OC steelhead trout have been removed from their proposed status (just as the Oregon Coast coho salmon) and they now fall under the provisions of the Oregon Salmon Restoration Initiative Plan. The Roseburg District received the July 16, 1997 Conference Opinion for the proposed activities (i.e. Smoke Signal Commercial Thinning project) occurring in the Middle Fork Coquille River. In the Opinion, NMFS concurred with the "may affect, not likely to adversely affect" call and determined that the activities proposed within the Middle Fork Coquille River would not jeopardize the continued existence of either the steelhead trout or the coho salmon.

Dream Weaver timber sale:
Current Status of Project: This sale was turned back to BLM; no action has taken place at this time. Planned to be reoffered for sale in summer of 1998.

There are no fish-bearing streams adjacent to the four proposed harvest units. Nonfish-bearing streams will have a Riparian Reserve width of 160 feet on each side of the stream. New road construction, road maintenance/upgrading, and decommissioning would meet the S&G's and the BMP. Approximately 0.63 miles of temporary spur roads are to be constructed to accommodate harvest methods. These roads would be decommissioned in the same dry season (i.e. operating season) they are constructed. Approximately 5.60 miles of the proposed haul route are planned for maintenance/upgrading.

Special Note: With the Umpqua River cutthroat trout (URCT) listed as an endangered species, the Roseburg District BLM is required to follow the terms and conditions of thebiological opinions developed by the NMFS. Road construction, maintenance/upgrading, and decommissioning would also meet the terms and conditions as described in the programmatic LRMP/RMP Biological Opinion and Conference Opinion dated March 18, 1997. The Dream Weaver timber sale action was consulted with NMFS and in the July 22, 1997 Biological Opinion received an incidental take permit. NMFS determined that this action as proposed would not jeopardize the continued existence of URCT or OC steelhead trout.

An additional amount of existing road mileage was identified for decommissioning in conjunction with this sale (approximately 0.34 mile of the 29-3-9.2, located in the SE1/4 of Section 9, T29S R3W). This was done to address the concern of road densities and road related impacts within the Upper South Myrtle Creek Watershed and to mitigate adverse impacts associated with the proposed temporary road construction occurring with this sale.

FY96 Followup Monitoring, Question 2

Old Dillard timber sale:
Current status of Project: Ongoing sale, all right-of-way timber has been cut in the Squaw Creek units (#1 and #2). The r oads to the units, including spurs, have been constructed. However, these roads have not been approved for haul at this time. The haul route for the Mt. Shep units of this sale (road #'s 29 1/2-7-31.0, and 29-7-31.2) have been renovated. The 30-7-8.0 renovation is partially completed. Culvert installation and roadside brushing has been completed. Road rocking is started but not completed. No timber harvesting has occurred in any of the units.

Fiscal year 1997 monitoring identified road renovation/upgrading was needed to mitigate water routing concerns along portions of the existing roads planned for haul routes under this timber sale. Road construction contract administrator field reports verify that this has been completed, as required in the road construction specifications of the authorization document.

Curtin Creek (Replacement Volume for Olalla Wildcat):
Current status of Project: The regeneration unit was harvested during the winter of 1997. Timber was cut and yarded by a high-lead system to the existing road adjacent to the unit. The thinning unit has not been harvested and the temporary road proposed to access the unit has not been constructed. Harvesting and temporary road construction in the commercial thin unit is scheduled to begin in late July or early August of 1998.

According to the contract administrator, blow down has occurred in the Riparian Reserve on the North side of the logged unit. The extent of damage to the riparian area is unknown currently. Future monitoring of this sale should describe and document the impacts of the blowdown on post harvest riparian width.

Yoncalla West timber sale:
Potential adverse impacts were identified in the fisheries report. The fisheries report included a copy of the Biological Assessment submitted to the National Marine Fisheries Service. The actions from this sale was determined to be "may affect, likely to adversely affect" for endangered Umpqua River cutthroat trout. The EA addressed cumulative impacts to fisheries as a key issue, and that followed through to the decision record.

Three specific BMPs were identified in the EA to reduce or mitigate potential adverse impacts.
1) Bringing existing roads on the haul route up to RMP standards
2) All new road construction will be temporary
3) Additional road decommissioning of .

A review of the timber sale prospectus and contract indicates:
1) Haul roads are being renovated with additional culverts added and an existing natural surfaced road (22-5-33.3) is being rocked in order to bring these roads up to RMP standards.
2) The new construction of Spurs #1 and 2 are temporary.
3) Additional roads (23-4-6.0 and 23-5-13.0) are being fully decommissioned

Emile timber sale:
The actions from this sale was determined to be "may affect, likely to adversely affect" for endangered Umpqua River cutthroat trout. In the Emile EA, cumulative impacts to fisheries was also a key issue. The discussion in the fisheries report and in the EA addresses how the project design features will minimize the adverse impacts, but the specific adverse impacts are not mentioned.

Three specific BMPs were identified in the EA to reduce or mitigate potential adverse impacts.
1) Bringing existing roads on the haul route up to RMP standards
2) All new road construction will be temporary
3) Additional road decommissioning of .

A review of the timber sale prospectus and contract indicates that all of the above mitigation measures are applied.

Ward Creek commercial thinning:
Potential adverse impacts were identified in the fisheries report, in the soils report, and in the hydrology report. The actions from this sale was determined to be "may affect, likely to adversely affect" for endangered Umpqua River cutthroat trout. Discussion of these potential impacts were carried into the EA.

Two specific BMPs were identified in the EA to reduce or mitigate potential adverse impacts.
1) Bringing existing roads on the haul route up to RMP standards
2) All new road construction will be temporary

The contract contains these mitigation measures for temporary road decommissioning and road improvement as required.

Dead Dog timber sale:
No mitigative measures were identified or required in the EA.

Conclusion:

RMP requirements were 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

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 adequately mitigate 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:

Dream Weaver timber sale, Smoke Signal timber sale, Yoncalla West Regeneration Harvest, Ward Creek commercial thinning. Follow up monitoring from 1996 for Bit O Honey timber sale, Sampson Butte commercial thinning.

Findings:

Dream Weaver timber sale:

Field surveys were conducted to determine presence of special status plant species No special status plants were identified.

Spotted owl locations in the vicinity of the sale were evaluated and dispersal corridors connecting the upper north myrtle drainage and the Weaver Creek drainage were designated for deferral of harvest.

Two years of goshawk surveys were completed for units 1 and 2 in order to

identify any occupied nest sites. None were located.

All units were evaluated for potential great grey owl habitat. None of the units were found to contain suitable habitat.

Units 1 and 2 received one fall survey for C-3 mollusk species in 1996. Several known sites were located and one site-tree-radius buffers reserved around them in unit 1. The EA for Louis Weaver Timber sale, which analyzed the unit containing the known sites, did not contain any mention of the sites. This was due to the sequence of events; the EA was completed before the sites were located. A memo from the area biologist referring to the sites and management of them is attached in the EA folder.

Smoke Signal timber sale:
Two populations of a special status plant species (Bensoniella oregana), which was also a "Survey & Manage" species were identified on the thinning sale. "No disturbance areas" were tagged out of the timber sale to protect the population and habitat. "No disturbance areas" were tagged out upstream from the habitat to maintain soil moisture.

Marbled murrelet habitat evaluation within 1/4 mile of the sale units was done to determine the need for seasonal restrictions for this species. No suitable habitat was found to be within 1/4 mile.

Surveys were done to determine the presence of suitable habitat for the Del Norte salamander in all units. Field visits confirmed that no suitable talus habitat was contained within the sale unit boundaries. No surveys for this species were then required.

Yoncalla West Regeneration Harvest:
Special Status Animals: Examination of the EA and prospectus indicated no endangered species (spotted owl, marbled murrelet, bald eagle, and peregrine falcon). Participation in the ID Team process and the location and the identification of several red-tree vole populations, whereby the trees with nests were used in the layout and distribution of the retention trees during layout process of the sale. The project area was examined and the area meets the red-tree voles guidance set-forth in BLM-Instruction Memorandum No. Or-97-009. As the project area is in a watershed where the federal government manages greater than 10% of the land base and over 60% of the forested land base is in a favorable disposition (i.e. canopy closure greater than 60%); therefore, no specific surveys are required. I recommend: In the commercial thinning sites during the layout process that when nest trees are identified they be considered a potential retention tree.

Special Status Fish: As was shown under the Fish Habitat monitoring question steps have been taken to mitigate for impacts to special status fish.

Special Status Plants: No special status plants observed as a result of surveys.

Ward Creek Commercial Thinning:
Special Status Animals: Examination of the EA and prospectus indicated no endangered species (spotted owl, marbled murrelet, bald eagle, and peregrine falcon) in the project area, and there were no provisions made for the red-tree vole in the sale. The project area was examined and the area meets the red-tree voles guidance set-forth in BLM-Instruction Memorandum No. Or-97-009. As the project area is in a watershed where the federal government manages greater than 10% of the land base and over 60% of the forested land base is in a

favorable disposition (i.e. canopy closure greater than 60%); therefore, no specific surveys were required.

Special Status Plants: No Survey and Manage vascular plants were observed as a result of conducted surveys. Two Survey and Manage Component 1 fungi were observed in the project area: *Helvella compressa* and *H. elastica*. These species were located in portions of units that are proposed to be cable logged with one-end suspension. The level of ground disturbance and modification of microclimatic conditions will likely be minimal. Recent information about these species has been provided that is relevant to the recommended management action (Castellano, M.A. and T. O'Dell, 1997. Management Recommendations for Survey and Manage Fungi). *H. Compressa* is a candidate for removal from the Survey and Manage species list because it is commonly found in disturbed, non-forested habitat across its range. *H. elastica* has been recommended for a status change from Component 1 (manage known sites) to Component 3 (conduct extensive surveys).

Special Status Fish: As was shown under the Fish Habitat monitoring question steps have been taken to mitigate for impacts to special status fish.

Bit of Honey timber sale:
Special Status Animals: No SEIS special status species were involved with this sale.

Special Status Plants: Surveys were conducted before ground disturbing activities under requirements in place at the time of project initiation. There were no known sites for Survey and Manage Strategies 1,2,3,4 or Protect and buffer species recorded in the project areas. Therefore no need to implement the protection of known site management action/direction, and no reexamination is required after project completion.

Special Status Fish: As was stated in FY96 monitoring report, special status fish species (coho salmon and coastal cutthroat trout) are identified in the fisheries report and also in the EA (pg 7). No ground disturbance has occurred as of yet on the proposed action and thus there is no follow-up yet.

Sampson Butte Commercial Thinning:
Special Status Animals: No SEIS special status species were involved with this sale.

Special Status Plants: One site of Buxbaumia piperi, a Protection and Buffer Species was found in unit 2. It was protected with a 100 foot, constituting 1 acre, no cut buffer around the log on which it was found and the canopy closure was maintained the same as before disturbance, to maintain viability of the species. No other Protection and Buffer Species or Survey and Manage Strategies 1,2,3,4 species were found on this project. A subsequent field reexamination, on 1/30/98, was conducted and the site was found to be intact, healthy and viable. Therefore the known site on Sampson Butte Commercial Thinning was appropriately protected during project implementation.

Special Status Fish: As was stated under the riparian reserves monitoring question, the EA made recommendations for protection of riparian resources through five BMPs which were to be incorporated on the ground. These BMPs were meant to protect cumulative affects for down stream fish. The BMPs and the results in the field are reiterated here:
1) No road construction or log hauling on unsurfaced roads between October 15 and May 15. These dates could be slightly modified depending on weather conditions.

2) All newly constructed roads would be built to minimum width standards and outsloped.
3) After logging is completed, roads are to be waterbarred, blocked, scarified, and seeded.
4) Logs would be felled away from and yarded away from stream channels except where yarding across the stream would be allowed as provided in the environmental assessment. Yarding corridors through the stream areas would be limited to 15 feet or less. Logs would be fully suspended across the stream areas when possible.
5) Trees with branches that overhang the stream channel would be reserved for retention.

Results after the contract were completed:
1. A review of the Contract administrators files indicated that log hauling was permitted beyond the October 15 deadline. A waiver was granted that permitted log hauling on road #27-2-32.5 through November 21, 1996. Log hauling was allowed beyond the October 15th deadline on this road because the purchaser added rock surfacing on approximately 200 feet of the road. With this modification, the contract administrator did not anticipate damages to the environment any greater than was allowed in the EA for natural surfaced roads with dry season restrictions.

2. All roads appeared to be built to minimum width standards, and were outsloped except for a few short sections.

3. After the logging was completed, the temporary roads were waterbarred, blocked and seeded. According to inspections reports, the roads in unit 1 and 2 were scarified after logging was completed although it did not appear that the roads in unit 1 were scarified. Because of late summer and fall rains the roads scarified in unit 1 were too wet to obtain the desired results from scarification. A field visit by the contract administrator in the spring verified that grass seed germination was successful on all roads.

4. There are several records in the Contract Administrator file that indicate that some trees were felled across streams (e.g. September 5, 1997), contrary to contract stipulations. In other places in the files, it is made clear by the contract administrator documents that he told the purchaser to fall trees away from the streams. In addition, the contract stated that trees accidentally felled into the defined stream would be left and not yarded. The stream involved in this falling situation was not readily identifiable by the contractor because of its small size. The trees in question were subsequently yarded. A review of the logging plan shows that the streams had contract administrator approved yarding corridors across them, which were provided for in the envrironmental assessment.

5. A field review determined that trees with branches that would have overhung the channel have been cut for purposes of yarding corridors. The contract administrator estimated the there were 16 of these types of trees cut along streams designated for no cutting, but that these trees were part of yarding corridors allowed for in the environmental assessment.

Conclusion:

Best Management Practice 4 was not entirely met because some trees that were accidently felled into the stream were subsequently yarded. With this one minor discrepancy with no discernable environmental effects, the RMP requirements were met.

For all other actions monitored, 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. Requirements for the RMP were met.

Comment/Discussion:

This instance in which RMP requirements were not met will be reviewed and examined to determine any appropriate adjustments in process and procedures that may be necessary.

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, and assess programs for compliance.

Monitoring Performed:

Programs were assessed for compliance with recovery plans.

Findings:

Proposed actions that have the potential to effect the species listed above are assessed through an interdisciplinary or a multidisciplinary process (depending on type, scope and sensitivity of project) which considers consistency and compliance with recovery plans.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

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

Monitoring Requirements:

Review programs and process for status of coordination.

Monitoring Performed:

Programs and process reviewed for coordination.

Findings:

USFWS, NMFS consultation for listed species; REO coordination of SEIS special attention species; the BLM and USFS have a cooperative agreement to monitor out- migrating juvenile fish in the Little River watershed; the BLM, USFWS, and ODFW are also working together in various drainages to monitor out-migrating juvenile fish. USGS Biological Resources Division assisted with by confirming that there was no suitable Del Norte salamander habitat in a timber sale area, ODFW helped to fund and coordinate regional surveys for the Del Norte salamander.

Conclusions:

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

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 Requirement:

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

Monitoring Performed:

Programs and actions reviewed for consistency.

Findings:

No major actions 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.

Conclusions:

RMP requirements were met.

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

Monitoring Requirement:

Program review.

Monitoring Performed:

Program was reviewed.

Findings:

Draft management plans have been completed for two ACEC/RNAs and two more management plans are in preparation. Seven ACECs were nominated by the public in the Final RMP. Four of these nominations are currently being reviewed by the South River Resource 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.

Conclusions:

RMP requirements were met.

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

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 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 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:

Dream Weaver timber sale, Smoke Signal timber sale, Yoncalla West timber sale, Ward Creek commercial thinning, Follow up monitoring from fiscal year 1996 on Old Dillard timber sale and Curtin Creek timber sale.

Findings:

Dream Weaver timber sale, Smoke Signal timber sale, Yoncalla West timber sale, Ward Creek commercial thinning:
After review and clearance, it was concluded that no known cultural resources will be impacted by these actions.

Old Dillard timber sale:
No mitigation required, no follow up monitoring required.

Curtain Creek timber sale:
A cultural clearance worksheet was completed on the Curtin Creek timber sale. A cabin site and prehistoric evidence was identified in the project area. Both sites are located within riparian reserves and, therefore, will be avoided to preclude any destruction or loss. The project was consulted by the State Historical Preservation Office (SHPO) who concurred with a "no effect"

determination. Logging was completed on the unit with the cabin and prehistoric evidence in the riparian reserve under the Olalla Wildcat Timber Sale. The riparian reserve protected both the cabin and the prehistoric site. Planned broadcast burning for site preparation is planned on the unit for spring, 1998.

Question 2 - What mechanisms have been developed to describe past landscapes and the role of humans in shaping those landscapes?

Monitoring Requirement:

Program review.

Monitoring Performed:

Program was reviewed.

Findings:

Use of historical research and existing data. In addition, the gathering of archeological data that represents new data such as the work conducted at North Bank Habitat Management Area and other excavations.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

Question 3 - What efforts are being made to work the American Indian groups to accomplish cultural resource objectives and achieve goals outlined in existing memoranda of understanding and develop additional memoranda as needs arise?

Monitoring Requirements:

Program review.

Monitoring Performed:

Program was reviewed.

Findings:

No existing memoranda of understanding. Tribes are routinely involved in cultural resource activities.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

Question 4 - What public education and interpretive programs were developed to promote the appreciation of cultural resources?

Monitoring Requirements:

Program review.

Monitoring Performed:

Program was reviewed.

Findings:

North Bank Archeological Project involved public volunteers and media coverage of excavation of American Indian archeological site. In addition, school talks were made during the year.

Conclusions:

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

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:

All fiscal year 1997 timber sale files.

Findings:

The Visual Resource Management System was utilized by each Resource Area of the District, with input from each respective Outdoor Recreation Planner or other specialist as a member of the ID team. No timber sales or substantial actions occurred in in VRM class II or III lands. No follow up was required from 1996 monitoring.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

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

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 1., 1997 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 corridor; USFS had the lead on issuing Special Recreation Permits. Employees engaged in monitoring included one full time BLM River Manager and one temporary USFS person. BLM covered the salary of the USFS temp.

1997 Use:

1. Boating Use: 655 visits (BLM only)
2. Fishing Use: 2,600 visits (BLM only)
3. Commercial Adjusted Use (entire Wild & Scenic River: (2,444) The commercial outfitters reported 2,011 clients. 349 guides participated.
4. Conflict between users: No conflicts were reported on the BLM segment of the Wild & Scenic River in FY-97. Groups contacted include: Boaters vs campers, Boaters vs. anglers, boaters vs. boaters, and anglers vs. anglers.

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.

Findings:

The were no significant actions or research proposals within and adjacent to Wild and Scenic River corridors. Routine actions were consistent with protection of ORV.

Conclusions:

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

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 1997 projects.

Findings:

No actions occurred within rural interface areas as identified in the RMP.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

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

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.

Monitoring Performed:
Program was reviewed.

Findings:
Jobs-in-the-Woods program is the principle strategy and program.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None.

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

Monitoring Requirements:
Program review.

Monitoring Performed:
Program was reviewed.

Findings:
Contracting of implementation projects relating to resources and facilities have supported local economies.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None.

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.

Monitoring Performed:

Program was reviewed.

Findings:

North Bank Habitat Management Area ACEC is currently undergoing planning for local recreational and wildlife viewing opportunities consistent with the ACEC objectives.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

Recreation

Expected Future Conditions and Outputs

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

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

Implementation Monitoring

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

Monitoring Requirement:

Program review.

Monitoring Performed:

Program was reviewed.

Findings:

Cow Creek Recreation Area Management Plan is under development. Two kiosk sites are nearing construction stages. Mineral withdrawals at recreation sites in the corridor are published in the Federal Register and are scheduled to be completed within two years. Inventory of Day-Use Sites for future construction are complete. Facility upgrades or renovation were completed at Rock Creek, Millpond, Susan Creek, Tyee, Miner-Wolf, Swiftwater Recreation Sites and Osprey Boat Ramp.

See Annual Program Summary for further description of Recreation program.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

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

The projections for practices are located in Roseburg District Record of Decision and Resource Management Plan, Table R-1, page 8, except for the component of ASQ attributable to key watersheds which is located on page 20. Estimates of annual first decade levels of timber management activity is also given in Chapter 4 of the Roseburg District Proposed Resource Management Plan/ Environmental Impact Statement. The Little River Adaptive Management Area projection is taken from the draft plan for that AMA. The addition of the various categories does not sum to the total because of overlapping land use allocations and rounding of significant digits.

Projected figures are assumed average annual for first decade.

Question 1 - By land-use allocation, how do timber sale volumes, harvested acres, and the age and type of regeneration harvest stands compare to the projections in the SEIS Record of Decision Standards and Guidelines and RMP management objectives?

Monitoring Requirement:

Program and data base review. The summary will report both planned and non-planned volumes sold. The report will also summarize annual and cumulative timber sale volumes, acres to be harvested, and stand ages and types of regeneration 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.

Findings:

	Fiscal Year 1996	Projected
Total Timber Sale Vol.***:	47.6 MMBF	49.5 MMBF
Matrix Timber Sale Vol.	36.2 MMBF	45.0 MMBF
GFMA Regen Timber Sale Vol.	24.1 MMBF	*
GFMA Comm. Thin TS Vol.	0.2 MMBF	*
GFMA Salvage TS Vol.	3.5 MMBF	*
C/D Block Regen TS Vol.	7.4 MMBF	*
C/D Block Comm Thin TS Vol.	0 MMBF	*
C/D Block Salvage TS Vol.	0 MMBF	*
RR Density Mgt TS Vol.	0 MMBF	**
RR Salvage TS Vol.	0 MMBF	**
LSR Density Mgt TS Vol.	1.6 MMBF	**
LSR Salvage TS Vol.	0.7 MMBF	**
Key Watershed TS Vol.	14.9 MMBF	8.3 MMBF
Little River AMA TS Vol	4.7 MMBF	4.6 MMBF
Little River AMA Salvage Vol.	0 MMBF	*

* No projections made by Record of Decision

** 4.5 MMBF was projected to be harvested from all reserves in combination. This category of "other wood" was estimated as a result of management for the reserve goals and objectives and was not computed as part of the 45 MMBF ASQ. It is included, however, in the total projected figure of 49.5 MMBF in this table.

*** Total timber sale volume includes 8.0 MMBF (two sales) that were "no bid". These sales will be offered at a future date.

Little River AMA projected volume from draft AMA plan.

	Fiscal Year 1996	Projected
Total Regeneration Harvest	815 acres	1,190 ac
Total Commercial Thinning	25 acres	84 acres
Total Density Management	114 acres	66 acres
GFMA Regeneration Harvest	622 acres	*
GFMA Commercial Thinning	25 acres	*
GFMA Salvage	363 acres	*
C/D Block Regen. Harvest	193 acres	*
C/D Block Comm. Thinning	0 acres	*
C/D Block Salvage	0 acres	*
RR Density Mgt	0 acres	*
RR Salvage	0 acres	*
LSR Density MGT	114 acres	*
LSR Salvage	25 acres	*
Little River AMA Regen	68 acres	*
Little River AMA Thin	25 acres	*
Little River AMA Salvage	0 acres	*

* No projections made by Record of Decision

All regeneration harvest occurred in stands over minimum harvest age of 60 years. No stands in Fiscal Year 1996 were harvested that were less than the culmination of mean annual increment (CMAI) age of 80-110 years.

Conclusions:

The program levels are at level that is approximately consistent with the projections in the Final Environmental Impact Statement for the Roseburg District RMP. The sustainability of programs, outputs and predicted impacts would not be expected to be significantly different than those anticipated in the Final EIS and RMP.

Comment/Discussion:

The most significant difference in fiscal year 1997 levels versus projections is the fertilization program. This represents the delay of implementing the program from past years because of funding and administrative appeals. The levels of activities over the first three years of RMP implementation will be closely analyzed during the third year evaluation, at the end of fiscal year 1998.

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 determine if the silvicultural and forest health practices identified and used in the calculation of the Allowable Sale Quantity were implemented.

Monitoring Performed:

Program and data base were reviewed and summary prepared.

Findings:

	Fiscal Year 1996	Projected
Brushfield/hardwood conversion	0 acres	15 acres
Site Preparation, prescribed fire	846 acres	840 acres
Site Preparation, other	0 acres	50 acres
Planting, regular stock	725 acres	290 acres
Planting, genetic stock	372 acres	1140 acres
Stand maintenance/protection	1525 acres	830 acres
Stand release/precommercial thin	3903 acres	3900 acres
Pruning	858 acres	460 acres
Fertilization	4278 acres	1140 acres

Conclusions:

The program levels are at level that is approximately consistent with the projections in the Final Environmental Impact Statement for the Roseburg District RMP. The sustainability of programs, outputs and predicted impacts would not be expected to be significantly differentthan those anticipated in the Final EIS and RMP.

Comment/Discussion:

The most significant difference in fiscal year 1997 levels versus projections is the fertilization program. This represents the delay of implementing the program from past years because of funding and administrative appeals. The levels of activities over the first three years of RMP implementation will be closely analyzed during the third year evaluation, at the end of fiscal year 1998.

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

Question 1 - Is the sustainability and protection of special forest product resources ensured prior to selling special forest products?

Monitoring Requirement:
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.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None.

Question 2 - What is the status of the development and implementation of specific guidelines for the management of individual special forest products?

Monitoring Requirement:
Program review.

Monitoring Performed:
Program was reviewed.

Findings:
Final Handbook on Guidance for Special Forest Products was published at end of fiscal year 1996.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None.

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

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

Monitoring Requirement:

Program review.

Monitoring Performed:

Program was reviewed.

Findings:

One overall project for district that is compatible with Northwest Forest Plan Aquatic Conservation Strategy and Integrated Pest Management, Northwest Noxious Weed EIS.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

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 not be limited to, fuels management for wildfire hazard reduction, restoration of 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

Question 1 - What is the status of the preparation and implementation of fire management plans for Late Successional Reserves and Adaptive Management Areas?

Monitoring Requirement:

Program review.

Monitoring Performed:

Program was reviewed.

Findings:

Late-Successional Reserve Assessments and Little River Adaptive Management Area Plan are nearing completion in fiscal year 1997. These assessments and plan which will address fire and fuels will be mostly complete in fiscal year 1998.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

Question 3 - Do wildfire suppression plans emphasize maintaining late-successional 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 Little River AMA will further address this issue.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None.

Question 4 - 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 situation from slash burns. Douglas Forest Protection Agency (DFPA) is contracted for wildfire suppression and prepares similar analyses.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None.

Question 5 - What is the status of the 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 have been begun. Some analyses is being done in conjunction with Late-Successional Reserve Assessments.

Conclusions:
RMP requirements were met.

Comment/Discussion:
None.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

Question 4 - 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 situation from slash burns. Douglas Forest Protection Agency (DFPA) is contracted for wildfire suppression and prepares similar analyses.

Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

Question 5 - What is the status of the 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 have been begun. Some analyses is being done in conjunction with Late-Successional Reserve Assessments.

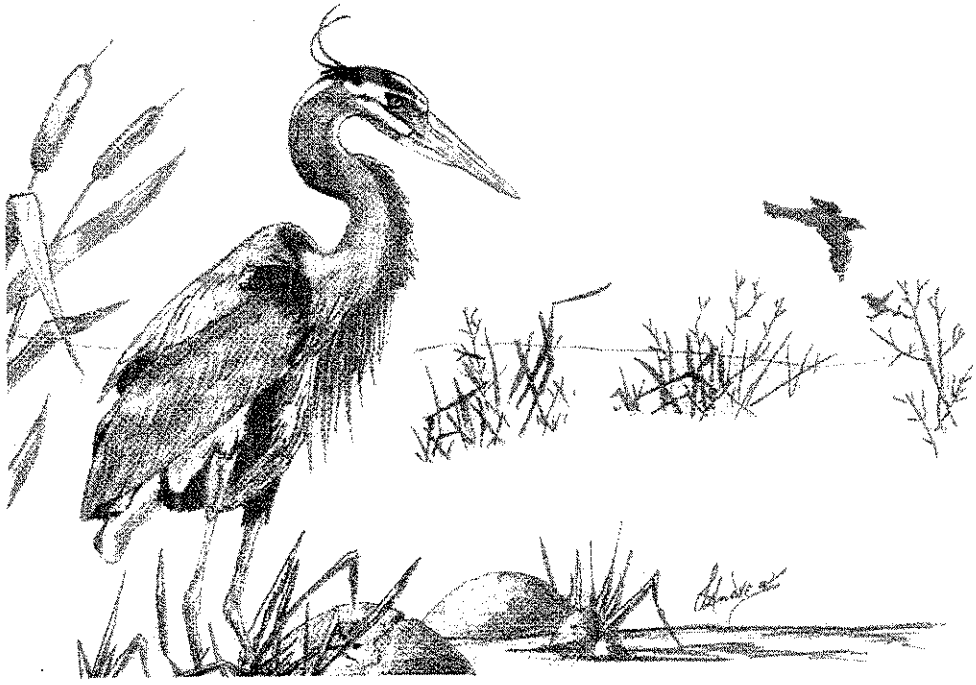
Conclusions:

RMP requirements were met.

Comment/Discussion:

None.

Appendix



RMP Monitoring Plan

(1996, prior to plan maintenance)

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

Questions

1. Are surveys for the species listed in Appendix H conducted before ground disturbing activities occur?

2. Are protection buffers being provided for specific rare and locally endemic species and other species in the upland forest matrix?

3. Are the sites of amphibians, mammals, bryophytes, mollusks, vascular plants, fungi, lichens, and arthropod species listed in Appendix H being protected?

4. Are the sites of amphibians, mammals, bryophytes, mollusks, vascular plants, fungi, lichens and arthropod species listed in Appendix H being surveyed?

5. Are high priority sites for species management being identified?

6. Are general regional surveys being conducted to acquire additional information and to determine necessary levels of protection for arthropods, fungi species that were not classed as rare and endemic, bryophytes, and lichens?

Monitoring Requirements

1. At least 20 percent of all management actions will be examined prior to project initiation and re-examined following project completion, to determine if: surveys are conducted for species listed in Appendix H, protection buffers are provided for specific rare and locally endemic species and other species in the upland forest matrix, and sites of species listed in Appendix H are protected.

2. The Annual Program Summary will address Implementation Questions 4-6.

Effectiveness and Validation Monitoring

Questions

1. Are measures taken to protect the SEIS special attention species effective?

2. Is the forest ecosystem functioning as a productive and sustainable ecological unit?

Monitoring Requirements

Deferred to SEIS Monitoring Plan.

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

Questions

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

2. Is the width and integrity of the Riparian Reserves being maintained? (e.g., did the conditions that existed before management activities change in ways that are not in accordance with the SEIS Record of Decision Standards and Guidelines and RMP management direction?)

3. What silvicultural practices are being applied to control stocking, reestablish and manage stands, and acquire desired vegetation characteristics needed to attain Aquatic Conservation Strategy Objectives?

4. Are management activities in Riparian Reserves consistent with SEIS Record of Decision Standards and Guidelines, RMP management direction, and Aquatic Conservation Strategy Objectives?

5. Are new structures and improvements in Riparian Reserves constructed to minimize the diversion of natural hydrologic flow paths, reduce the amount of sediment delivery into the stream, protect fish and wildlife populations, and accommodate the 1 00-year flood?

6. A) Are all mining structures, support facilities, and roads located outside the Riparian Reserves? B) Are those located within the Riparian Reserves meeting the objectives of the Aquatic Conservation Strategy? C) Are all solid and sanitary waste facilities excluded from Riparian Reserves or located, monitored, and reclaimed in accordance with SEIS Record of Decision Standards and Guidelines and RMP management direction?

7. Are new recreation facilities within the Riparian Reserves designed to meet, and where practicable, contribute to Aquatic Conservation Strategy Objectives? Are mitigation measures initiated where existing recreation facilities are not meeting Aquatic Conservation Strategy Objectives?

Monitoring Requirements

1. 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 and to ensure the concerns identified in the watershed analysis were

addressed in the project's Environmental Assessment.

2. At least 20 percent of management activities within each resource area will be examined prior to project initiation and re-examined following project completion, to determine whether the width and integrity of the Riparian Reserves were maintained.

3. The Annual Program Summary will report what silvicultural practices are being applied in order to attain Aquatic Conservation Strategy Objectives.

4. At least 20 percent of the activities that are conducted or authorized within Riparian Reserves will be reviewed in order to identify whether the actions were consistent with the SEIS Record of Decision Standards and Guidelines, RMP management direction, and Aquatic Conservation Strategy Objectives. 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.

5. All new structures and improvements within a Riparian Reserve will be monitored during and after construction to ensure that it was constructed to: minimize the diversion of natural hydrologic flow paths, reduce the amount of sediment delivery into the stream, protect fish and wildlife populations, and accommodate the 100 year flood.

6. 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 Aquatic Conservation Strategy objectives 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.

7. The Annual Program Summary will examine the status of evaluations of existing recreational facilities inside Riparian Reserves, to ensure that Aquatic Conservation Strategy Objectives are met. The Summary will also report on the status of the mitigation measures initiated where the Aquatic Conservation Strategy objectives cannot be met.

Effectiveness and Validation Monitoring

Questions

1. Is the health of Riparian Reserves improving?

2. Are management actions designed to rehabilitate Riparian Reserves effective?

Monitoring Requirements

Deferred to SEIS Monitoring Plan.

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

Questions

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

2. What activities were conducted or authorized within Late-Successional Reserves and how were they compatible with the objectives of the Late-Successional Reserve plan? Were the activities consistent with SEIS Record of Decision Standards and Guidelines, RMP management direction and Regional Ecosystem Office review requirements, and the Late-Successional Reserve assessment?

3. What is the status of development and implementation of plans to eliminate or control non-native species which adversely impact late-successional objectives?

Monitoring Requirements

1. The Annual Program Summary will address Implementation Questions 1-3.

Effectiveness and Validation Monitoring

Questions

1. Are forest management activities (e.g., special forest product harvest activities) within Late-Successional Reserves compatible with the goal of developing and maintaining a functional, interacting, latesuccessional and old-growth forest ecosystem?

2. Does the harvest of special forest products have adverse effects on Late-Successional Reserve objectives?

3. Is a functional, interacting, late-successional ecosystem maintained where adequate and restored where inadequate?

4. Did silvicultural treatments benefit the creation and maintenance of late-successional conditions?

5. What is the relationship between levels of management intervention and the health and maintenance of late-successional and old-growth ecosystems?

Monitoring Requirements

Deferred to SEIS Monitoring Plan

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

Questions

1. Are the Adaptive Management Area plans being developed, and do they establish future desired conditions?

Monitoring Requirements

1. The Annual Program Summary will address Implementation Question 1.

Effectiveness and Validation Monitoring

Deferred to SEIS Monitoring Plan and individual Adaptive Management Area management plans.

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

Questions

1. Are suitable numbers of snags, coarse woody debris, and green trees being left, following timber harvest, as called for in the SEIS Record of Decision Standards and Guidelines-and RA/IP management direction?

2. Are timber sales being designed to meet ecosystem goals for the Matrix?

3. 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

1. At least 20 percent of regeneration harvest timber sales in each resource area will be examined by preand post-harvest (and after site preparation) inventories to determine snag and green tree numbers, heights, diameters, and distribution within harvest units. The measure of distribution of snags and green trees will be the percent in the upper, middle, and lower thirds of the sale units monitored. 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.

2. At least 20 percent of the files on each year's timber sales will be reviewed annually to determine if ecosystem goals were addressed in the silvicultural prescriptions.

3. 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.

Effectiveness and Validation Monitoring

Questions

1. Are stands growing at a rate that will produce the predicted yields?

2. Are forests in the Matrix providing for connectivity between Late-Successional Reserves?

Monitoring Requirements

Deferred to the SEIS Monitoring Plan.

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

Questions

1. Were efforts made to minimize the amount of particulate emissions from prescribed burns?

2. Are dust abatement measures used during construction activities and on roads during BLM timber harvest operations and other BLM commodity hauling activities?

3. Are conformity determinations being prepared prior to activities which may contribute to a new violation of the National Ambient Air Quality Standards, increase the frequency or severity of an existing violation, or delay the timely attainment of a standard?

Monitoring Requirements

1. At least twenty percent of prescribed burn projects will be randomly selected for monitoring to assess what efforts were made to minimize particulate emissions, and whether the environmental analysis that preceded the decision to burn addressed the questions set forth in the SEIS discussion of Emission Monitoring (Chap. 3&4 p. 100).

2. At least twenty percent of the construction activities and commodity hauling activities will be monitored to determine if dust abatement measures were implemented.

3. The Annual Program Summary will address Implementation Question 3.

Effectiveness and Validation Monitoring

Questions

1. What techniques were the most effective in minimizing the amount of particulate emissions from prescribed burns?

2. Are BLM prescribed burns contributing to intrusions into Class I areas or nonattainment areas?

3. Of the intrusions that the BLM is reported to be responsible for, what was the cause and what can be done to minimize future occurrences?

4. Are BLM prescribed underburns causing adverse air quality impacts to rural communities?

5. Are prescribed fires decreasing the actual or potential impacts from wildfire emissions?

Monitoring Requirements

Deferred to SEIS Monitoring Plan.

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

Questions

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

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

3. What is the status of identification of instream flow needs for the maintenance of channel conditions, aquatic habitat, and riparian resources?

4. What watershed restoration projects are being developed and implemented?

5. What fuel treatment and fire suppression strategies have been developed to meet Aquatic Conservation Strategy Objectives?

6. What is the status of development of road or transportation management plans to meet Aquatic Conservation Strategy Objectives?

7. What is the status of preparation of criteria and standards which govern the operation, maintenance, and design for the construction and reconstruction of roads?

8. What is the status of the reconstruction of roads and associated drainage features identified in watershed analysis as posing a substantial risk? What is the status of closure or elimination 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?

9. What is the status of reviews of ongoing research in Key Watersheds to insure that significant risk to the watershed does not exist?

10. What is the status of evaluation of recreation, interpretive, and user-enhancement activities/facilities to determine their effects on the watershed? What is the status of eliminating or relocating these activities/facilities when found to be in conflict with Aquatic Conservation Strategy Objectives?

11. What is the status of cooperation with other agencies in the development of watershed-based Research Management Plans and other cooperative agreements to meet Aquatic Conservation Strategy Objectives? What is the status of cooperation with other agencies to identify and eliminate wild ungulate impacts which are inconsistent with attainment of Aquatic Conservation Strategy objectives?

Monitoring Requirements

1. At least 20 percent of the timber sales and silviculture projects stratified by management category will be randomly selected for monitoring to determine whether or not Best Management Practices were implemented as prescribed. The selection of management actions to be monitored will be based on which Best Management Practices are being prescribed and on which beneficial uses are likely to be impacted.

2. Compliance checks will be completed for all agreements entered into with providers of municipal water.

3. The Annual Program Summary will address Implementation Questions 3-14.

Effectiveness and Validation Monitoring

Questions

1. Is the ecosystem function of the watersheds improving?

2. Are State water quality criteria being met? When State water quality criteria is met, are the beneficial uses of riparian areas protected?

3. Are prescribed Best Management Practices maintaining or restoring water quality consistent with basin specific State water quality criteria for protection of specified beneficial uses?

Monitoring Requirements

Deferred to SEIS Monitoring Plan

Wildlife Habitat

Expected Future Conditions and Outputs

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

Implementation Monitoring

Questions

1. Are suitable (diameter and length) numbers of snags, coarse woody debris, and green trees being left, in a manner that meets the needs of species and provides for ecological functions in harvested areas as called for in the SEIS Record of Decision Standards and Guidelines and RMP management direction?

2. Are special habitats being identified and protected?

3. What is the status of designing and implementing wildlife restoration projects?

4. What is the status of designing and constructing wildlife interpretive and other user-enhancement facilities?

Monitoring Requirements

1. 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. The measure of distribution of snags and green trees will be the percent in the upper, middle, and lower thirds of the sale units monitored. 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.

2. 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.

3. The Annual Program Summary will address Implementation Questions 4 and 5.

Effectiveness and Validation Monitoring

Questions

1. Are habitat conditions for late-successional forest associated species maintained where adequate, and restored where inadequate?

2. Are the snags, green trees, and coarse woody debris being left, achieving the habitat necessary to attain the desired population at a relevant landscape level?

3. Are BLM actions intended to protect special habitats actually protecting the habitat? Is the protection of special habitats helping to protect the species population?

4. What are the effects of management on species richness (numbers and diversity)?

Monitoring Requirements

Deferred to SEIS Monitoring Plan
(Which will address a variety of wildlife species such as amphibians, mollusks, neotropical migratory birds, etc.)

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

Questions

1. Are at-risk fish species and stocks being identified?

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

3. Are potential adverse impacts to fish habitat and fish stocks being identified?

Monitoring Requirements

1. The Annual Program Summary will report on the status of watershed analysis to identify at-risk fish species and stocks, their habitat within individual watersheds, and restoration project needs.

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

3. The Annual Program Summary will report on the status of cooperation with federal, tribal, and state fish management agencies to identify and eliminate

impacts associated with poaching, harvest, habitat manipulation, and fish stocking which threaten the continued existence and distribution of native fish stocks inhabiting federal lands. The Summary will also identify any management activities or fish interpretive and other user-enhancement facilities which have detrimental effects on native fish stocks.

4. 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.

Effectiveness and Validation Monitoring

Questions

1. Is the ecological health of the aquatic ecosystems recovering or sufficiently maintained to support stable and well-distributed populations of fish species and stocks?

2. Is fish habitat in terms of quantity and quality of rearing pools, coarse woody debris, water temperature, and width to depth ratio being maintained or improved as predicted?

3. Are desired habitat conditions for listed, sensitive, and at-risk fish stocks maintained where adequate, and restored where inadequate?

Monitoring Requirements

Deferred to SEIS Monitoring Plan

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

Questions

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 adequately mitigate disturbances?

2. Are the actions identified in plans to recover species being **implemented** in a timely manner?

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

4. What land acquisitions occurred or are under way, to facilitate the management and recovery of special status species?

5. What site specific plans for the recovery of special status species were or are being developed?

6. What is the status of analysis which ascertains species requirements or enhances the recovery or survival of a species?

7. What is the status of efforts to maintain or restore the community structure, species composition, and ecological processes of special status plant and animal habitat?

Monitoring Requirements

1. 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.

2. Review implementation schedule and actions taken annually, to ascertain if the actions to recover species were carried out as planned.

3. The Annual Program Summary will address Implementation Questions 3-7.

Effectiveness and Validation Monitoring

Questions

1. Are trends for special status species meeting the objectives of mitigation and/or conservation actions?

2. Have any Federal Candidates, Bureau Assessment, or Bureau Sensitive species been elevated to higher levels of concern due to BLM management?

3. Were desired habitat conditions for the northern spotted owl and marbled murrelet maintained where adequate and restored where inadequate?

Monitoring Requirements

Deferred to SEIS Monitoring Plan
(Which will address a variety of special status species including marbled murrelet, bald eagle, northern spotted owl, anadromous fish species, etc.)

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 in 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

Questions

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

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

3. Are interpretive programs and recreation uses being developed and encouraged in Outstanding Natural Areas? Are the outstanding values of the Outstanding Natural Areas being protected from damage?

4. What environmental education and research initiatives and programs are occurring in the Research Natural Areas and Environmental Education Areas?

5. Are existing BLM actions and BLM authorized actions and uses not consistent with management direction for special areas being eliminated or relocated?

6. Are actions being identified which are needed to maintain or restore the important values of the special areas? Are the actions being implemented?

7. Are protection buffers being provided for specific rare and locally endemic species and other species in the upland forest matrix?

Monitoring Requirements

1. Annually, the files on all actions and research proposals within and adjacent to special areas will be reviewed to determine whether the possibility of impacts on Area of Critical Environmental ConceM values was considered, and whether any mitigation identified as important for maintenance of Area of Critical Environmental Concern 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.

2. The Annual Program Summary will address Implementation Questions 2-7.

Effectiveness and Validation Monitoring

Questions

1. Are the implemented management actions, designed to protect the values of the special areas, effective?

2. Are the special areas managed to restore or prevent the loss of outstanding values and minimize disturbance?

Monitoring Requirements

1. Each special area will be monitored at least every three years to determine if the values for which it was designated are being maintained.

2. Each Area of Critical Environmental Concern will be monitored annually to determine if proactive management actions met their objectives.

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

Questions

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?

2. What mechanisms have been developed to describe past landscapes and the role of humans in shaping those landscapes?

3. What efforts are being made to work the American Indian groups to accomplish cultural resource objectives and achieve goals outlined in existing memoranda of understanding and develop additional memoranda as needs arise?

4. What public education and interpretive programs were developed to promote the appreciation of cultural resources?

Monitoring Requirements

1. 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.

2. The Annual Program Summary will address Implementation Questions 2-4.

Effectiveness and Validation Monitoring

Questions

1. Are sites of religious and cultural heritage adequately protected?

2. Do American Indians have access to and use of forest species, resources and places important for cultural, subsistence, or economic reasons; particularly those identified in treaties?

Monitoring Requirements

3. All cultural resource sites, where management and/or mitigation measures are utilized to protect the resource, will be monitored at least once a year to determine if the measures were effective.

The balance is deferred to SEIS Monitoring Plan.

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

Questions

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

1. 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.

Effectiveness and Validation Monitoring

Questions

1. Are timber sales and other major actions in Class II and Class III areas meeting or exceeding Visual Resource Management objectives?

2. Are Visual Resource Management objectives being met consistently, over long periods of time, in Class II in management areas?

Monitoring Requirements

1. All timber sales and other selected projects in Visual Resource Management Class II areas and at least 20 percent of sales or projects in Class III areas that have special design features, or mitigating measures for visual resource protection, will be monitored to evaluate the effectiveness of the practices used to conserve visual resources.

2. in Visual Resource Management Class II management areas, where two or more sales or actions have occurred, impacts will be monitored at a minimum interval of five years.

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

Questions

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?

2. Are existing plans being revised to conform to Aquatic Conservation Strategy Objectives? Are revised plans being implemented?

Monitoring Requirements

1. 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.

2. The Annual Program Summary report will summarize progress on preparation and revision of Wild and Scenic River management plans, their conformance with the Aquatic Conservation Strategy Objectives, and the degree to which these plans have been implemented.

Effectiveness and Validation Monitoring

Questions

1. Are the Outstandingly Remarkable Values for which the Wild and Scenic Rivers were designated being maintained?

2. Are the Outstandingly Remarkable Values of the rivers which were found suitable or eligible, but not studied, protected?

Monitoring Requirements

1. Each Wild and Scenic River will be monitored at least once a year to determine if the Outstandingly Remarkable Values are being maintained.

2. Each river which was found suitable or eligible, but not studied, will be monitored at least once a year to determine if the Outstandingly Remarkable Values are being maintained.

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

Questions

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

1. 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.

Effectiveness and Validation Monitoring

Questions

1. Are the rural interface area design features and mitigation measures effective in minimizing impacts to health, life, and property?

Monitoring Requirement

1. At least 20 percent of actions within the identified rural interface areas which had design features or mitigation measures will be examined following completion to assess the effectiveness of the action.

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

Questions

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

2. Are RMP implementation strategies being identified that support local economies?

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

Monitoring Requirements

1. The Annual Program Summary will address Implementation Questions 1-3.

Effectiveness and Validation Monitoring

Questions

1. What level of local employment is supported by BLM timber sales and forest management practices?

2. What were O&C and Coos Bay Wagon Road payments to counties?

Monitoring Requirements

Deferred to SEIS Monitoring Plan.

Recreation

Expected Future Conditions and Outputs

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

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

Implementation Monitoring

Questions

1. What is the status of the development and implementation of recreation plans?

Monitoring Requirements

1. The Annual Program Summary will address Implementation Question 1.

Effectiveness and Validation Monitoring

Questions

1. Based on the Statewide Comprehensive Outdoor Recreation Plan, supply and demand data, and public comments, is the range of recreation opportunities on BLM lands (i.e., roaded vs. unroaded) meeting public needs?

2. Are BLM developed recreation facilities meeting public needs and expectations, including facility condition and visitor safety considerations?

3. Are Off Highway Vehicle designations adequate to protect resource values while providing appropriate motorized vehicle recreation opportunities?

Monitoring Requirements

1. Each Special Recreation Management Area will be monitored at least every three years to determine if the types of recreation opportunities being provided are appropriate.

2. All developed recreation sites will be monitored annually to determine if facilities are being properly managed and all deficiencies documented.

3. All Off Highway Vehicle designations will be reviewed annually to determine if revisions are necessary to protect resource values and resolve user conflicts.

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

Questions

1. By land-use allocation, how do timber sale volumes, harvested acres, and the age and type of regeneration harvest stands compare to the projections in the SEIS Record of Decision Standards and Guidelines and RMP management objectives?

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 Requirements

1. The Annual Program Summary will report both planned and non-planned volumes sold. The report will also summarize annual and cumulative timber sale volumes, acres to be harvested, and stand ages and types of regeneration harvest for General Forest Management Areas, Connectivity/ Diversity Blocks and Adaptive Management Areas, stratified to identify them individually.

2. An annual district wide report will be prepared to determine 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.

Effectiveness and Validation Monitoring

Questions

1. Is reforestation achieving desired stocking?

Implementation Monitoring

Questions

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

Monitoring Requirements

1. Review the files of at least 20 percent of each year's noxious weed control applications to determine if noxious weed control methods were compatible with Aquatic Conservation Strategy Objectives.

Effectiveness and Validation Monitoring

Questions

1. Are management actions effectively containing or reducing the extent of noxious weed infestations?

Monitoring Requirements

1. At least twenty percent of the noxious weed sites subjected to treatment will be monitored to determine if the treatment was effective.

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 not be limited to, fuels management for wildfire hazard reduction, restoration of 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

Questions

1. What is the status of the preparation and implementation of fire management plans for Late Successional Reserves and Adaptive Management Areas?

2. Have additional analysis and planning been completed to allow some natural fires to burn under prescribed conditions?

3. Do wildfire suppression plans emphasize maintaining late-successional habitat?

   Are Wildfire Situation Analyses being prepared for wildfires that escape 4initial attack?

5. What is the status of the interdisciplinary team preparation and implementation of fuel hazard reduction plans?

Monitoring Requirements

1. The Annual Program Summary will address Implementation Questions 1-5.

Effectiveness and Validation Monitoring

Questions

1. Are fire suppression strategies, practices, and activities meeting resource management objectives and concerns?

2. Are prescribed fires applied in a manner which retains the amount of coarse woody debris, snags, and duff at levels determined through watershed analysis?

3. Are fuel profiles being modified in order to lower the potential of fire ignition and rate of spread; and to protect and support land use allocation objectives by lowering the risk of high intensity, stand-replacing wildfires?

Monitoring Requirements

Deferred to SEIS Monitoring-Plan

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