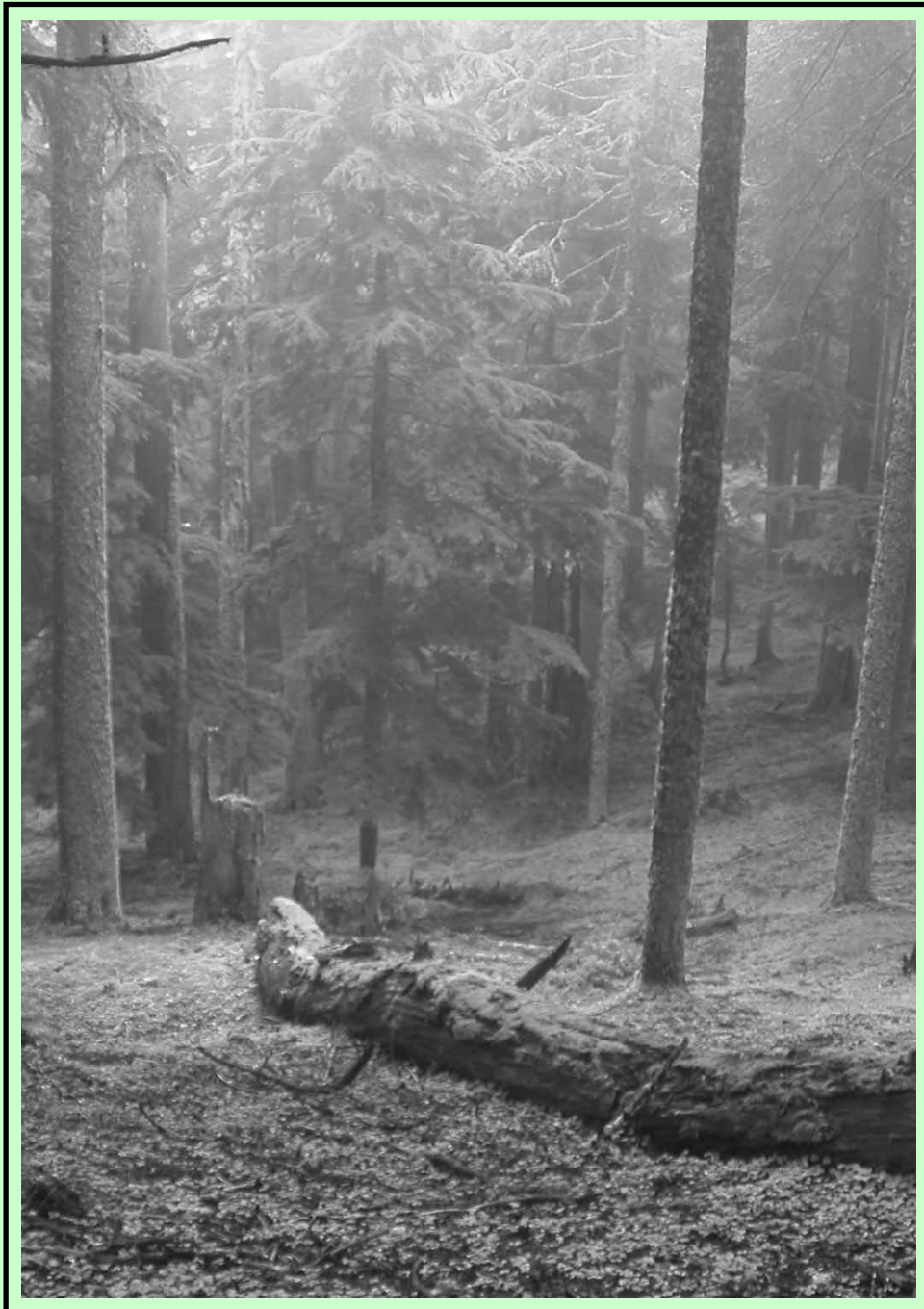


**Salem District
Annual Program Summary
Plan Maintenance and
Monitoring Report
Fiscal Year 2006**



As the Nation's principal conservation agency, the Department of Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering economic 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 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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INTRODUCTION

This Annual Program Summary (APS) is a review of the programs and accomplishments on the Salem District during fiscal year 2006. Programs are implemented under the authority and guidance of the Salem District Resource Management Plan (RMP) which was approved in May 1995.

The RMP directs that the APS 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 report; and serve as a report to the public. The different sections of the APS reflect the different purposes of the document. The information in the APS and monitoring report are different. Both documents should be reviewed to get a complete picture of district programs and their progress. The APS provides information about the progress of plan implementation. The monitoring report contains information resulting from an in-depth examination of a representative sample of projects within the district.

The manner of reporting activities differs between various programs. Some resource programs are described in short narratives while others lend themselves to statistical summaries. Where possible, cumulative information covering the period since the beginning of the RMP (fiscal years 1995 through 2006) is provided.

Table 1 - Summary of Renewable Resource Management Accomplishments

RMP Management Activity	Fiscal Year 2006	Cumulative 1995-2006	Projected Decadal Practices (2005-2014 * timber only)
Regeneration Harvest (acres sold/offered)*	125	2,455	5,558
Commercial Thinning / Density Management / Uneven-age Harvests (acres sold/offered)*	1,989	9,874	8,195
Prescribed Burning - hazard reduction (acres)	89	701	None
Prescribed Burning - wildlife habitat (acres)	46	46	None
Prescribed Burning - ecosystem management (acres)	111	111	None
Hazard Reduction - hand pruning and pullback (acres) ¹	92	672	None
Site Preparation - Prescribed Burning (acres)	88	2,222	4,800
Site Preparation - Other (acres)	112	3,974	5,900
Plantation Maintenance - Vegetation Control (acres) ²	1,294	23,464	18,500
Plantation Protection - Animal Damage Control (acres) ³	211	6,052	12,800
Pre-commercial Thinning (acres)	3,242	28,048	29,700
Brush Field / Hardwood Conversion (acres)	0	194	900
Planting / Regular Stock (acres)	200	4,545	4,800
Planting / Genetically Selected (acres)	19	1,667	4,500
Fertilization (acres)	0	4,645	6,000
Pruning (acres) ⁴	356	2,741	None
New Permanent Road Constructed (miles)	1	24	NA
Roads Fully Decommissioned / Obliterated (miles)	8	121	NA
Roads Closed / Gated (miles)	3	177	NA
Timber Sale Quantity Sold/Offered (million board feet)(allowable sale quantity)*	28	291	348
Timber Sale Quantity Sold/Offered (million cubic feet) (allowable sale quantity)*	5	50	57
Noxious Weed Control, Chemical (sites/acres)	36/114	52/167	As Needed
Noxious Weed Control, Other (sites/acres)	27/436	96/3,828	As Needed
1 Hazard reduction accomplishment with no burning. 2 Plantation Vegetation Control (Maintenance) & Animal Damage Control (Protection) separated in 2003. 3 Pre-commercial thinning and release combined 4 Pruning for disease control combined with wood quality			

Table 2 - Summary of Non-Renewable Resource Management Accomplishments

RMP Management Activity	Activity Units	Fiscal Year 2006 Accomplishments	Cumulative Accomplishments 1995-2006
Realty, Land Sales	actions / acres	0 / 0	16 / 15.82
Realty, Land Exchanges	actions / acres acquired / acres disposed	0/0	9/5,037/2,241
Realty, R&PP Leases/Patents	actions	0	2
Realty, Road Easements Acquired for Public / Agency Use	actions	0	22
Realty, Road Rights-of-Way, Permits or Leases Granted	actions	13	80
Realty, Utility Rights-of-Way Granted (linear / areal)	actions	2	27
Realty, Withdrawals Completed	actions / acres	0	2
Realty, Withdrawals Revoked	actions / acres	0	1/16
Mineral / Energy, Total Oil and Gas Leases	actions / acres	0	0
Mineral/Energy, Total Other Leases	actions / acres	0	0
Mining Plans Approved	actions / acres	0	0
Mining Claims Patented	actions / acres	0	0
Mineral Material Sites Opened	actions / acres	0	0
Mineral Material Sites, Closed	actions / acres	0	0
Recreation, Maintained Off Highway Vehicle Trails	units / miles	1 / 25	1/229
Recreation, Maintained Hiking Trails	units / miles	9/63	72/500
Recreation, Maintained Sites	units / acres	18 / 1,500	N/A*
Cultural Resource Inventories	sites / acres	1/966	20/14,635
Cultural / Historic Sites Nominated	sites / acres	0/0	0/0
Hazardous Material Sites	identified / cleaned	1/1	38/38

*Same sites maintained annually - no cumulative number

BUDGET

Budget Summary

The Salem District had an appropriation of \$20.9 million in fiscal year 2006. This included \$14.2 million for resource management on Oregon and California Railroad Lands (O&C) and future year prepared sales or timber pipeline funds; approximately \$2.0 million for resource management on public domain lands in Management of Lands and Resources (MLR) accounts (including fire management and preparation); \$1.7 million for Title II (county payments) projects; \$0.5 million for construction and infrastructure improvements; and approximately \$1.2 million in fees and collections including recreation fee demonstration sites.

Over time, funding in the O&C accounts has been relatively stable. Accounts related to special one-time projects fluctuate from year-to-year. Examples of these accounts include Land and Water Conservation Funds for special land acquisitions (Sandy River acquisition), National Fire Plan, Title II Projects (county payments), and certain specified construction and deferred maintenance projects.

Jobs-in-the-Woods Funds

The Jobs-in-the-Woods program was discontinued at the end of fiscal year 2005.

Timber Pipeline Restoration Funds (5810)

Since May 1998, 5810 funds have been available to work on pipeline timber sales. These are future or out-year sales that will not be sold in the current year. These funds allow one year's worth of timber sales to always be complete and ready to be offered. Having these sales available, or in the pipeline, provides flexibility in the sale program to react to late developing issues that might delay regular sales in the current year. The Salem District did not offer any sales in fiscal year 2006 using 5810 funds.

Challenge Cost Share

The Salem District cooperated in four Challenge Cost Share projects. Partners included federal, state and local government agencies, private corporations, conservation organizations, individuals, and local watershed councils. Salem District grants totaling \$108,000 were leveraged with \$378,000 of funding and value-in-kind contributions from partners. Challenge cost share funding is available for projects benefiting fish, wildlife, botany, recreation, cultural resources, environmental education, and riparian resources.

Table 3-Challenge Cost Share Projects

Project	Funding BLM/ Partners	Partners
Sandy River Weeds	\$25,000/117,000	The Nature Conservancy, Oregon Watershed Enhancement Board, PGE Healthy Habitats, U.S. Forest Service, U.S. Fish and Wildlife Service
Nestucca OHV Trail Inventory	\$25,000/63,000	Oregon Department of Forestry, Applegate Rough Riders, Nestucca Connections
Clackamas River Smolt Trapping	\$25,000/94,000	Mt. Hood National Forest, USFS-Pacific Northwest Forest and Range Experiment Station, Portland General Electric, ODFW
Cascade StreamWatch	\$33,000/104,000	Wolftree, Inc., many volunteers.

PROGRESS OF RESOURCE MANAGEMENT PLAN IMPLEMENTATION

Land Use Allocations

Most of the changes to Land Use Allocation (LUA) boundaries and acreage reflect acquisitions in the Sandy River Basin. Table 4 shows LUA acreage revisions since Resource Management Plan (RMP) implementation began.

Table 4 - Revised Acreage Within Land Use Allocations*

Major Land Use Allocation	Acreage in RMP Record of Decision	Acreage BEFORE Removing Unmapped LSRs (Owl,MM)	Acreage AFTER Removing Unmapped LSRs (Owl,MM)
Late-Successional Reserves Outside of the Adaptive Management Area	132,100	133,6652	135,951
Late-Successional Reserves Inside of the Adaptive Management Area	79,700	80,374	80,759
Adaptive Management Area	43,700	41,967	41,583
General Forest Management Area (Matrix)	107,300	105,044	104,187
Connectivity / Diversity Blocks (Matrix)	27,400	27,147	26,204
Other	7,900	14,900	14,401
TOTAL	398,100	403,084	403,485

*See Salem RMP Record of Decision page 5 for original footnotes.

LSR=Late-Successional Reserve

MM=Marbled Murrelet

Riparian Reserves are included in all land use allocations listed above. The amount of acres within riparian reserves is estimated at approximately 55 percent of the land base or 222,000 acres (based on mapping and analysis factors).

Late-Successional Reserve Assessments

Except for 1,986 acres of scattered parcels in the Scappoose block, Late-Successional Reserve Assessments have been completed and reviewed by the Regional Ecosystem Office for all Late-Successional Reserves (LSR) within the Salem District. Many of the LSR assessments were joint efforts involving the U.S. Forest Service and other BLM districts. In fiscal year 2006, 281 acres of habitat in LSRs were commercially treated to accelerate the development of late-successional characteristics. About 1,450 acres from 1996 through 2006 have been treated as such. In addition, pre-commercial thinning was completed on 2,403 acres of LSR for the same purpose.

Northern Coast Range Adaptive Management Area (AMA)

The Salem District's Northern Coast AMA is managed to restore and maintain late-successional forest habitat while developing and testing new management approaches to achieve the desired economic and social objectives.

1. The Tillamook Resource Area is a partner with state agencies, local agencies, and watershed councils in the Native Plant Cooperative. This partnership was formed to (a) share resources, (b) encourage education in the local community on habitat management and, (c) implement riparian restoration projects across all land ownerships in each watershed. The BLM has received grants from the National Fish and Wildlife Foundation to support the production of locally adapted native plant material for this project. Native plant vegetation is needed in riparian zones to reduce pollutants, stabilize stream banks, and lower stream temperatures. Local students and volunteers have collected reproductive plant material, sown and repotted plant material at the BLM Horning Seed Orchard, and provided labor for planting projects. Growing facilities are being developed locally to improve efficiency and broaden partnerships with our communities. Because of this partnership, 15 to 20 miles of degraded riparian habitat is being improved annually.
2. Contracting is the primary method used for accomplishing surveys for implementation of the RMP. This method has been very successful and provides job opportunities in the private sector.
3. Methods of marketing forest density management thinning for wildlife habitat development are being tested through variations in timber sale contracts. The objective is to successfully complete forest habitat development projects with less cost in preparing and administering the contracts. The district has tested variations of designation by description contracts. In these contracts, the BLM describes the desired density (basal area) and desired species mix. The contractor selects which trees to cut and which are to remain based upon the description.
4. The Tillamook Resource Area and the Oregon Department of Forestry completed a joint watershed analysis for the Trask River Watershed a couple of years ago. The two agencies, with support of Tillamook Estuaries Partnership, Oregon Department of Fish and Wildlife, Tillamook County Future Council, school districts, and the Tillamook Bay Watershed Council, planned and implemented a large cooperative aquatic in-stream and riparian restoration project in 2005. This is within the Elkhorn sub-watershed of the Trask River on Cruiser Creek. A second phase of restoration work on Cruiser Creek and Elkhorn Creek is being planned. Implementation is anticipated in 2007 and 2008. Weyerhaeuser is expected to participate in these second-phase efforts.
5. The Tillamook Resource Area is an active member of the Nestucca Valley Education Partnership. The BLM has served a key role in creating an alternative education program within the Nestucca High School. Students from the Nestucca Connections program work on aquatic, riparian and terrestrial habitat restoration projects on BLM-managed lands. Students blend their field experience with educational objectives in the classroom, including science, math, language arts, and history. Funding from the *Secure Rural Schools and Community Self Determination Act of 2000* has been integral in sustaining this cooperative effort
6. The Tillamook Resource Area worked collaboratively with the Siuslaw National Forest, Tillamook Estuaries Partnership, Tillamook County Soil and Water Conservation District, and the Nestucca-Neskowin Watershed Council to complete a comprehensive assessment of fish passage barriers throughout the watershed. A publication will soon be released.

PROGRAM ACCOMPLISHMENTS

Air Quality

Air quality continues to be a major emphasis on the Salem District. All prescribed fire projects were done in compliance with the guidelines outlined in the Oregon Smoke Management Plan. There were no intrusions of smoke into any designated area or Class 1 air sheds. The low number of acres burned, prompt mop-up of spring under burned units, and burning of piled material during damp, unstable atmospheric conditions in the fall helped reduce residual smoke. The location of piles were distributed throughout the district, also reducing impacts to any one geographic air shed. All burning was closely coordinated with our adjacent landowners to assure that management of the air shed was maintained at a high level of quality for visuals and humans.

Water and Soil Quality

Water and soils are the primary components for production of renewable resources and health of the ecosystem. Water quality and quantity are high profile issues in terms of federal regulation and the BLM's commitment to the Aquatic Conservation Strategy found in the Northwest Forest Plan. Providing conditions for high quality water supporting domestic drinking and fish habitat are some of the Salem District's foremost objectives. The district promotes protection of soils to reduce erosion and sedimentation of waterways, preventing the occurrence of landslides, and otherwise enhancing the productivity of land for overall watershed health.

Water Pollution Management and Best Management Practices

The Salem District incorporates design features during environmental analysis that comply with Water pollution management direction. These include identification of downstream beneficial uses and selection of design features (best management practices) to protect those uses. Identification can include on-site investigations for fish and stream habitat, review of all available water use data including the Water Resource Department's water right's database and Oregon Department of Fish and Wildlife and Oregon Department of Forestry stream surveys. This process also considers the potential impacts to streams that are not meeting state water quality standards and are on the Oregon Department of Environmental Quality (ODEQ) impaired water quality list (303d streams). To avoid or reduce the risk of adverse impacts, design features are selected site specifically from the best management practices listed in the Salem District's Resource Management Plan Appendix C.

Implementation, Effectiveness, and Baseline Monitoring for Water Quality

Five projects completed in fiscal year 2006 were monitored to determine if bmp were implemented according to project plans and if there was visual evidence of effectiveness. (see results in monitoring section).

Water temperature effectiveness monitoring was conducted in the South Fork Alsea sub-basin to evaluate changes in shade and water temperature resulting from thinning operations in Riparian Reserves. This project will be completed in fiscal year 2007. Elkhorn Creek and Schafer Creek in the South Santiam sub-basin also received continuous temperature monitoring for reference condition comparisons

Bacteria samples and water quality field parameters were collected in the major streams draining the Table Rock Wilderness in preparation for a wilderness management plan revision. The results of this sampling and

2005 monitoring will be used to identify changes in water quality since baseline samples were taken in fiscal years 1994 and 1995.

Water temperature data was collected on the West Creek restoration project in the Sandy River Watershed. Stream flow monitoring is being conducted at this site year-round. Both data sets will be used to evaluate the long term water quality benefits of this channel and riparian restoration project, and to meet the intent of the Sandy Basin Water Quality Management Plan.

The BLM cooperates with the U.S. Geological Survey on five continuous recording stream flow stations in the Salem District. These stations are located in headwater watersheds: Tucca Creek, East Fork Lobster Creek, Bull Creek, Schaffer Creek, and Nate Creek. The real time data from these sites is available on line at: <http://waterdata.usgs.gov/or/nwis/sw>.

Pesticide spraying with the associated water quality monitoring was conducted at the Horning Seed Orchard. The results of this monitoring are in the Horning Seed Orchard Annual Monitoring Report. This report is available at the Salem District Office or the Horning Seed Orchard. All sample analysis showed no detection of pesticides due to the spray project.

303d Listed Streams

The Salem District manages lands in 12 sub-basins that contain 303d listed streams. Streams on the 303d list are recognized by the Oregon Department of Environmental Quality (ODEQ) as not meeting state water quality standards. The development of Total Maximum Daily Loads (TMDL) and water quality management plans are required for these sub-basins. The TMDLs describe the amount of each pollutant a waterway can receive and still not violate water quality standards. The ODEQ has set target completion dates, displayed in Table 5, for development of TMDL and water quality management plans in the listed sub-basins.

Municipal Watersheds

The Salem District has a management agreement with private landowners in the Rickreall Watershed specifying seasonal vehicle closures on the watershed road system. The Rickreall Watershed provides the municipal water supply for the city of Dallas.

The Salem District has signed four Memorandums of Agreement (MOA) for management of the Sandy (Alder Creek), Clackamas, Molalla, and Little North Santiam watersheds. These watersheds contain the municipal water supplies for the towns of Sandy, Clackamas, Estacada, Lake Oswego, Oregon City, Molalla, Canby, and Salem. The agreements focus on cooperative water quality monitoring and communication regarding BLM management actions. These agreements will be considered for renewal in 2007.

Water Body Identification and Protection

The Salem District protects flood plains, wetlands, streams and lakes through implementation of the *Aquatic Conservation Strategy of the Northwest Forest Plan*. This is accomplished through on-the-ground identification of these water features and application of standards and guidelines appropriate for operation in and around these areas. Field mapping of water features is tracked within the Geographic Information System (GIS) hydrology theme. This data is integral to Northwest Forest Plan aquatic effectiveness monitoring, cumulative watershed assessments, and future project level planning.

Updated Watershed and Stream Information

The Salem District continued to update information on streams, lakes, and wetlands in a GIS theme. The

hydrography GIS theme is a digitized computer representation of streams, lakes, and wetlands containing information such as stream flow, fish distribution, fish species, and water quality. This information is essential for planning and implementing 2006 projects, as stream channels are within or adjacent to most actions on the district. This theme has been integrated with data from the Mt. Hood, Willamette, and Siuslaw national forests, and has been rectified for use with the watershed and sub-watershed (5th and 6th field) boundary themes.

Table 5 - Planning for Total Maximum Daily Loads (TMDLs)

Area	Stream Segment (303d Listing Parameter)	TMDL Status
Tualatin Sub-basin	East Fork Dairy Creek (temperature) McKay Creek (temperature)	TMDL Approved by Environmental Protection Agency (EPA) 8/7/01
Nestucca Bay Watershed, Tillamook Bay Watershed	Trask River (temperature) Wilson River (temperature) Nestucca River (temperature, sediment) East Fork Beaver Creek (sediment)	Nestucca: TMDL approved by EPA 5/13/02 Tillamook: TMDL approved by EPA 7/31/01
North Santiam Sub-basin	Little North Santiam (temperature) Elkhorn Creek (temperature) North Santiam River (temperature)	TMDL Approved by Environmental Protection Agency (EPA) 10/16/06
South Santiam Sub-basin	Thomas Creek (temperature) Hamilton Creek (temperature) Crabtree Creek (temperature) Quartzville Creek (temperature)	TMDL Approved by Environmental Protection Agency (EPA) 10/16/06
Clackamas Sub-basin	Clackamas River (temperature)	TMDL Approved by Environmental Protection Agency (EPA) 10/16/06
Middle Willamette Sub-basin	Rickreall Creek (temperature)	TMDL Approved by Environmental Protection Agency (EPA) 10/16/06
Upper Willamette Sub-basin	Marys River (temperature)	TMDL Approved by Environmental Protection Agency (EPA) 10/16/06
Alesia Sub-basin	Alesia River (temperature) Fall Creek (temperature) Lobster Creek (temperature) Little Lobster Creek (temperature)	Target year for TMDL completion: 2008
Siletz Sub-basin	Siletz River (temperature) Drift Creek (temperature)	Target year for TMDL completion: 2008
Yamhill Sub-basin	Mill Creek (temperature) North Yamhill River (temperature) Turner Creek (temperature)	Target year for TMDL completion: 2007
Molalla – Pudding Sub-basin	Molalla River (temperature) North Fork Molalla (temperature) Table Rock Fork (temperature) South Fork Molalla (temperature) Pine Creek (temperature)	Target year for TMDL completion: 2007
Sandy Basin	Salmon River (temperature) Sandy River (temperature)	TMDL Approved by EPA 4/14/05

Site Treatments

Accurate maps for project planning around fragile areas (i.e. wetlands, unstable, and potentially unstable slopes) are often not available until site-specific environmental analysis has occurred. As a result, management actions around fragile areas have primarily been conducted by identifying these areas on the ground and designing bmp to avoid and mitigate disturbance impacts.

Terrestrial Habitat

The type of work affecting wildlife and wildlife habitat depends on the land use allocation. Projects follow the recommendations identified in watershed analyses and Late-Successional Reserve (LSR) assessments.

Forest management activities in LSRs are designed to enhance late-successional forest characteristics for wildlife habitat. This habitat enhancement is for a variety of species from raptors to invertebrates. It also benefits fungi, bryophytes, and vascular plants.

Forest management actions within matrix allocations, which include General Forest Management Area (GFMA), Adaptive Management Area (AMA), and Connectivity areas, are designed to meet timber management objectives in conformance with RMP standards and guidelines. Green tree retention was completed on 54 acres of regeneration harvest in the Cascades Resource Area. The other two resource areas did not conduct any regeneration harvest.

The Salem District treated 1,337 acres to create snags to benefit primarily forest birds, bats, and aboreal rodents. About 812 acres were treated to create coarse woody debris (CWD) to benefit forest floor species such as mollusks and salamanders. These treatments included work in GFMA and reserves.

Connectivity/Diversity Blocks

Twenty acres of commercial variable density thinning was conducted in a connectivity/diversity block within the Lulay Camp timber sale area. in the Cascades Resource Area.

Special Habitats

Along the Sandy River, 70 acres of noxious weed control was conducted to prepare sites for planting. This was followed with native tree planting to enhance riparian zones.

Nest Sites, Activity Centers, and Rookeries

One new spotted owl activity center was discovered in the Cascades Resource Area. No new nest sites, activity centers, or rookeries were found in the other two resource areas. Existing known nesting trees were protected. Seasonal restrictions were placed on nearby projects to discourage nest abandonment for active nests, particularly for raptors and special status species like the spotted owl and marbled murrelet.

Since the inception of the 1995 RMP, the Salem District has established 79 spotted owl core areas (nest sites approximating 100 acres) totaling 8,312 acres. Most of these core areas lie within reserved land use categories. However, all or parts of 21 core areas totaling 1,913 acres occur on matrix lands, which have been reserved as unmapped LSRs.

The Salem District has also established unmapped LSRs to protect marbled murrelet nesting sites. There are 34 occupied marbled murrelet nest sites within the Coast Range of the Salem District. Some 6,340 acres of older forest habitat has been reserved to protect this occupied habitat; most of it occurring on reserved land-use allocations. However, all or parts of six occupied murrelet sites occur on matrix lands. This totals 383

acres that has been reserved as unmapped LSRs.

Tree topping was completed on 890 trees to provide nesting or perching structures for forest raptors.

Other than at the Horning Seed Orchard, no nest boxes or platforms have been installed since implementation of the RMP. In fiscal year 2006 at Horning, 167 nest boxes for insectivorous birds were installed as part of Horning's integrated pest management program. The boxes seem to be well used by violet green swallows and tree swallows. In total, 227 nest boxes are now installed at Horning.

Elk Habitat

Seven miles of road were decommissioned or obliterated to restore watershed conditions. About 7.5 miles of road were also closed. While elk are not the primary reason for decommissioning, obliterating, or closing roads, they benefit from less human induced disturbance when these kinds of actions are implemented.

Late-Successional Reserve Habitat Improvement

The Salem District implemented (*actual on-the-ground, not just sold and awarded*) 281 acres of density management treatment in three project areas. This was done to stimulate the development of old growth characteristics. The Re-Bear (237 acres) and Southern Flame 1 (13 acres) projects were in the Tillamook Resource Area. The Old Blue (31 acres) project was in the Marys Peak Resource Area. The district also completed 2,403 acres of pre-commercial thinning in very young stands in LSRs to accelerate the development of older forest structure.

Special Status Species

Wildlife

Surveys for special status or survey and manage wildlife species were completed prior to all ground disturbing activities. Some 7,955 acres of pre-project surveys were conducted, bringing the total from 1996 through 2006 to 98,618 acres. In addition, a purposive survey of amphibians and mollusks covering 1,350 acres was also completed in the Cascades Resource Area. A summary of this purposive survey effort is presented below:

Cascades Resource Area

Mollusk and Amphibian Species 2006 Purposive Survey Summary

Through a contract, 1,350 acres of purposive surveys were conducted in some of the most mature forest or wetland habitat in the north, middle, and southern portions of the Cascades Resource Area. The contractor provided all the services necessary to locate, collect and document the target species, using specifications contained in the contract and the Survey Protocol for Terrestrial Mollusk Species, Version 3.0. surveys were conducted in two general habitat types: open wet meadows and adjacent forested habitat; and interior forest. The goal was to complete two surveys for each site. The entire final report is available at the district office. The individual survey records (except for a few evening fieldslug records) have been entered into BLM's regional database (GeoBOB) for special status and survey and manage species. The following were target species:

<i>Species</i>	<i>SPCODE</i>	<i>Habitat</i>	<i>Microsite Features</i>	<i>Evidence</i>
<i>Deroceras hesperium</i> Evening fieldslug	<i>DEHE</i>	Moist forest types within 30 meters of water.	Variety of low shrubs, leaf litter, debris, and rocks.	Live animal
	Similar Species	<i>Deroceras laeve</i>		
<i>Cryptomastix devia</i> Puget Oregonian snail	<i>CRDE2</i>	Moist forests with hardwood component	Bigleaf maple, sword ferns, coarse woody debris	Live animal or empty shell
	Similar Species	<i>Cryptomastix hendersoni</i> , <i>Vespericola columbiana</i>		
<i>Gliabates oregonius</i> Axe-tail slug	<i>GLOR</i>	Moist forest types.	Snags, stumps, coarse woody debris.	Live animal
	Similar Species	Juvenile <i>Hemphillia malonei</i>		
<i>Prophysaon spp.</i> "spotted" taildropper slugs	<i>PROPHSP</i>	Moist forest types.	Snags, stumps, coarse woody debris, large sword ferns.	Live animal
	Similar Species	1 described and 1 undescribed <i>Prophysaon</i> species known		
<i>Batrachoseps wrightii</i> Oregon slender salamander	<i>BAWR</i>	Moist forest types.	Snags, stumps, coarse woody debris.	None required
	Similar Species	<i>None</i>		
<i>Plethodon larselii</i> Larch Mountain salamander	<i>PLLA</i>	Moist forest types.	Rocky substrate, coarse woody debris	Photo
	Similar Species	Any salamander species in the <i>Plethodon</i> genus		

Survey Limitations

Survey area accomplishments fell short of assignments due to:

- Late season snow and freezing conditions ending the fall/winter survey period in 2005;
- late winter snow hampering access for 2006 spring surveys, and;
- hot, dry conditions ending the spring/summer survey season in 2006.

This was not unanticipated, as these conditions may occur during any year in the western Cascade Mountains. Despite these limitations:

- All wet meadows were surveyed twice if necessary.
- All Sandy River Basin areas were surveyed twice.
- One Santiam River Basin survey area was surveyed once.
- 69 percent of Molalla River Basin sites were surveyed twice.

One assigned Molalla River Basin site was not surveyed due to access/safety concerns. The survey project manager authorized surveys to end in early July, 2006, when the contractor reported that conditions had become extremely hot and dry, detections had declined significantly, and travel within and between sites had become unsafe (due to extreme heat).

Observations

The Puget Oregonian snail was not detected in any of the Sandy River Basin survey areas. These survey areas represent the best BLM-managed habitat available in northern Clackamas and Multnomah counties within the suspected range of this species. It appears that the Puget Oregonian snail does not inhabit BLM land. The same could be stated for the Larch Mountain salamander. Although the best habitat was searched and the methodology should still have allowed adequate observation if present, the very intensive protocol for this species was not applied; thus the certainty of the lack of occurrence is not as strong.

Based on the frequency of detection (found at 44 sites, 120 individuals found during 254 survey hours) from this survey, the Oregon slender salamander appears to be about as common at the northern extreme of its natural range as it is in the heart of the range in southern Clackamas, Marion, and northern Linn counties. The detection rate (found at 9 sites, 10 animals found during 61 hours of survey effort) for the species was lower in the Molalla River Survey Area. Low detection was not unanticipated, since this large block of habitat is the result of stand-replacement wildfires which eliminated almost all large wood legacies... Detection rates (found at 19 sites, 49 individuals found during 69 hours of survey effort) in the Santiam River survey areas, much of it true old growth forest with abundant large woody material, was much higher.

Although a significant number of new sites (10) have been established for the axe-tail slug through this survey effort, it may be that little new specific habitat information can be teased-out of these locations. This species still appears to be associated primarily with conifer leaf litter, in which case, there remain large gaps in known distribution with little evidence to indicate the reason(s).

Deroceras species of some sort were detected at seven wet meadows. Six of those detections have been confirmed by taxa experts as new evening fieldslug (*Deroceras hesperium*) locations. The seventh detection was a meadow slug (*Deroceras laeve*). Since both native *Deroceras* slug species were unknown in the Cascades Resource Area, these new sites represent perhaps the most exciting finds of the purposive survey, providing the largest body of new habitat information for a species.

Five different species of tail droppers of the *Prophysaon* genus were encountered during this survey. None however were of the spotted variety. These results indicate most likely that the spotted tailedropper (*Prophysaon vanattae* var. *pardalis*) does not occur on BLM lands in the Cascades Resource Area.

Plants

Surveys, monitoring, and restoration activities were conducted for special status plant and fungi species. Species management was consistent with RMP direction for special status plant species. Surveys for special status and special attention species were completed prior to all ground disturbing activities. Some 4,200 acres of pre-project surveys for special status plant and fungi species were conducted, bringing the total to 63,200 acres.

TALL BUGBANE (*Cimicifuga elata*): Implementation of The Conservation Strategy for *Cimicifuga elata* (tall bugbane), developed by western Oregon BLM districts, national forests and the Army Corps of Engineers was continued. Three populations were monitored for general population and habitat health and were found to be in good condition.

NOBLE POLYPORE FUNGUS (*Bridgeoporus nobilissimus*): Salem BLM participated with the Willamette, Olympic, Gifford Pinchot, and Mt. Hood National Forests to calibrate a *Bridgeoporus nobilissimus* habitat model. Known site data was added to the model's data set from the Salem District because of the high number of acres which have already been inventoried for this species in the Salem District. The model did not do an adequate job of predicting high potential habitat areas for the northwestern Oregon Cascades. Additional calibration surveys and model runs will be needed for Salem to be able to use this habitat model for predicting areas of high potential *Bridgeoporus* habitat in the western Oregon Cascades.

RAMARIA PUBLICATIONS: The Salem District is home to several species of coral fungi which are included in both our survey and manage and SS lists. After a multi-year and interagency effort Ron Exeter

co-authored and arranged for the publication of *Ramaria of the Pacific Northwestern United States*. Ron also prepared *Ramaria: Trial Key to the Pacific Northwest Species*. Version ii. (November 2006 for the Pacific Northwest Key Council.

ELEGANT FAWN LILY Conservation Assessment (*Erythronium elegans*), was coordinated and written in fiscal year 2006. A genetic study for associated *Erythronium* species was also initiated.

Survey and Manage Species

On January 9, 2006, a U.S. District Court order in Northwest Ecosystem Alliance et al. v. Rey et al. set aside the *2004 Record of Decision To Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl (March, 2004)*. The court reinstated the *2001 Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines (January, 2001)*, including any amendments or modifications in effect as of March 21, 2004. The U.S. District Court subsequently modified this order to exempt four types of activities from the injunction such that the decision to eliminate the survey and manage provision is effective as to these activities. In general, these activities are described as thinning in stands of timber less than 80 years in age, stream improvement or restoration projects, road decommissioning, and fuel hazard reduction projects other than those that would involve harvest in timber stands greater than 80 years old. Also, subsequent to this court order in Klamath Siskiyou Wildlands Center et al. v. Boody et al., the Ninth Circuit held that the changes in survey and manage protection regarding the red tree vole resulting from the 2001 and 2003 Annual Species Reviews are invalid under the Federal Land Policy and Management Act (FLPMA) and the National Environmental Policy Act (NEPA). During fiscal year 2007, the *Final Supplement to the 2004 Supplemental Environmental Impact Statement to Remove or Modify the Survey and Manage Mitigation Measure Standards and Guidelines* will be released. The record of decision that will follow this document is expected to resolve the concerns raised in the court opinions.

The survey and manage program is being implemented according to direction specified in the court order and in BLM Instruction Memorandum OR-2006-029.

Survey and Manage Animals

The following activities for survey and manage animal species on Salem District were conducted:

OREGON RED TREE VOLE: Approximately 1,964 acres were surveyed to pre-project protocol standards for this species. Forty-nine active red tree vole nests were confirmed. Sixty-three inactive red tree vole nests were confirmed. In addition, purposive surveys for red tree voles were conducted on 500 acres; 18 new sites were confirmed as having red tree voles with 57 active red tree vole nests and 61 inactive nests.

MOLLUSKS: Approximately 2,811 acres were surveyed to protocol for five mollusk species identified as potential inhabitants of the Salem District. Some 920 acres of these 2,811 acres of survey were completed through the purposive survey for amphibians and mollusks in the Cascades Resource Area summarized earlier.

LARCH MOUNTAIN SALAMANDER: A habitat assessment was conducted on 1,800 acres of the Gordon Creek project area to determine if intensive surveys for this species were warranted. Suitable habitat was not discovered. In addition, the Larch Mountain salamander was a target species of the purposive survey for amphibians and mollusks in the Cascades Resource Area summarized earlier.

Survey and Manage Plants and Fungi

Survey and Manage botanical compliance was assured for projects planned during fiscal year 2006. Project compliance and surveys to protocol were accomplished in the same efforts with SS botanical work described above. Many botanical species including *Bridgeoporus nobilissimus*, *Ramaria* species, which had specific project accomplishments in 2006, described above, are included in the special status and survey and manage programs.

Threatened or Endangered Wildlife

Interagency teams continued using the Section 7 streamlined Endangered Species Act (ESA) consultation process. Level one teams, consisting of local employees from BLM, FS, and FWS regularly met to accomplish formal consultations. The ESA consultation for habitat modification projects on the Willamette and North Coast provinces to cover fiscal years 2007 and 2008 was completed through two batched biological assessments. This was followed by two biological opinions (formal consultation for likely to adversely affect actions) and two letters of concurrence (informal consultation for not likely to adversely affect actions). Programmatic consultations for disturbance-only activities on the Willamette and North Coast Provinces to cover fiscal years 2006 and 2007 were also completed. These programmatic or batched consultations help avoid numerous redundant consultation efforts for normal, repetitive actions. The biological opinions and letters of concurrence received from the FWS are used to plan projects for 2006 and beyond.

A project specific biological assessment and biological opinion was completed for the Maxfield Creek Meadow/Oak Woodland Restoration and Density Management Project. These documents addressed effects of planned restoration work on Fender's blue butterfly, Kincaid's lupine, northern spotted owl, and marbled murrelet.

BALD EAGLE: Five known bald eagle nesting sites were surveyed for activity and reproductive success; five adults and three nestlings were observed. In coordination with other federal and state agencies, winter bald eagle counts were completed on three designated routes; three adult eagles and one immature eagle were encountered. Three eagles were encountered at the largest known winter roost site on the Salem District.

MARBLED MURRELET: The Salem District has 34 known occupied murrelet sites in reserved land-use allocations of the Coast Range.

Two years of surveys are required for marbled murrelets on all projects that will modify suitable murrelet habitat in the Coast Range. From 1995 through 2006, surveys have been completed where required for specific projects, in accordance with established protocol. The Salem District conducted 33 surveys for marbled murrelets over 9 project areas covering 510 acres. None of these surveys detected murrelet presence.

Murrelet monitoring in known murrelet habitat was conducted at nine sites including Valley of the Giants (the habitat area on Salem District-managed lands with the known highest level murrelet use). Monitoring surveys (21) were completed covering 430 acres. Five of these surveys detected murrelet presence.

NORTHERN SPOTTED OWL: District-wide, 98 pre-project surveys for northern spotted owls were conducted over 17 project areas covering 12,900 acres. District-wide, monitoring of existing spotted owl sites was conducted on 76,200 acres. Forty-eight sites were occupied, three spotted owl fledglings were

produced, and twelve spotted owls were banded. Seventy-three barred owls were detected. Summaries by each resource area of their spotted owl survey results in 2006 are presented below:

Marys Peak Resource Area - Northern Spotted Owl 2006 Survey Summary

The Marys Peak Resource Area (MPRA) consists of 128,000 acres of Bureau of Land Management-managed land in Benton, Lincoln, and Polk counties. With the cooperation of timber companies, consultants, and Pacific Northwest Research Station (PNW), 43 spotted owl sites were monitored on BLM and adjacent landowners within the resource area. The PNW owl crew monitored 39 of these sites as part of their Coast Range Demographic Study. Several of those sites involved cooperative surveys with local landowners or their consultants. In addition, MPRA staff surveyed four spotted owl sites.

A total of 18 sites were occupied by spotted owls (13 pairs and 5 resident singles). Twenty-three sites had no occupancy by spotted owls, and two sites were occupied by spotted-barred owl hybrids. Thirty-one of the 43 owl sites had one or more barred owls detected. Only one spotted owl pair successfully nested, producing two juveniles that were banded. Two female spotted owls were also banded, and 25 previously banded spotted owls (16 male and 9 females) were confirmed by identification of their color bands.

Tillamook Resource Area – Northern Spotted Owl 2006 Survey Summary

The Tillamook Resource Area (TRA) consists of 106,000 acres of Bureau of Land Management (BLM) managed land in Clatsop, Columbia, Multnomah, Tillamook, Washington, and Yamhill counties. There are eleven active known or historic spotted owl sites located on or near BLM land within the TRA. These sites vary in current and historic occupancy status and monitoring history. During the 2006 survey season, five historic known spotted owl sites on BLM or on directly adjacent non-federal lands were monitored by our cooperators. The TRA also initiated an effort to resurvey a large block of BLM ownership. In addition, TRA staff conducted pre-project surveys associated with one commercial density management project.

With the cooperation of Oregon Department of Forestry, McMinnville Power and Light, Weyerhaeuser, and various consultants, five historic spotted owl sites were monitored on BLM and adjacent land within the TRA. The Clear Creek, Lower Wilson, and Moon Creek sites were surveyed by Kingfisher Ecological under contract for the Oregon Department of Forestry. Clear Creek and Moon Creek had no detections while Lower Wilson had a single female audible response. The Haskins Creek historic site was surveyed by ABR Inc. under contract for McMinnville Power and Light. A single female was visually detected and moused; nesting status was not verified and there were no other detections on other visits to this site. The historic core area of the Kutch Creek site was surveyed by Weyerhaeuser personnel to protocol with no detections.

The most noteworthy survey effort of the 2006 spotted owl survey season was an intensive survey of the Nestucca Block. This area of the TRA is primarily contiguous in BLM management within the LSR land use allocation that is designated as spotted owl critical habitat. It had been previously surveyed from 1990 to 1993 as part of a larger spotted owl density study. The 2006 survey effort consisted of three visits to 185 stations covering 11,000 acres. These stations were surveyed to protocol under a service contract by Merlin Biological. This survey is part of a two-year effort and the same areas will be surveyed again in 2007 to protocol. No spotted owls were detected during the three visits to the study area in 2006. At least ten barred owls were detected throughout the survey area, and a pair of barred owls with a juvenile was located near one of the survey stations. Interestingly, during the 1991-93 density study which covered a much larger area, there were seven spotted owl responses in 1991, and one response in 1992 and 1993. Not a single barred owl was detected during the previous Nestucca spotted owl density study conducted in this area from 1991-93.

The Flora and Fauna II density management project (640 acres) was surveyed to protocol by BLM personnel with no spotted owl and one barred owl detection.

Cascades Resource Area – Northern Spotted Owl 2006 Survey Summary

The Cascades Resource Area (CRA) consists of 175,000 acres of Bureau of Land Management (BLM) managed land in the Cascade Range of western Oregon, intermingled with state and private industrial landowners. In the CRA, because of the land pattern, comprehensive surveys are conducted in cooperation with the state and adjacent private landowners, with the intent of tracking spotted owl occupancy, nesting status, and reproductive success over time. This joint effort occurs across mixed ownerships with all parties contributing funding and in kind services to accomplish the workload.

The BLM awarded its Cascades Owl Survey contract to Environmental Services Northwest. This was the second year of protocol surveys in the Snow Peak, Quartzville, and Whitcomb Late-Successional Reserves (LSR) and surrounding matrix. The Gordon Creek area east of Portland was added to the survey contract. The contract contributed greatly to the coverage of suitable habitat in the cooperative area, by more than doubling the total survey acreage over previous years. Through this survey, coordination with state and adjacent private landowners has been greatly enhanced. This coordination is essential to planning projects that minimize impacts to spotted owls across the landscape; and for use in BLM's current resource planning effort. The new surveys greatly expanded the knowledge of spotted and barred owl locations and territories. The contract enabled the survey of 28,200 acres of suitable habitat that hasn't been surveyed to protocol for over 10 years. As a result, 26 historic and two new known spotted owl sites established in 2005 were surveyed for the second year of protocol survey. Of the 28 sites surveyed, 8 were occupied by pairs (30%), 8 were occupied by singles (30%), and there were no responses in 12 sites (40%). In addition, there were 3 pair and 10 single responses not associated with known spotted owl sites. These responses don't currently meet the criteria for the establishment of new known spotted owl sites, but could qualify if owls continue to be detected through additional surveys in the future.

In addition to the contract, BLM personnel surveyed seven known spotted owl sites and six proposed BLM project areas in Clackamas, Linn, and Marion counties. One spotted owl pair and four singles were located.

Some of the sites surveyed by BLM personnel and some surveyed through the contract were also surveyed by the Pacific Northwest Research Station. The objective was to acquire blood samples for genetic studies and banding birds. As a result, blood from nine birds was collected, eight birds were banded and two birds were recaptured.

The state of Oregon and private industry surveyed 24 known spotted owl sites and 8 project areas in the cooperative area. Five pairs and seven singles were located, and one new site on adjacent private lands was established.

During the course of the survey season, 60 known spotted owl sites were surveyed by state, federal, and private parties in the cooperative area. Of the 60 sites surveyed, 14 were occupied by pairs (23%), 14 were occupied by singles (23%), and there were no responses in 32 sites (54%). Twenty known spotted owl sites were not surveyed due to lack of funds and personnel; the majority of which are located in a BLM Late-Successional Reserve in the Molalla River Watershed.

This was the second consecutive year of poor reproduction for spotted owls in the cooperative area. In 2005, no known juveniles fledged, and three apparent nesting failures were documented in the cooperative area.

Only one known juvenile was fledged. The owls were not very responsive this year, and occupancy was difficult to establish.

In the cooperative area, barred owls were documented in 15 of the 60 known spotted owl sites surveyed this year as compared to 17 sites in 2005. The number of barred owl detections not associated with known spotted owl sites was 19 in 2006, compared to 14 in 2005. The number of nesting barred owls and juveniles fledged is unknown. Follow up visits are generally not conducted, and they don't readily take prey items from surveyors and deliver them to their nests.

Threatened or Endangered Plants

NELSON'S CHECKERMALLOW (*Sidalcea nelsoniana*). The BLM and the Berry Botanic Garden cooperated to continue monitoring the federally-threatened *Sidalcea nelsoniana* population and habitat at the Walker Flat Area of Critical Environmental Concern. The monitoring protocol and analysis methods used were initiated in 1997 and were repeated in 1998, 2003, and 2006. Among the most important information is simply the initial quantitative assessment of what the frequency and distribution of *Sidalcea nelsoniana* plants are at Walker Flat, and if they changed significantly between 1997 and either 1998, 2003 or 2006. Frequency of any *Sidalcea nelsoniana* plants (reproductive or vegetative) declined from 36%, to 34% to 28%, in 1997, 1998, and 2003 respectively, but rebounded to near original frequency (0.344) in 2006.

NELSON'S CHECKERMALLOW *Experimental Introduction Plan for Nelson's checker-mallow (Sidalcea nelsoniana)*. The BLM coordinated with the Berry Botanic Garden and the U.S. Fish and Wildlife Service to develop a detailed plan for the introduction of Nelson's checkermallow (*Sidalcea nelsoniana*) into a selected BLM-managed site in the Oregon Coast Range. Additional federally protected, established populations are needed in the Coast Range for the species to successfully recover. The Berry Botanic Garden will be submitting a report of the findings to the BLM in 2007.

Fisheries

The Salem District fisheries program continued the on-going work of implementing the aquatic portion of the Northwest Forest Plan. Major duties are divided among the following workloads: NEPA documentation, timber sales and other project reviews, watershed restoration, watershed analysis, inventory and data collection, biological assessment preparation, and Section 7 consultation with the National Marine Fisheries Service. Additionally, the district has been providing fisheries expertise to local watershed councils, in support of the state's Plan for Salmon and Watersheds. BLM biologists also participated in Oregon Trout's Salmon Watch environmental education program.

The Marys Peak Resource Area fish biologist provided assistance to the Klamath Falls Resource Area by preparing and providing expert witness testimony for the FERC Klamath Hydroelectric Project relicensing.

Fish Population Monitoring

Salem District personnel conducted spawning and salmonid adult surveys in coastal and Columbia Basin streams. Spawning and redd surveys targeted coho and chinook salmon and steelhead in the Nestucca, Trask, Wilson, Willamina, Dairy Creek, Alesa, Sandy, Clackamas, Little North Santiam, and South Santiam River basins.

The Salem District, in cooperation with Portland General Electric, Forest Service, USFWS, and ODFW, completed the tenth year of smolt monitoring for Lower Columbia River steelhead and coho in the Clackamas River Basin. This project operated six traps. The 19th year of smolt trapping to monitor Oregon Coastal coho in Lobster Creek (Alesa Watershed) was completed in cooperation with the ODFW. The Lobster Creek smolt monitoring project is the longest continuous fish production study in Oregon.

Habitat Restoration

INSTREAM: The Tillamook Resource Area completed another phase of a cooperative fish habitat and passage project with the Oregon Department of Forestry and the Tillamook Estuaries Partnership in the upper Trask River. Restoration work included planting and fencing along streambanks. District staff set up cross section surveys and photo points to monitor changes to habitat. An assistance agreement with the Nestucca Valley High School for educational outreach (Nestucca Connections) utilizes students to perform fish habitat restoration monitoring and enhancement projects. Students from Nestucca Connections assisted in collecting data and monitored recent restoration actions in the Nestucca Basin.

The Cascades Resource Area completed two restoration projects in the Wildwood Recreation Site. The first project put several whole trees into the Salmon River channel to improve rearing habitat. These trees were on an unstable cliff and presented a potential hazard to swimmers below. A second project utilized a volunteer group to add gravel to supplement spawning habitat in the side channel that runs through the site. Initial planning was started for a large wood placement project in the Little Sandy River prior to the removal of Little Sandy Diversion Dam in 2008. The primary objective of the project is to ensure that adequate structure is in place in the channel prior to dam removal. This will capture and retain a substantial amount of the riverbed sediments that are stored behind the dam. After the dam is removed, anadromous fish stocks will have access to habitat that has been blocked for nearly 100 years.

The Marys Peak Resource Area continues working with the Luckiamute Watershed Council to develop restoration projects. Grant applications were submitted for road and stream restoration projects in Maxfield Creek. Planning and NEPA preparation continued for the Wooden Lobster project in Lobster/Five Rivers Watershed. This cooperative project, funded by OWEB, will utilize a helicopter to place trees into several streams in the upper Lobster Creek Watershed in 2007.

FISH PASSAGE: The Salem District has been active in its efforts to identify and correct culverts that are barriers to fish passage. The Tillamook Resource Area completed its effort to survey all fish culverts to which the BLM had access in the Nestucca Watershed. In coordination with the Tillamook Estuary Partnership, a prioritization system for replacing barrier culverts has been developed and is available. Partnering agencies and organizations within the Nestucca watershed are now seeking funding to replace high priority culverts. Surveys of fish passage culverts for BLM-managed lands and participating industrial timber owners were completed in the Yamhill Basin and for BLM and county roads in the Dairy-McKay watersheds. A grant has been applied for to complete these surveys on other private lands within the Yamhill Basin. A barrier culvert in East Beaver Creek and in the Nestucca Basin was replaced. Additional design work was completed for replacement of two barrier culverts on Fan Creek, also in the Nestucca, and on Gooseneck Creek in the Yamhill Basin.

Threatened or Endangered Fish

Interagency teams continued using the Section 7 consultation streamlining process. The aquatic Level 1 team, consisting of members from the BLM, Forest Service, NMFS, and FWS, regularly met to assure consultation was accomplished efficiently. There are eight federally-listed fish species within the Salem District: Upper Willamette River spring chinook, Upper Willamette River winter steelhead, Lower Columbia River steelhead trout, Columbia River chum salmon, Lower Columbia River chinook salmon, Lower Columbia River coho salmon, Columbia River bull trout, and Oregon chub. Columbia River bull trout and Oregon chub are not found on BLM lands within the Salem District.

Endangered Species Act consultation was completed for two timber sales and a number of actions were

covered with a programmatic consultation. As a result of the new listings for hatchery stocks, Lower Columbia River coho salmon, and critical habitat, the Salem District reinitiated and completed consultation on four previously issued consultations. The Salem District, in coordination with the Eugene BLM, Willamette National Forest, Mt. Hood National Forest, NMFS, and USFWS, has been working on the development of a programmatic consultation for timber thinning sales in young stands. It is anticipated that this consultation will be completed in mid-2007.

BLM fish biologists participated as members of expert panels assessing limited factors for Lower Columbia River coho salmon, Upper Willamette River Chinook salmon, and Upper Willamette River steelhead. These efforts are being used in the development of recovery plans for these species. The Cascades Resource Area participated with the Sandy River Basin Partnership in the development of a restoration strategy for the Sandy River. They also worked with the Sandy River Monitoring Group to develop a monitoring strategy for the Sandy River following the removal of Marmot Dam.

Weed Management

The Salem District implemented the *Strategies for the Management and Control of Invasive Plant Species* on the Eugene and Salem districts (September 2003). The primary goal is to reduce the density, expansiveness and the impacts posed by invasive plant infestations so other resource management objectives can be successfully implemented. The Salem District continued to participate in the Northwest Oregon Weed Management Partnership, the Knotweed Working Group, and five cooperative weed management areas.

The Salem District continues to inventory BLM-managed land for noxious weeds through systematic surveys and risk assessments in the course of project planning. Infestations are reported to the Oregon Department of Agriculture and the district cooperates with the department and other partners to control infestations. Integrated pest management includes chemical, mechanical, manual, and biological methods used in accordance with BLM's *1985 Northwest Area Noxious Weed Control Program Environmental Impact Statement*, and the 1987 supplement, and respective records of decision. A summary of integrated weed management activities is provided in Table 6.

Noxious weed risk assessments have been integrated into all project clearance surveys which have averaged 5,500 acres over the last eleven years. In all, 7,850 acres were inventoried for noxious weeds in fiscal year 2006. The majority of new invader noxious weed sites have been found through systematic roadside and riparian inventories.

Table 6 - Management Actions to Control Noxious Weeds

Treatment	Species	Fiscal Year 96-05 Acres	Fiscal Year 2006 Acres
Mechanical	Scotch broom	1,433	302
	Canada thistle	831	115
	Himalayan blackberry	800	287
	Bull thistle	264	-
	St. John's wort	264	-
	Tansy ragwort	264	-

Treatment	Species	Fiscal Year 96-05 Acres	Fiscal Year 2006 Acres
Manual	Scotch broom	1,768	243
	Himalayan blackberry	692	233
	English ivy	40	-
	Meadow knapweed	15	1
	Spotted knapweed	14	1
	False brome	24	1
	Diffuse knapweed	1	-
	Japanese knotweed	19	1
	Gorse	10	-
	Canadian thistle	154	340
	Bull Thistle	104	300
	Tansy Ragwort	127	280
	Butterfly bush	1	-
	Reed canary grass	15	-
Biological (arthropods)	Scotch Broom	100s	100s
	Canada Thistle	500	500
	St. John's Wort	200	200
	Bull Thistle	250	250
	Tansy Ragwort	1,000s	1,000s
Biological (goats)	Scotch Broom	75	0
	Himalayan blackberry	75	0
Chemical	Knotweeds (Japanese, Giant, Bohemian)	36	8
	Quack grass	10	10
	Yellow hawkweed	1	1
	False brome	18	20
	Scotch broom	-	70
	Himalayan blackberry	-	70
	Spotted knapweed	-	1
	Tansy ragwort	-	15
	Canada thistle	-	25
	Bull thistle	-	15
	St. Johnswort	-	10

Special Areas Management

Areas of Critical Environmental Concern

The Salem District went through an Areas of Critical Environmental Concern (ACEC) nomination and interdisciplinary evaluation process in 2006 to determine if they met the required relevance and importance criteria for designation. Through this process eleven areas were determined to be potential ACECs. They are

now under interim management until a future planning decision is made to designate or not designate them as ACECs.

Twenty-four of the twenty-six existing ACECs were found to still meet the relevance and importance criteria needed for ACEC designation. Little Grass Mountain and the Sheridan Peak ACECs were found to no longer meet the relevance and importance criteria through the evaluation process.

Sixteen of the district's twenty-six ACECs were monitored and most were found to be in good or stable condition.

Permanent vegetation monitoring plots were established in the Little Sink, Forest Peak, Grass Mountain, and Saddlebag Mountain Research Natural Areas (RNAs). A supplemental guidebook was published and distributed for the High Peak – Moon Creek Research Natural Area. The plot baseline data collected and the supplemental guidebook provide useful information about the ecology and vegetative communities within the RNAs for prospective researchers and educators.

Cultural Resources

Twelve projects totaling 1,980 surveyed acres were inventoried for cultural sites prior to project implementation. Five projects totaling 47 surveyed acres were inventoried after project work was completed (post-project inventory). Six historic sites, Bridal Veil Lumber Company Railroad Logging Complex in the Gordon Creek Watershed, four historic dump sites, and one structural foundation) were recorded, evaluated, and found to be ineligible for the National Register of Historic Places. A "historically significant" historic isolate was also recorded.

The Salem District continued to actively promote appreciation of cultural resources through public education and interpretive programs. Fifteen public presentations, including staffed event exhibits, were made by the district cultural resources staff. These presentations reached 2,323 people. Three unstaffed exhibits at schools were viewed by an estimated 475 students. The Salem District continued to distribute the Exploring Oregon's Past Teacher's Activity Guide statewide by teacher request.

The Salem District represented Oregon BLM on the Oregon Archeology Celebration (OAC) Steering Committee, co-chairing the committee with the U.S. Fish and Wildlife Regional office. To publicize OAC 2006, the Salem District distributed posters and calendars of events to over 1,200 locations including all Salem-Keizer schools, all schools in Marion, Polk, Yamhill, Umatilla, Wallowa, Union, and Morrow counties, all branches of the Washington County Library, nine units of the National Park Service in or adjacent to Oregon, and to over 900 schools, teachers, and museums statewide. The Salem District conducted three of the 50 OAC events.

Cumulative Totals Fiscal Years 96-06

Public education and interpretative programs	298
People directly reached by these programs	15,223
Teacher workshops held	28
Teachers attending workshops	476
Teacher's activity guides distributed	3,320
Years co-chaired OAC	8
Number of locations OAC materials distributed	11,181
Traveling displays developed	13
Permanent displays developed	10

Visual Resources

Visual resource management guidelines continued to be implemented as part of all reviewed projects and actions.

Rural Interface Areas

Field offices review projects to determine if they are within a designated rural interface area. If appropriate, project designs may be revised or mitigating measures incorporated to reduce the effects to neighboring land owners.

Socioeconomic Conditions

The Salem District continues to successfully contribute to local, state, national and international economies through monetary payments, sustainable use of BLM-managed lands and resources, and use of innovative contracting as well as other implementation strategies.

Monetary Payments

The Bureau of Land Management contributes financially to the local economy in a variety of ways. One of these ways is through financial payments. They include Payments in Lieu of Taxes, Oregon and California (O&C) payments, and Coos Bay Wagon Road (CBWR) payments. Payments of each type were made as directed in current legislation. The specific amounts paid to the counties under each revenue sharing program are displayed in Table 8. A description of each type of payment program is described below.

Payments in Lieu of Taxes

Payments in Lieu of Taxes (PILT) are federal payments made annually to local governments that help offset losses in property taxes due to nontaxable federal lands within their boundaries. The key law that implements the payments is Public Law 94-565, dated October 20, 1976. This law was rewritten and amended by Public Law 97-258 on September 13, 1982 and codified as Chapter 69, Title 31 of the United States Code. The law recognizes that the inability of local governments to collect property taxes on federally-owned land can create a financial impact.

Payments in Lieu of Taxes help local governments carry out such vital services as firefighting and police protection, construction of public schools and roads, and search and rescue operations. These payments are one of the ways the federal government can fulfill its role of being a good neighbor to local communities. This is an especially important role for the BLM, which manages more public land than any other federal agency.

Payments to Counties

Payments are made to counties under *The Secure Rural Schools and Community Self-Determination Act of 2000*. The purpose of the act is "To restore stability and predictability to the annual payments made to states and counties containing National Forest System lands and public domain lands managed by the BLM for use by the counties for the benefit of public schools, roads, and other purposes." The public domain land managed by the BLM refers only to Oregon and California Revested Grant lands (O&C) and Coos Bay Wagon Road Lands (CBWR). The O&C lands consist of approximately 2.5 million acres of federally-owned forest lands in 18 western Oregon counties including approximately 74,500 acres of Coos Bay Wagon Road Lands in the Coos Bay and Roseburg BLM districts.

This was the sixth year that payments were made to western Oregon counties under the *Secure Rural Schools and Community Self-Determination Act of 2000* (P.L. 106-393). Counties made elections to receive the standard O&C and CBWR payment as calculated under the Act of August 28, 1937 or the Act of May

24, 1939, or the calculated full payment amount as determined under P.L. 106-393. All counties in the Salem District elected to receive payments under the new legislation. Beginning in fiscal year 2001 and continuing through sunset of September 30, 2006, payments were made based on historic O&C and CBWR payments to the counties. Table 7 displays the statewide payments made under each Title of P.L. 106-393 as well as the grand total. Actual payments made in 2006 for fiscal year 2007 projects were distributed October 24, 2006.

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

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

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

**Table7-Total Payments,
Total Acres by State/County and BLM Acres
Summary by State and County
Fiscal Year 2006
OREGON**

County	Payment	Total Acres
BAKER	\$367,039	1,020,642
BENTON	\$4,108	20,301
CLACKAMAS	\$105,832	522,983
CLATSOP	\$7,611	1,348
COLUMBIA	\$0	1
COOS	\$13,670	67,553
CROOK	\$190,183	939,816
CURRY	\$119,684	591,437
DESCHUTES	\$289,911	1,432,636
DOUGLAS	\$192,091	949,242
GILLIAM	\$48,218	34,616
GRANT	\$354,585	1,752,233
HARNEY	\$600,090	4,465,166
HOOD RIVER	\$41,641	205,773
JACKSON	\$93,214	460,631
JEFFERSON	\$60,119	297,088
JOSEPHINE	\$70,839	350,063
KLAMATH	\$437,002	2,159,510
LAKE	\$600,090	3,703,245
LANE	\$277,201	1,369,828
LINCOLN	\$37,326	184,449
LINN	\$96,328	476,021
MALHEUR	\$1,474,780	4,298,133
MARION	\$41,363	204,378
MORROW	\$38,628	149,960
MULTNOMAH	\$15,365	75,930
POLK	\$0	435
SHERMAN	\$76,763	53,672
TILLAMOOK	\$18,802	92,913
UMATILLA	\$141,707	419,206
UNION	\$429,941	624,346
WALLOWA	\$236,408	1,168,165
WASCO	\$44,845	221,611
WASHINGTON	\$3,777	2,604
WHEELER	\$61,098	301,926
YAMHILL	\$5,219	25,790
TOTAL	\$6,595,478	28,643,651

Table 8-Fiscal Year 2006 Secure Rural Schools Payments to Counties

County	Title I Paid to County	Title III Paid to County	Total Paid to County	Title II Retained By BLM	Grand Total
Benton	\$2,772,872.51	\$440,397.40	\$3,213,269.91	\$48,933.04	\$3,262,202.95
Clackamas	\$5,476,669.89	\$715,188.66	\$6,191,858.55	\$251,282.50	\$6,443,141.05
Columbia	\$2,032,781.97	\$240,346.58	\$2,273,128.55	\$118,379.66	\$2,391,508.21
Coos	\$5,822,045.47	\$462,338.91	\$6,284,384.38	\$565,080.88	\$6,849,465.26
Coos (CBWR)	\$728,877.97	\$57,881.49	\$786,759.46	\$70,744.04	\$857,503.50
Curry	\$3,601,773.89	\$286,023.22	\$3,887,797.11	\$349,583.94	\$4,237,381.05
Douglas	\$24,719,023.57	\$1,090,545.16	\$25,809,568.73	\$3,271,635.47	9,081,204.20
Douglas (CBWR)	\$131,764.34	\$5,813.13	\$137,577.47	\$17,439.40	\$155,016.87
Jackson	\$15,462,958.06	\$1,364,378.65	\$16,827,336.71	\$1,364,378.65	\$18,191,715.36
Josephine	\$11,920,391.41	\$2,103,598.48	\$14,023,989.89	\$0.00	\$14,023,989.89
Klamath	\$2,309,082.44	\$81,497.03	\$2,390,579.47	\$325,988.11	\$2,716,567.58
Lane	\$15,068,243.11	\$1,356,141.88	\$16,424,384.99	\$1,302,959.85	\$17,727,344.84
Lincoln	\$355,243.45	\$37,614.01	\$392,857.46	\$25,076.01	\$417,933.47
Linn	\$2,605,118.65	\$229,863.41	\$2,834,982.06	\$229,863.41	\$3,064,845.47
Marion	\$1,440,709.55	\$190,682.15	\$1,631,391.70	\$63,560.72	\$1,694,952.42
Multnomah	\$1,075,598.23	\$172,811.45	\$1,248,409.68	\$17,000.00	\$1,265,409.68
Polk	\$2,131,460.71	\$319,719.11	\$2,451,179.82	\$56,421.02	\$2,507,600.84
Tillamook	\$552,600.93	\$32,668.47	\$585,269.40	\$64,849.34	\$650,118.74
Washington	\$621,676.04	\$0.00	\$621,676.04	\$109,707.54	\$731,383.58
Yamhill	\$710,486.91	\$125,380.04	\$835,866.95	\$0.00	\$835,866.95
Total	\$99,539,379.10	\$9,312,889.23	\$108,852,268.33	\$8,252,883.58	\$17,105,151.91
				CBWR	\$1,012,520.37
				O&C	\$16,092,631.54
					\$17,105,151.91

Environmental Justice

Executive Order 12898 of February 11, 1994, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" directs all federal agencies to "...make achieving environmental justice part of its mission by identifying and addressing ...disproportionately high and adverse human health or environmental effects of its programs, policies and activities." Projects with possible effects on minority and/or low-income populations are analyzed during the NEPA process to identify, avoid or reduce disproportionately high and adverse human health or environmental effects.

Recreation

Recreation visitation on all BLM-managed lands in the Salem District was estimated to be over 1.5 million visitors. Almost a third of these were users who visited the 18 developed day use and overnight recreation sites on the district.

Recreation Pipeline Funds

Additional appropriations were provided by Congress to accomplish needed recreation maintenance, repairs, and improvements which had been postponed due to reduced funding over several years. These are referred to as Recreation Pipeline funds. Table 9 shows how Salem utilized these funds.

Table 9 - Recreation Pipeline Projects for Fiscal Year 2006

Project Area	Project Description	Dollars Expended*
Wildwood Recreation Site (H201)	Replacement picnic tables, volunteer housing upgrade, trail maintenance power carriers, fish viewing window drain repair, restroom repair.	\$301,450
Nestucca Off-Highway Vehicle Area (H205)	Trail hardening, sign replacement, and other improvements. Roof replacement for restrooms/rental equipment.	\$35,000
Molalla Recreation Corridor (H207)	Volunteer host site upgrade/water system.	\$6,150
Total:		\$342,600

* Costs include administrative overhead/labor costs

Recreation Fee Program

Table 10 shows how the Salem District used fee program funds in fiscal year 2006.

Table 10 - Fee Site Expenditures Fiscal Year 2006

Site Name	Description	Dollars
Yaquina Head Outstanding Natural Area	Operation and maintenance of facilities, visitor services, and interpretative programs.	\$375,338
Nestucca River Recreation Sites	Operation and maintenance of facilities and visitor services.	\$6,953
Fishermen's Bend Recreation Complex	Operation and maintenance of facilities and visitor services.	\$199,839
Wildwood Recreation Site	Operation and maintenance of facilities and visitor services.	\$43,339
Total: \$625,469		

Recreation Passes

Now in its third year, state and federal agencies in Washington and Oregon are collectively offering the Washington and Oregon Recreation Pass. This is a convenient day-use recreation pass which is honored at the majority of agency sites within the region, including all fee sites on the Salem District. This pass is an add-on to the existing Golden Eagle Passport, reducing the need to purchase multiple passes, while providing a cost savings to the avid recreational user. This pass can also be added-on to the National Parks Pass with the Golden Eagle Hologram. In January of 2007, the national Golden Eagle, Golden Age, and Golden Access passes will be replaced by a new national pass called "America the Beautiful – National Parks & Federal Recreational Lands Pass.

National Landscape Conservation System Units

In 1996, the BLM established the National Landscape Conservation System. The Salem District manages several units. They include:

Yaquina Head Outstanding Natural Area: The area continued to be managed to protect and conserve the area's unique scenic, scientific, cultural, historic, educational, natural, and recreational values. Efforts are underway to write a new management plan for Yaquina Head. A major renovation and restoration project was completed on the historic Yaquina Head lighthouse.

Wild and Scenic Rivers: This consists of BLM-managed lands within the designated corridor boundaries of the Sandy, Clackamas, Salmon, Elkhorn Creek, and Quartzville Creek National Wild and Scenic Rivers (WSRs). The BLM continued to protect each river's "Outstandingly Remarkable Values." The visitor contact and volunteer corridor host program was continued along the Quartzville Creek WSR to encourage appropriate use ethics among visitors to the river. The BLM provided input to the Oregon Parks and Recreation Department's Scenic Waterways Program, on private development proposals within the Sandy and Salmon River's WSR boundary. They also worked with several partners including Portland Metro and the River Conservancy on a comprehensive Sandy River conservation and land acquisition strategy.

Wilderness: Several groups such as the Mazamas, Back Country Horsemen, American Hiking Society, and Molalla RiverWatch along with several other volunteers, continued to help maintain 16 miles of trails in the Table Rock Wilderness. The Northwest Youth Corp. performed 2,500 feet of trail maintenance and realignment work on the existing Saddle Trail.

Recreation Partnerships and Special Events

The recreation program greatly depends on special events and partnerships to maintain high quality recreation facilities, trails, services, and programs. Some of the events include National Trails Day, National Public Lands Day, Earth Day, annual river clean-ups, and several other less formal work party events. These special events and work parties would not be successful without the assistance of partners. Some of these partners include: Molalla RiverWatch, American Wildlife Foundation, Wolfree Inc., Pechuck Lookouts, boy scout troops, Applegate Rough Riders Motorcycle Club, Northwest and Linn County youth crews, Clackamas County Environmental Youth Corp, AmeriCorp, volunteer hosts, and other individuals who lend their enthusiastic help throughout the year. Friends of Yaquina Lighthouses work with the BLM at the Yaquina Head Outstanding Natural Area to assist in preserving and interpreting the Yaquina Head lighthouse and surrounding area. Friends of Yaquina Lighthouses contributed \$20,000 towards the documentation of the lighthouse restoration project.

Other partnerships include the involvement and cooperation with other federal land management agencies such as the U.S. Forest Service and U.S. Army Corp. of Engineers.

Other Recreation Management Areas

Molalla River Recreation Corridor: The visitor contact program helped encourage appropriate use ethics among visitors to the river. Natural rock and vegetative barriers, adjacent to several designated dispersed campsites along the river corridor, were maintained to better define parking and reduce impacts to riparian vegetation. Impacted areas behind the barriers are being rehabilitated with plantings of trees and shrubs. Molalla River Watch continued their role in helping to organize fall and spring volunteer river cleanups. They also hosted tours to educate the public about the natural resources and management challenges along

the river. Todos Juntos, a local non-profit organization that serves the Hispanic youth of the area, performed multiple service projects including campsite cleaning, noxious weed removal, and replanting of native plants in the corridor. Santiam Crossing, a local wilderness therapy organization, completed several service projects.

Larch Mountain Environmental Education Site: Approximately 500 students participated in natural resource education programs in partnership with the Corbett School District.

Aquila Vista Environmental Education Site: Located in the Molalla River Recreation Corridor, the BLM hosted 400 students and adults who participated in natural resource education programs provided in partnership with Molalla RiverWatch, the Molalla School District, and the American Wildlife Foundation. Several groups such as the boy scouts helped with improvements and maintenance of the site. A youth crew, funded with Title II funds of the *Secure Rural Schools & Community Self Determination Act of 2000*, and Northwest Youth Corp. helped improve trails to make them more accessible for visitors and participants in educational activities.

Pechuck Lookout

Located just outside the Table Rock Wilderness, Pechuck Historic Lookout is a popular attraction to those hiking in and near the wilderness. The Salem District, with the help of a volunteer group, the “Pechuck Lookouts,” completed annual maintenance on the lookout plus trail maintenance to the lookout.

Non-Motorized Trails

Molalla Shared-Use Trail System: Twenty-five miles of trails were maintained in this popular trail system. Monthly trail work parties hosted by our partner Molalla RiverWatch, remain successful; and volunteer numbers are increasing. Other volunteer trail maintenance groups included the Molalla Youth Conservation Corps, Portland United Mountain Peddlers, Oregon Equestrian Trails, and the Oregon State Hospital’s Youth Outdoor Group. The Horse, Hiker and Mountain Biker Annual Ride, a partnership event between the BLM, the Molalla Saddle Club and Molalla RiverWatch had a great turnout with over 100 participants. All of the monies generated from this event are directly returned to the shared-use trail system.

Baty Butte/Silver King Trail: Staff and several volunteers helped complete 10 miles of trail maintenance on this historic trail system.

Motorized Roads and Trails

Off-Highway Vehicle Areas (OHVs)

Approximately 140 people participated in OHV events this year, with over 5,200 people visiting the Upper Nestucca OHV trail system. The Salem District worked in partnership with the Applegate Rough Riders to maintain 25 miles of trail in the Nestucca Trail System.

Back Country Byways

The Salem District continued to maintain signs and facilities along the Quartzville, South Fork Alsea, and the Nestucca National Back Country Byway.

Forest Management and Timber Resources

Timber Harvest Activities

The Salem District offered 36.5 million board feet (MMBF) of timber for sale, plus 5.6 MMBF of previously offered volume. The 28.1 MMBF of allowable sale quantity (ASQ) offered timber represents 80.7 percent of Salem’s 34.8 MMBF yearly ASQ. In addition to the ASQ volume, it also offered 8.4 MMBF of Settlement Agreement volume from Late-Successional Reserves.

Cumulative information on timber harvest acres, volumes, and harvest types are shown in Tables 11-14.

Except for the district declared allowable sale quantity, projections made in the Resource Management Plan (RMP) are not intended as management action/direction, but rather are underlying RMP assumptions. Projected levels of activities are the approximate level expected to support the ASQ.

Continuing unresolved litigation and reduced budgets have limited the ability to offer timber sales at the level anticipated by the RMP. It is not possible at this time to accurately predict the duration or effect of these short-term uncertainties on the long-term ability to implement the underlying assumptions that form the basis of the allowable sale quantity. Therefore, changes to the RMP based on the inability to implement timber resources decisions, and assumptions in fiscal year 2006, would be premature at this time. These circumstances will be more closely examined during the ongoing Western Oregon Plan Revision process.

Table 11- Summary of Volume Sold			
Sold ASQ/Non ASQ Volume (MMBF)	FY 2006	Total FY 2005 - 2006	FY 2005 – 2014 Decadal Projection
ASQ Volume (Harvest Land Base)	28.1	54.2	348 *
Non-ASQ - Volume (Reserves)	8.4	20.2	0 *
Total	36.5	74.4	348
Sold Unawarded as of 9/30/06) Sold ASQ/Non ASQ Volume (MMBF)	FY 2006	Total FY 2005 - 2006	FY 2005 – 2014 Decadal Projection
ASQ Volume (Harvest Land Base)	9.1	NA	NA * **
Non-ASQ - Volume (Reserves)	0.0	NA	NA
Total	9.1	NA	NA

Table 12 - Volume And Acres Sold By Allocation			
ASQ Volume - MMBF (Harvest Land Base)	FY 2006	Total FY 2005 - 2006	FY 2005 - 2014 Decadal Projection
Matrix	27.5	43.7	328.6 *
Adaptive Management Area	0.6	10.5	19.5 *
ASQ Acres -(Harvest Land Base)			
Matrix	1,190	2,005	9,214 *
Adaptive Management Area	2	487	2,141 *
ASQ Volume - MMBF (Key Watersheds)			
Key Watershed	0	0	32

Table 13 - Timber Sales Sold By Harvest Types			
ASQ Volume - MMBF (Harvest Land Base)	FY 2006	Total FY 2005 - 2006	FY 2005 - 2014 Decadal Projection
Regeneration Harvest	3.7	5.2	298.6 *
Commercial Thinning & Density Management	24.4	48.8	49.5 *
Other (Mortality Salvage)	0.0	0.2	0.0
Total	28.1	54.2	348.1 *
ASQ Acres -(Harvest Land Base)			
Regeneration Harvest	125	168	5,558 *
Commercial Thinning & Density Management	1,097	2,352	5,797 *
Other (Mortality Salvage)	2	4	0
Total	1,224	2,524	11,355
Reserve Acres			
Late-Successional Reserves	445	949	1,456
Riparian Reserves	447	683	892 ***
Other Withdrawn Lands	0	0	50
Total	892	1,632	2,398

Table 14 - Timber Sale Acres Sold By Age Class			
			FY 2005 - 2014 Decadal Projection
Regeneration Harvest (Harvest Land Base)	FY 2006	Total FY 2005 - 2006	
0-79 Years	124	157	880
80-149 Years	1	11	4,035
150-199 Years	0	0	175
200+ Years	0	0	468
Total	125	168	5,558
			FY 2005 - 2014 Decadal Projection
Density Management / Commercial Thinning (Harvest Land Base)	FY 2006	Total FY 2005 - 2006	
0-79 Years	804	1,514	5,647 *
80-149 Years	293	838	150 *
150-199 Years	0	0	0
200+ Years	0	0	0
Total	1,097	2,352	5,797 *
			FY 2005 - 2014 Decadal Projection
Mortality Salvage & Other (Harvest Land Base)	FY 2006	Total FY 2005 - 2006	
0-79 Years	2	4	0
80-149 Years	0	0	0
150-199 Years	0	0	0
200+ Years	0	0	0
Total	2	4	0
* Includes Riparian Reserve volume and/or acres that are associated with the major land base allocation.			
** Consists of the following sales: Clear Dodger (1.7 MMBF), and Pig's Puzzle (7.4 MMBF).			
*** This information is also contained in the information for the land use allocation that the Riparian Reserve is associated with.			

Silvicultural Practices

Silvicultural accomplishments were diverse and addressed a range of forest management challenges. Silvicultural activities for the year are summarized in Table 15.

Table 15 - Silviculture Practices - Model Projections vs. Actual

Silvicultural Practice	Annual Projected Amount (acres)	Actual Amount (Acres)	Actual Amount (Acres)	Actual Amount (Acres)	Actual Amount (Acres)	Actual Amount (Acres)	Actual Amount (Acres)	Actual Amount (Acres)	Actual Amount (Acres)	Actual Amount (Acres)	Actual Amount (Acres)	Actual Amount (Acres)	Actual Amount (Acres)	Total Acres Treated
		FY 95 (part)	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 95-FY 06
Site Preparation - Prescribed Fire*	480	88	183	263	330	245	284	229	116	75	168	19	134	2,134
Site Preparation - Other*	590	157	224	646	220	642	730	334	295	155	162	185	112	3,862
Maintenance / Protection**1	3,130	3,907	2,632	2,399	2,244	2,102	2,906	3,086	2,861	3,011	2,754	1,911	1,784	31,597
Release / Pre-commercial Thinning (PCT)**	2,970	1,419	2,609	1,250	1,172	1,330	711	1,962	2,563	3,506	3,836	4,448	3,242	28,048
Stand Conversion**	90	5	0	0	0	0	50	0	0	129	0	10	0	194
Plant Regular Stock*	480	0	478	520	343	382	577	490	511	366	407	271	200	4,545
Plant Genetic Stock*	450	0	156	131	186	345	169	212	167	75	114	93	19	1,667
Fertilization*	600	0	0	0	1,671	2,974	0	0	0	0	0	0	0	4,645
Pruning ²	None	14	113	0	158	65	0	0	151	0	0	82	77	660

1 Includes pruning for disease control (FY'06 = 279, FY'95 – FY'06 = 2081).

2 Includes pruning for wood quality only (no pruning for disease control, see 1).

*These items are directly related to acres harvested. Funding was sufficient to complete all available acres.

**These items are related to need and budget levels. Actual amounts vary from year to year.

NOTE: This table displays treatment acres differently than the 1995 - 1999 editions of the APS. This difference is the result of using a more consistent methodology for sorting treatment acres into various practices and fiscal years.

Table 16- Site Preparation Fuel Treatments by Land Use Allocation

Land Use Allocation	Matrix (GFMA)	Connectivity	AMA	LSR	Other	Total
Fire Treatment Acres	253	0	37	44	0	334
Other Treatment Acres	0	0	24	85	3	112
Total	253	0	61	129	3	446

Special Forest Products

A total of 350 contracts for special forest products were issued. The contracts resulted in \$21,810 in receipts. Mushroom sales accounted for the greatest number of permits. However, the greatest amount of product (103,700 pounds) was for boughs, and the largest amount of receipts (\$12,054) was also for bough products. Appendix 3 summarizes the special forest products sales for fiscal year 2006.

Energy and Minerals

It is the policy of the BLM to make mineral resources available to the public, including commercial users.

Locatable Minerals

No applications or of plans of operation were received for locatable minerals on the Salem District in 2006.

Leaseable Minerals

Bureau of Land Management State Office geologists manage the Bureau's oil and gas program for the Salem District. There is no oil and gas production on public lands within the Salem District. The Mist Field near Portland is being used for natural gas storage. No applications were received for permits to drill for oil and gas on land within the Salem District.

Saleable Minerals

The Salem District issued 5 permits to sell 5,024 cubic yards of mineral material (rock).

Wind Energy

The Bureau completed an Environmental Impact Statement (EIS) for wind energy development on BLM lands nationwide. The BLM also identified potential transmission line corridors which would allow development of high potential sites. The EIS simultaneously amended all BLM resource management plans to allow wind energy development. Although a small number of high potential sites are located in the Salem District, the lack of near by existing transmission line facilities will likely preclude their development in the near future.

Lands and Realty Program

The BLM's Lands and Realty Program consists of the following general categories or subject areas:

- Rights-of-Way (including communication use leases)
- Land Leases
- Recreation & Public Purpose Leases
- Land Tenure Adjustments (Purchases, Sales and Exchanges)
- Compliance

- Trespass Abatement
- Withdrawals

Uses of public land in the Lands and Realty Program must be consistent with a land use plan. According to provisions of the Federal Land Policy and Management Act of 1976, unless specifically reduced or waived by statute or regulation, the BLM is required to charge public land users fair market value for public lands and resources.

Right-of-Way Grants

Ten individual right-of-way grants were issued for a total of 94 since fiscal year 1995. One right-of-way grant was amended.

Land Leases

Three new communication use leases were issued.

Recreation and Public Purposes Leases (R&PP)

The Salem District has nine active R&PP leases. Since fiscal year 1995, one R&PP lease and one R&PP patent have been issued.

Land Tenure Adjustments

The BLM acquires and disposes lands to support a variety of recreation and resource program objectives. Refer to Appendix 4 for a summary of completed land acquisitions by exchanges or purchase and to Appendix 5 for a summary of completed land sales.

Acquisitions

The Salem District purchased two parcels totaling 125.4 acres in the Mt. Hood Corridor along the Sandy River. These acquisitions were made with Land and Water Conservation Fund monies. They are intended to protect the visual resources of the area and to protect the land from development. Since the Sandy River acquisition project began in 2001, the BLM has acquired 15 parcels totaling 2,233.9 acres at a cost of \$8,460,000.

Exchanges

No land exchanges were completed. Since implementation of the RMP, 4,524 acres have been acquired by the BLM in seven land exchanges; 2,240 acres have been conveyed out of federal ownership by exchange.

Sales

No land sales were completed. Since fiscal year 1995, 16 sales have resulted in conveyance of 15.82 acres.

Withdrawals

Staff work, including a minerals report for a minerals withdrawal for public land along Quartzville Creek was completed. The withdrawal would replace a Recreation & Public Purpose lease issued to Lane County which segregated and closed the land to mining claim location. The withdrawal is the more appropriate way to segregate and close land to mining claim location. The land along Quartzville Creek will remain open to recreational prospecting and gold mining. The withdrawal petition/application has been approved by the BLM's Washington, D. C. Office and has been forwarded to the Secretary of Interior's Office for further review and action.

No withdrawals were revoked. Since fiscal year 1995, three withdrawal applications have been processed.

Compliance

The Salem District completed 18 compliance inspections on a variety of right-of-way grants, leases, and permits.

Trespass Abatement

Nine trespass cases were completed.

O&C Revested Lands Access and Transportation Rights-Of-Way Program

The O&C Revested Lands Access and Transportation Rights-of-Way Program facilitates the management and sale of BLM timber and timber owned by private companies and individuals. Access, whether acquired by the BLM to cross non-BLM lands, or by private landowners to cross BLM lands, is accomplished through reciprocal right-of-way agreements, road easements, unilateral O&C road use permits, and license agreements. These instruments facilitate access to public and private timberlands across the complex checkerboard ownership pattern of Salem District BLM-managed lands.

According to the BLM's new right-of-way regulations, the O&C program is exempt from recovery of processing and monitoring costs.

Reciprocal Right-of-Way Agreements

Agreements are amended primarily when either party desires to add land or interests in land to the agreement. Permits are assigned when a private property owner (permittee) conveys land or interests in land to third parties.

Ten amendments were completed. Work continued on amendments required to eliminate duplicate acreage and to update and conform land schedules for agreements affected by the 2002 Weyerhaeuser/Willamette Industries merger. Amendments are being prepared to consolidate seven Weyerhaeuser/Willamette agreements into three agreements. There have been 67 amendments since implementation of the RMP.

The Salem District completed 11 assignments of right-of-way agreements where ownership of private lands had changed.

The Salem District has entered into and administers 91 reciprocal right-of-way agreements. One new right-of-way agreement was completed.

Unilateral O&C Road Use Permits

The Salem District issued 23 unilateral road use permits.

Road Easements

The Salem District has obtained and manages 505 road easements. No easements were acquired in fiscal year 2006.

License Agreements

Eight license agreements were issued.

Transportation and Roads

The Salem District road system encompasses approximately 2,400 miles of road. Roads decommissioned or obliterated are still included in BLM's road data base. They remain unuseable. Funding levels for road maintenance are not adequate to maintain this system. The Salem District deferred maintenance on approximately 1,700 miles of little used road. Maintenance Level 4 and 5 roads are maintained yearly because they are used more often. The goal of the Salem District is to maintain system roads other than the maintenance Level 4 and 5 roads on a three-year cycle. With current funding this cycle cannot be met.

Road maintenance personnel performed maintenance on 500 to 600 miles of road. This maintenance consisted of blading gravel roads (107 miles), cutting brush to increase visibility (184 miles), cleaning ditches to allow water to freely flow (322 miles), and right-of-way cleaning (removing slide or slough material) (10,436 cubic yards). Other types of maintenance such as bridge deck cleaning (77), culvert cleaning (633), culvert replacement (1,058 liner feet), surface rock replacement (2,924 cubic yards), road shoulder maintenance, and removing vegetation blown down on roads by winter storms were also performed.

Road system maintenance was completed in addition to work done by BLM maintenance crews through timber sales contracts and the *Secure Rural Schools & Community Self Determination Act of 2000*. These contracts were responsible for the decommissioning of 8 miles of road, gating or blocking 3 miles of road, water barring or storm proofing 5 miles of road, improving or reconstructing 207 miles of existing road, construction of 1 mile of new road, construction of 6 miles of temporary road (to be decommissioned upon timber sale completion), installation of 6 gates, 2 bridge repaired, and the replacement or installation of 112 new culverts. There were 93 miles of roads maintained by industry users under right-of-way permits. This work consisted of brushing, surface blading, ditch cleaning, and the placement of rock.

Secure Rural Schools & Community Self Determination Act of 2000 and congressionally-approved anadromous fish passage funds were used to make improvements to anadromous fish passage. The Salem District replaced three existing culverts which constituted barriers to fish.

Hazardous Materials

One abandoned hazardous waste site containing a 55-gallon drum of used oil waste was discovered and cleaned up. Since fiscal year 1995, the BLM has identified 52 potentially hazardous abandoned waste sites on agency-managed lands. Of the 52 sites, 38 were determined to be hazardous and cleaned up. Abandoned hazardous wastes removed from federal lands have included: drug lab waste, abandoned barrels of corrosives and heavy metals, dynamite and explosives, oil based paints, pesticides, used paint thinners, lead contaminated soils, and solvents.

Wildfire

Fiscal year 2006 was an above average year for wildfires on the Salem District. The district experienced a wet winter that extended into early spring with an abundant snow pack. By mid- June rainfall tapered off and the district entered an extended period of hot, dry weather coupled with lightning outbreaks in July and August. Fire starts from all causes and particularly from lightning exceeded the 10-year averages by wide margins (130-325%). There were 41 fires resulting in 364 acres burned on BLM lands. The 10-year average is 10.4 fires and 6.4 acres burned. Eleven fires on BLM land in the Santiam drainage east of Sweet Home were the result of a lightning storm. Three of the fires resulted in the majority of acres burned on the Salem District: the Boulder Fire, 63 acres; the Rocky Top #5 Fire, 28 acres; and the Middle Fork Fire, 263 acres. In

addition to the firefighting performed by the Oregon Department of Forestry under contract with the BLM, the Salem District provided manpower and equipment resources to assist in fighting these fires. The Middle Fork Fire required a Wildland Fire Situation Analysis to be completed by the Salem District for use by the fire team.

The increasing number of intentionally set fires on the Salem District in fiscal year 2006 is a serious concern. There were 10 arson fires primarily in the Molalla River Recreation Corridor. The Rooster Fire burned three acres on BLM land and was stopped after it had burned several hundred feet into the Table Rock Wilderness Area. The other nine arson fires were controlled at less than one acre each. There were five abandoned car fires and one fire resulting from illegal fireworks use: all controlled at less than one acre. One fire resulting from a discarded cigarette and ten abandoned campfires were extinguished, all less than one acre each.

Fire prevention, detection and suppression continued to be provided by the Oregon Department of Forestry through the Western Oregon Protection Contract. Payment is based on a per acre assessment for total acres protected.

Law Enforcement

The Salem District’s law enforcement program addresses the public safety and resource protection issues integral to managing public lands in northwest Oregon. The Salem District has Oregon’s largest population concentration and the largest urban use of public lands. The program has three rangers: the District Staff Ranger, the Cascades Field Office Ranger (K-9) and the Tillamook Field Office Ranger. Law Enforcement Assistance (LEA) agreements with Linn, Marion, Polk, Yamhill, and Clackamas counties allow the BLM to fund officers’ time in county forest deputy programs. This enables them to patrol district lands targeting specific high use areas including the Molalla River, Nestucca River, Little North Fork Santiam, and the Quartzville Wild and Scenic River. Polk and Clackamas counties have the “Dump Stoppers” Program, a cleanup, education, violation investigation and prosecution program designed to reduce trash dumping on federal lands. It has worked to the point that dumps are sometimes hard to find for the work crews. Some of these LEA agreements and “Dump Stopper” programs are presently funded through the *Secure Rural Schools and Community Self Determination Act* of 2000 (Title II program).

There were 236 law enforcement incidents reported in 2006, down from 345 in 2005. Law enforcement incidents include arson of government property (1) and government timber (7), 1 case that involved injury to a wild horse by someone who shot it with a hunting arrow

There were 30 misdemeanors, 6 arrests, 79 federal citations, 5 state citations, and 50 written warnings. There were also 11 assists to local agencies.

County (LEA) incidents	32	Bomb	1
Arsons	8	Weapons violation	1
Abandoned property/vehicles	20	DUII/ liquor law violations	27
Stolen vehicles recovered	12	Camping violations	7
Thefts - other	5	Littering/dumping	17
Theft of special forest products	10	K-9 utilizations	4
Vandalism	13	OHV violations/incidents	32
Drug violations	11		

Cadastral Survey

Bureau of Land Management cadastral survey crews completed 18 projects ranging from ¼ mile to 8.5 miles in length. In total, 38 miles were surveyed and 46 monuments set. Nine surveys were completed on a cost share basis with adjacent landowners, where BLM cadastral survey performs the surveys and adjacent landowners pay half the cost. Private timber companies and the Oregon State Board of Forestry contributed approximately \$49,000 for surveys, as part of the cost share program in the Salem District.

Cadastral survey assisted with Geographic Information System (GIS) inventory applications. Using Geographic Positioning System technology or surveying to high precision stations such as geological survey monuments, GIS land line inventories and maps are more precise.

Education and Outreach

Several key outdoor programs are implemented on the Salem District. The Yaquina Head Outstanding Natural Area (YHONA) provides a variety of coastal and marine education programs on ecology, natural systems, and history targeting different age groups, needs, and interests. The YHONA hosted 5,310 students for school-based tide pool and intertidal ecology and geology field activities. Teacher-led programs focused on coastal geology, marine birds and wildlife, and marine mammals and utilized the YHONA visitor center and outdoor sites. Other on-site YHONA programs for adults and families with children include the costumed lighthouse tour (7,961 participants) and a junior ranger program (22 junior rangers completed the activities). Nineteen presentations on marine birds and animals, lighthouse history, and coastal ecosystems were made by YHONA staff at evening campground programs in Beverly Beach State Park and South Beach State Park. These programs reached a mixed age audience of approximately 1,000 campers. In fiscal year 2006, 166,831 visitors experienced education programs offered by YHONA employees.

Salem District outdoor education programs operated cooperatively with non-profit educational organizations, schools, colleges, and other organized groups and utilized the Wildwood Recreation site, Molalla River Recreation Corridor, Larch Mountain, and the Nestucca Watershed areas.

One of the most successful cooperative partnerships is the science-based and award winning Cascade StreamWatch program operated in coordination with Wolfree, Inc. and the U.S. Forest Service at the Wildwood Recreation Site along the Salmon Wild and Scenic River. Wolfree, Inc. served over 2,400 students at Wildwood, bringing a total of 29,900 students served since the partnership was established in 1994.

Over 600 students from the Molalla School District were involved in teacher-led learning activities at Salem District's Aquila Vista Environmental Education Site in the Molalla River Recreation Corridor.

Students at Corbett Elementary School visited the Salem District's Larch Mountain Environmental Education site. Each class made five separate trips over the school year to engage in teacher-led educational activities. This equals 1,800 participation experiences for these students.

A partnership with the Tillamook County Education Consortium has resulted in a successful outdoor education program called Nestucca Connections in the Nestucca Watershed. In fiscal year 2006, 14 high school Nestucca Connection enrollees made 10 trips to the field to assist in riparian restoration, sediment routing, and other activities in the Nestucca Watershed.

The Salem District made 59 school-based environmental education presentations to 947 students. Student levels ranged from kindergarten through college and adult education with presentations occurring in classroom, outdoor school, and other education organization based settings.

The Salem District presented information at large public events throughout the year. These events involved a variety of public and private partners and included the Tillamook County Fair in Tillamook (attendance of 71,180), Salmon Fest at Oxbow Park, Portland (attendance of 7,300), Salmon Watch activities at various district locations (153 contacts), Free Fishing Day (600 participants), Kids Day for Conservation in Corvallis (attendance of 2,000), National Trails Day in Table Rock Wilderness (85 participants), Public Lands Day along the Little North Fork of the Santiam River (80 participants), SOLV fall and spring cleanups (160 participants) and Earth Day events at Pringle school and in the Molalla River Recreation Corridor (attendance of 745 for the two events).

Cumulative Totals (fiscal years 96-06)

School-based environmental education presentations	1,409
Students participating in these programs	29,408
Salmon Fest participants	106,300
Kids Day for Conservation participants	4,800
Students participating in YHONA intertidal ecology programs	58,210

Research

The Salem District has a long-term relationship with the research community centered at Oregon State University (OSU) in Corvallis. Cooperative research is conducted by various departments of OSU, the Pacific Northwest Research Station, the Forest and Rangeland Ecosystem Science Center (FRESC) of the U. S. Geological Survey, Biological Resources Division (BRD); and other federal agencies. The BRD was formed when the U.S. Department of the Interior (USDI) consolidated its research personnel into one agency. Together with the BLM and other USDI agencies, the BRD conducts an annual evaluation of ongoing and proposed research projects, choosing which ones to fund in the context of current and future management needs. Each westside BLM district has a representative at these meetings. Projects supporting ongoing implementation of the Northwest Forest Plan (NFP) have consistently secured funds through this process.

The Cooperative Forest Ecosystem Research program (CFER) was initiated in June 1995. Cooperators include the BLM, FRESC, OSU - Colleges of Forestry and Agricultural Sciences, and the State of Oregon Department of Forestry (ODF). The intent of the program is to facilitate ecosystem management in the Pacific Northwest with emphasis on meeting priority management information needs of the BLM and ODF. A research problem analysis in support of CFER was produced in June 1997 and identified three categories where research is needed to assist implementation of the NFP: 1) the ecology and management of biodiversity of young forests, 2) the ecology and management of riparian zones, and 3) the ecology and management of special interest species. By 2000, research in these categories led to development of three integrated projects: 1) biotic responses to changes in stand structure, 2) production and function of large wood in the riparian zone, and 3) effects of landscape pattern and composition on species.

A good of current information on the CFER program is the CFER web site at: www.fsl.orst.edu/cfer. A publication entitled *BLM Density Management and Riparian Buffer Study: Establishment Report and Study Plan (USGS, 2006-5087)* is an excellent synopsis of the collaboration between the BLM and the scientific community in their joint efforts to study the effects of alternative forest density management treatments in

young stands on the development of late-successional forest habitat attributes as well as effects on aquatic and riparian ecosystems. Taken together, these CFER projects will significantly aid the BLM in meeting the requirements for effectiveness and validation monitoring identified in the Northwest Forest Plan.

Coordination and Consultation

Federal Agencies

The Provincial Interagency Advisory Committees (PIECs) are a primary method for cooperation and coordination between federal agencies. The PIECs, organized in accordance with the Northwest Forest Plan, include the following federal agencies: Bureau of Land Management, Forest Service, Bureau of Indian Affairs, Fish & Wildlife Service, Environmental Protection Agency, National Marine Fishery Service, and the Natural Resource Conservation Service. In addition, personnel from several of these agencies have been involved in project level planning, conflict resolution, Endangered Species Act consultation, and implementation monitoring.

State of Oregon

The Salem District continued its long-term working relationships with the Oregon Department of Forestry, Oregon Department of Fish and Wildlife, and Oregon Department Environmental Quality. These relationships cover a diverse assortment of activities, including; timber sale planning, fish habitat inventory, water quality monitoring, hazardous material cleanup, air quality maintenance, and wildfire suppression.

Counties

The Salem District manages land in 13 counties. While involvement levels vary between counties based on amount of BLM-managed lands, there is frequent mail and telephone contact with various county commissioners and other staff. The purpose of this communication is to inform, coordinate and obtain or provide input on BLM proposed projects, county projects that may affect BLM lands, water quality, and other issues. County commissioners and agencies receive copies of all major publications, project updates, and project proposals.

Cities

The Salem District works with cities to ensure that timber harvest and road building are done in a manner to protect water quality in watersheds used by cities for their municipal water supply.

Tribes

Coordination with Native American groups has broadened as a result of the Northwest Forest Plan. The Confederated Tribes of the Siletz Reservation and the Confederated Tribes of the Grand Ronde are represented on the Coast Provincial Advisory Committee.

Watershed Councils

The Salem District participated in and supported local watershed councils. A watershed council provides a forum for exchange of information and ideas among all interested stakeholders about the activities proposed or occurring within a watershed. Table 17 shows the current status of Salem District involvement in watershed councils.

Table 17 - Salem District Involvement with Local Watershed Councils

Watershed Council	Resource Area	Status of Involvement 2006
Alesea	Marys Peak	Attend meetings as appropriate.
Clackamas River Basin	Cascades	Share a seat on the council with the Forest Service. Forest Service attends monthly meetings.
Lower Columbia River	Cascades	Not involved at this time.
Lower Nehalem	Tillamook	Occasional meetings with members. Working together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Native Plant Cooperative).
Luckiamute	Marys Peak	Attend meetings as appropriate, provide technical assistance in planning and project implementation. Have MOU for restoration project and has partnership in OWEB grant in conjunction with a BLM timber sale.
Marys River	Marys Peak	Attend meetings as appropriate.
Mid-Coast	Marys Peak	Limited involvement. On mailing list.
Nestucca/Neskowin	Tillamook	Attend monthly council meetings and technical committee meetings. The council reviews BLM projects. Work together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Native Plant Cooperative).
North Santiam	Cascades	Limited involvement. Maintain communications provide technical support.
Pudding River	Cascades	Limited involvement. Maintain communications provide technical support.
Rickreall	Marys Peak	Limited involvement. On mailing list.
South Santiam	Cascades	Limited involvement. Maintain communication provide technical support.
Sandy Basin	Cascades	Limited involvement. Maintain communication provide technical support.
Scappoose Bay	Tillamook	Attend meetings. The council reviews BLM projects. Work together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Native Plant Cooperative).
Siletz	Marys Peak	Limited involvement. On mailing list.

Watershed Council	Resource Area	Status of Involvement 2006
Tillamook Bay	Tillamook	Attend meetings. The council reviews BLM projects. Work together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Native Plant Cooperative).
Tualatin	Tillamook	Attend monthly council meetings and technical committee meetings. Work together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Native Plant Cooperative).
Upper Nehalem	Tillamook	Attend meetings. Provide technical support. Work together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Native Plant Cooperative).
Yamhill Basin	Tillamook & Marys Peak	Attend meetings. Member of council. The council participates in BLM Adaptive Management Area planning and reviews BLM projects. Work together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Native Plant Cooperative). Marys Peak RA provides technical assistance in the Gooseneck Confluence Technical Assistance Grant (OWEB).

Resource Advisory Committees

The *Secure Rural Schools and Community Self-Determination Act of 2000 (Public Law 106-393)* established a district resource advisory committee (RAC) and a six-year payment schedule to local counties in lieu of funds derived from the harvest of timber on federally-managed lands. These receipts have dropped dramatically over the past 10 years. In addition to providing millions of dollars to the counties under Title I of the act, the act also created a mechanism for local communities to collaborate with federal land managers in the selection of projects to be conducted on federally-managed lands or to benefit resources on federally-managed lands. Funds for these efforts are provided through participating counties under Title II of the act. A copy of the act and additional information can be found at <http://www.blm.gov/or/rac/index.php>.

The Salem District RAC reviewed proposals for projects intended to improve infrastructure, restore forest ecosystems, and provide improved land health and water quality. Forty-nine projects with an estimated value of \$2.9 million were submitted. From those initial project requests, the RAC recommended funding 37 projects for approximately of \$1.2 million. The recommended projects were all adopted for implementation by the district manager. These projects, shown in Table 18, are in ten of the counties within the Salem District.

Table 18 Title II Salem District RAC

Partnerships, Volunteer Activities and Accomplishments

Volunteer Program

Seven hundred volunteers contributed 47,885 hours to the Salem District. Their contributions are valued at \$686,637 (based on minimum wage estimates). Overall BLM costs to support the volunteer program were \$38,500. This calculates to a net value of \$648,137 to BLM (equivalent to two percent of the Salem District's total budget).

Volunteers contributed work in a variety of programs, none of which could have been accomplished with BLM funds alone. Some volunteers seek experience for future jobs. Others want to contribute toward a worthwhile project. Recreation programs garnered 76 percent of the volunteer hours. Biological programs, environmental education, support services, and surveying were the beneficiaries of the remaining 24 percent.

Tillamook Resource Area Riparian Restoration Effort

The Tillamook Resource Area Riparian Restoration Effort is a continuing collaborative effort. It began in 2002 and is expected to continue for a decade or more. Partners include: Salem BLM's Tillamook Resource Area and Horning Seed Orchard, Lower and Upper Nehalem Watershed Councils, Nestucca/Neskowin Watersheds Council, Oregon Youth Authority, Scappoose Bay Watershed Council, Tillamook Bay Watershed Council, Tillamook County Soil and Water Conservation District, Tillamook Estuaries Partnership, Tualatin River Watershed Council, and the Yamhill Basin Council.

Riparian conditions in the Tillamook Resource Area (TRA) are generally poor. Many of the major river systems within this resource area are on the federal 303(d) list as being in non-compliance with temperature standards of the Clean Water Act. In addition, populations of five of the major native salmonids in the TRA are highly depressed and are threatened species, candidates for federal listing, or Bureau sensitive species. Oregon Department of Environmental Quality Total Maximum Daily Load studies, North Coast Basin Water Quality Management Plans, Watershed Council Action Plans, and the Tillamook Bay Comprehensive Conservation and Management Plan have all concluded that vegetation is needed in riparian zones to reduce pollutants, stabilize streambanks, and lower stream temperatures. Completed watershed assessments have shown that riparian restoration in Tillamook County is required along approximately 400 miles of stream.

Recognizing the need to encourage riparian restoration on not just BLM lands, the Tillamook Resource Area and Horning Seed Orchard joined the other partners above to enter into a Memorandum of Understanding (MOU) in 2002. The purpose was to work with each other to implement riparian restoration in all the watersheds in the resource area with BLM ownership including streams feeding the Lower Columbia River and several northwest Oregon coastal bays. One of the primary challenges in implementing effective riparian restoration has been securing a stable supply of conifers, hardwoods, and shrubs grown from locally collected seed sources adapted to the area. This is where the BLM helps most through its facilities at Horning and in botany expertise.

The partnership in cooperation with 177 landowners, planted 36,000 trees and shrubs along 35 miles of stream and in 27 acres of wetland. About 55,000 plants were propagated for out-year projects through the Horning Seed Orchard, the Tillamook Native Plant Cooperative Nursery, and watershed council sites. Since the signing of the MOU, 102 miles of stream have been planted to promote recovery of fish stocks, improve water quality and wildlife habitat, reduce flood potential, and encourage land and water stewardship among all landowners.

Most of BLM's share of the effort has been funded through grants from the National Fish and Wildlife Foundation and Challenge Cost Share appropriated funds. The BLM's \$65,000 in labor and materials was matched with the other partners' contributions of goods and services valued at \$144,000 to implement the effort.



Tualatin River Watershed Council
Volunteers removing invasive English Ivy at Gales Creek, April 2006

Willamette Partnership

Many issues facing the district concern results from actions occurring across the entire watershed or region. A broader watershed wide strategy is needed to make noteworthy gains on these issues. The Willamette Partnership has completed a basin-wide strategy, and is working on related tasks that should benefit the entire area, including public lands managed by the BLM. In recognition of the multiple benefits from the work done by the Willamette Partnership, the district provides support including office space, use of office services, and meeting rooms.

National Environmental Policy Act

The quarterly Project Update publishes the availability of specific environmental documents and their stage of preparation. The Project Update serves as a vital part of scoping and solicitation of public comment for all projects. Availability of individual project NEPA documents is advertised in local newspapers during the public review period.

PLAN REVISION AND MAINTENANCE FISCAL YEAR 2006

The Salem District and other districts in western Oregon began a revision to the existing Resource Management Plan and Record of Decision (RMP/ROD). This multi-year effort will develop potentially significant changes to the RMP guidelines. Details regarding the RMP revision can be seen at <http://www.or.blm.gov/or/plans/wopr/index.php>.

No revisions to the Salem District RMP/ROD were implemented.

Implementation Monitoring Report

Introduction

Monitoring is an essential component of natural resource management because it provides information on the relative success of management strategies. This report compiles the results and findings of implementation monitoring of projects completed during 2006 as part of the Salem District Resource Management Plan (RMP). The monitoring year varies from the fiscal year to facilitate the timing of monitoring and to alleviate conflicts with end of year workloads such as accomplishment and budget reporting. A full year of project work is desirable to provide a large and diverse pool of completed projects to monitor.

The monitoring report meets the requirements for monitoring and evaluation of resource management plans at appropriate intervals within BLM planning regulations (43 CFR 1610.4-9). This report does not include the monitoring conducted by the Salem District that is identified in activity or project plans. The Regional Interagency Executive Committee (RIEC) conducts additional monitoring at watershed and province level scales.

On pages 75 and 76 of the RMP it states 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 RMP Monitoring Report, and serve as a report to the public. Information within the monitoring report contains monitoring information resulting from an in-depth examination of a representative sample of projects within the district. Because of workloads involved with preparation of the Western Oregon Plan Revision, management felt that a summary of the past years' monitoring results coupled with a monitoring effort focused on water quality would be more appropriate for 2006.

The goal of management is to have complete compliance with all management action/direction on all standards and guidelines. Monitoring results help to identify and change district processes and procedures to achieve all implementation objectives.

Validation monitoring questions are not addressed in this report. The nature of questions concerning validation monitoring generally require some maturation of implemented projects and research to discern results. Best management practice effectiveness monitoring was conducted to address water quality issues.

Recommendations and Conclusions

Hundreds of discrete actions were reviewed through the implementation monitoring questions identified in Appendix J of the RMP in the years 1997 through 2005. The Salem District achieved a remarkable record in implementing the RMP to within standards. The table below displays a summary of monitoring results for those years. Please reference the appropriate Annual Program Summary for more specific information on results during that fiscal year.

**Table 19 - Implementation Monitoring Summary
Fiscal Years 1997 through 2005**

Fiscal Year	Monitoring Questions	Met Standards	No Answer or Did Not Meet Standards	Percentage Meeting Standards
1997	4,092	4,019	73	98%
1998	2,904	2,886	18	99%
1999	594	569	25	96%
2000	990	967	23	98%
2001	201	193	8	96%
2002	331	326	5	98%
2003	330	326	4	99%
2004	321	320	1	100%
2005	201	201	0	100%
Totals	9,964	9,807	157	98%

Analysis of the fiscal year 1997 through 2005 monitoring results concludes that the Salem District has complied with management action/direction with a high degree of consistency. Implementation of the Salem District RMP involves the management of diverse natural resources through a complex mix of planning, budgeting, environmental analysis, compliance with many laws and regulations, on-the-ground actions, contracting, follow-up actions, monitoring and adaptive management that take place year after year and involves many BLM resource professionals and managers. Because of this past track record, in fiscal year 2006 the district concentrated on BMP monitoring, which is the water quality component of the original questions.

2006 Monitoring

Introduction

During 2006 a number of management projects were located in and around streams, lakes and wetlands on the Salem District. Best Management Practices (BMPs) were planned for each of these actions in order to protect water quality. This report is a summary of BMP monitoring that was conducted on specific projects by field review, discussions with contract inspectors and review of the project record. This monitoring is conducted as part of the BLM's responsibilities under the Clean Water Act and as directed in the Salem District Resource Management Plan. Monitoring questions focused on reviewing whether BMPs identified in the decision record were implemented as intended, and determining whether there is evidence of effectiveness.

Monitoring Process and Approach

An interdisciplinary team completed the BMP monitoring for each project selected for review. Information about each project was collected and those with a high probability of interacting with water were identified. From this list, a sufficient number of projects were selected to meet the 20 percent of projects monitoring requirement in the RMP. The selection process ensured that all resource areas were included and a full suite of water quality BMPs were reviewed.

The district hydrologist reviewed the selected decision record and contract documents for the water quality BMPs intended for each of the selected projects. The projects were examined in the field by the team and contract inspector to determine if these BMPs were completed. The team then identified indicators on site that would suggest the BMPs were effective in protecting water quality. Recommendations for adjustment or continuation of specific BMPs are provided to the local line manager and the district manager for consideration and implementation in future projects. This monitoring process stimulates an exchange of information, ideas and perspectives relating to BMP effectiveness and implementation. The monitoring process provides an adaptive management mechanism that has resulted in improvement in water quality protection through the plan maintenance process.

Monitoring Findings

A list of the projects monitored in each resource areas and the number of BMPs reviewed by water quality parameter is shown in Table 20. The BMPs reviewed were primarily designed to protect streams from sedimentation and increases in temperature due to timber harvest operations and culvert / bridge replacement. The primary sediment BMPs for timber operations involved application of a no entry buffer along stream channels, dry season operations and erosion control measures such as water bar placement and seeding of disturbed areas. The primary temperature BMPs involved application of a no-cut primary shade zone and partial canopy retention zone along perennially flowing stream channels. The primary sediment BMPs for bridge and culvert replacement involve de-watering procedures, proper sizing for capacity, and disturbed area stabilization.

A numeric summary of results is provided in Table 21. All temperature BMPs were found to be implemented as designed. Most sediment BMPs were implemented and effectiveness indicators suggest that erosion and sedimentation was minimized. Recommendations for improvements in reducing exposure of construction and yarding disturbance at stream crossings have been identified. Some BMPs were not implemented as originally designed; however alternative measures were put in place which were considered more effective for the location and site conditions.

Table 20 - Summary of Fiscal Year 2006 Projects Monitored for BMPs

Project Type	Tillamook Resource Area	Marys Peak Resource Area	Cascades Resource Area	Total Number Sediment BMPs reviewed	Total Number Temperature BMPs reviewed
Timber Harvest, Yarding and Transport	Re-Bear Timber Harvest			10	2
		Mainline Timber Harvest		13	3
			Pine Rock Timber Sale	9	3
Culvert and Bridge Replacement	Walker Cr Bridge			9	1
		Williams Creek Culvert		12	1
Total BMPs Reviewed				53	10

Table 21 - Summary of Implementation Monitoring Results Fiscal Year 2006

Project	BMPs Designed #	BMPs Implemented #	Implementation Success %	Evidence of Sediment BMP Effectiveness	Evidence of Temperature BMP Effectiveness
Re-Bear Timber Harvest	12	11	92%	No yarding or falling disturbance along stream channels. Water bars and decommissioning minimized surface runoff	Retained primary shade zone canopy, greater than 50% canopy retained in secondary shade zone.
Walker Creek Bridge	10	9	90%	No erosion of fill slopes after flood periods, full vegetative cover of disturbed areas	Damage and removal of trees in and around the riparian construction site was minimized
Mainline Timber Harvest	16	15	94%	No yarding or falling disturbance along stream channels. Water bars re- directed road surface water flow away from stream crossings	Retained primary shade zone canopy, greater than 50% canopy retained in secondary shade zone.
Williams Creek Culvert	13	12	92%	No erosion of fill slopes after high flow periods, full vegetative cover of disturbed areas.	Disturbance of existing riparian vegetation minimized. Large conifers planted.
Pine Rock Timber Harvest	12	11	92%	No yarding or falling disturbance along stream channels. Sediment from haul roads captured in grassed ditches	Retained primary shade zone canopy, greater than 50% canopy retained in secondary shade zone.
TOTAL	63	58	92%		

* Examples of physical evidence that BMPs were effective.

Discussion of Noted Monitoring Discrepancies

Timber Management

The RMP Management Action/Direction for Timber Harvest states:

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

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

The Salem District offered 43.5 million board feet (MMBF) of timber for sale during Fiscal Year 2005, of which 5.6 MMBF failed to sell. The 31.7 million board feet of allowable sale quantity (ASQ) offered timber represents 91.1 percent of Salem’s 34.8 MMBF yearly ASQ. In addition to the ASQ volume, it also offered 11.8 MMBF of additional volume resulting from the treatment of wildlife habitat in the Late- Successional Reserves (LSR).

Silvicultural Activities

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

Site Preparation (FIRE) – 134 acres were treated with prescribed fire (28 percent of projected amount). Since implementation of the RMP, the number of acres prepared with prescribed fire, both broadcast treatment and pile treatment, is 37 percent of the planned amount. A continued decline in trend is likely to continue due to less than expected levels of regeneration harvest.

Site Preparation (OTHER) – The district treated 112 acres with other site preparation techniques (19 percent of projected amount). Since implementation of the RMP, the number of acres prepared with alternative site preparation techniques is about 55 percent of the planned amount. Factors affecting this activity are the same as for prescribed fire.

Planting (regular stock) – The district planted 200 acres with regular planting stock (42 percent of projected). Total acres planted with regular reforestation stock since 1995 is 86 percent of RMP assumed levels. This is a result of lower actual harvest levels than planned in the RMP.

Planting (improved stock) – The district planted 19 acres with genetically selected conifers (4 percent of projected). Total acres planted with genetically selected stock since 1995 is 34 percent of RMP projected acres. This is a result of less than expected levels of regeneration timber harvest and an inadequate supply of genetically diverse seed.

Maintenance/Protection – The district accomplished 1,784 acres of maintenance treatments (57 percent of projected levels). Total number of maintenance acres since 1995 is 84 percent of projected levels.

Pre-commercial Thinning (PCT) – The district completed 3,242 acres of release and PCT combined (109 percent of projected levels). Since implementation of the RMP, 79 percent of projected PCT levels have been completed.

No fertilization has been done on the district since 1999 due to Survey and Manage potential impacts to species. Total acres fertilized since 1995 is 65 percent of the amount projected in the RMP for the decade. Seventy-seven acres of pruning to improve wood quality was completed. No estimate of pruning accomplishments were projected in the RMP.

Detailed, cumulative information on all silviculture treatments since the adoption of the RMP are provided in the Timber Resources section of the Annual Program Summary.

Additional Comments on Project Implementation and Monitoring

The monitoring process continues to be an excellent means to share information and ideas between work groups and to improve understanding of RMP requirements. Some of the ideas identified during the monitoring process included:

- Using an environmental assessment to timber sale cross reference document to ensure all stipulations are included in timber sale contracts.
- Using windblown trees in riparian areas for placement in streams instead of being sold for timber production. This wood could then be retained in the for fish habitat and/or stream flow measures.
- Having a copy of the ACZA treated wood report on file for future reference when projects using this material are planned and reviewed. Providing this report to state and district for use on other projects using this material.
- Specifying the desired number of large trees desired after riparian reserve thinnings and implementing a more variable spacing, thus providing the growing space to accomplish that target.
- Using the NEPA process to disclose why native or non-native plant materials are used in any given project.
- Development of a district coarse woody debris marking policy that will improve the ability to see or track in the contract reports whether marking was completed.
- Reducing the monitoring requirements for projects that have been monitored for many years with little new information or benefit provided.

BMP Monitoring Results Answer RMP Questions

The review of BMP implementation provided an opportunity to answer existing related questions from the RMP.

Riparian Reserves

Expected Future Conditions and Outputs

See Aquatic Conservation Strategy objectives.

Implementation Monitoring

Monitoring Question 1

Is the width and integrity 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 and integrity of the Riparian Reserves were maintained.

Monitoring Performed

Monitoring of Riparian Reserves involves checking to ensure streams have been identified in the management area and that the Riparian Reserves identified in the environmental assessment have been established. All the projects monitored had activities in Riparian Reserves.

Findings

Monitoring recorded compliance with stream marking and identification on all units monitored.

Conclusion

RMP requirements were fully met.

Comment/Discussion

None

Monitoring Question 2

Are management activities in Riparian Reserves consistent with the SEIS Record of Decision Standards and Guidelines and RMP management direction?

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 and Aquatic Conservation Strategy objectives.

Monitoring Performed

Monitoring of Riparian Reserves involves checking to ensure streams have been identified in the management area and that the Riparian Reserves identified in the environmental assessment have been established.

Findings

The riparian widths were appropriate and complied with the environmental assessments. Projects met the RMP requirements. Road restoration and road construction had the greatest potential for disturbing conditions in Riparian Reserves. Activities met standards.

Conclusion

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

Comment/Discussion

There is a continuing trend of thinning within riparian reserves to promote improvement of forest stands in riparian areas. All BMP monitoring showed good compliance with standard practices to protect shade and avoid stream bed and bank disturbance. Riparian Reserves 55

have been established according to RMP management direction and the current water temperature protection practices outlined in the temperature sufficiency documentation.

Monitoring Question 3

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 100-year flood?

Monitoring Requirement

All new structures and improvements within a Riparian Reserve will be monitored during and after construction. This will ensure that construction was done 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.

Monitoring Performed

Projects monitored with structures in Riparian Reserves included Walker Creek Bridge and Williams Creek Culvert.

Findings

Activities met standards.

Conclusion

The structure projects met the SEIS Record of Decision Standards and Guidelines and RMP management direction.

Monitoring Question 4

(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?

Monitoring Requirement

All approved mining plans of operations will be reviewed to determine if regulatory and RMP requirements were met.

Monitoring Performed

Program review.

Findings

No plans of operations for projects monitored for 2006.

Conclusion

RMP objectives were met.

Expected Future Conditions and Outputs

Comply with state water quality requirements to restore and maintain water quality to protect recognized beneficial uses.

Implementation Monitoring

Monitoring Question 1

Are site-specific Best Management Practices (BMPs), identified as applicable during interdisciplinary review, carried forward into project design and executed? Are these BMPs appropriate for water quality needs of downstream beneficial uses?

Monitoring Requirement

Each year at least 20 percent of the timber sales and other relevant actions stratified by management category will be selected for monitoring. This will determine whether sensitive downstream beneficial uses of water have been identified and whether appropriate BMPs to protect these uses were implemented as prescribed.

Monitoring Performed

All projects monitored included BMP provisions to meet soil and water objectives.

Findings

All projects monitored had appropriate BMPs designed to avoid or mitigate potential impacts to beneficial uses identified. All projects documented the appropriate downstream beneficial uses. Most BMPs identified in project documentation were found to be implemented on the ground.

Conclusion

RMP objectives were met.

Implementation monitoring of the Resource Management Plan (RMP) since its adoption in 1995 through fiscal year 2006 indicates the Salem District has consistently implemented the RMP with a high degree of success. The few discrepancies that have been discovered by monitoring during the past ten years have been examined closely and corrective action taken. However, the departure of timber sales and silvicultural activities from the level of actions assumed in the RMP has been identified as a concern to the management of the Salem District.

The departures from assumed level of activities related to timber sales and silviculture in the RMP are largely a result of conditions and uncertainties that the Salem District does not directly control. These issues will be addressed in the RMP revision scheduled for completion in 2008.

APPENDIX 1 GLOSSARY

Adaptive Management Area (AMA) - The Salem District's Northern Coast AMA is managed to restore and maintain late-successional forest habitat while developing and testing new management approaches to achieve the desired economic and other social objectives.

Allowable Sale Quantity (ASQ) - An estimate of annual average timber sale volume likely to be achieved from lands allocated to planned, sustainable harvest.

Anadromous Fish - Fish that are hatched and reared in freshwater, move to the ocean to grow and mature, and return to freshwater to reproduce. Salmon, steelhead, and shad are examples.

Archaeological Site - A geographic location that contains the material remains of prehistoric and/or historic human activity.

Area of Critical Environmental Concern (ACEC) - An area of BLM-managed land where special management attention is needed to protect and prevent irreparable damage to important historic, cultural or scenic values, fish and wildlife resources, or other natural systems or processes; or to protect life and provide safety from natural hazards.

Best Management Practices (BMPs) - Methods, measures, or practices designed to prevent or reduce water pollution. Not limited to structural and nonstructural controls and procedures for operations and maintenance. Usually, BMPs are applied as a system of practices rather than a single practice.

Biological Diversity - The variety of life and its processes, including a complexity of species, communities, gene pools, and ecological function.

Candidate Species - Plant and animal taxa considered for possible addition to the List of Endangered and Threatened Species. These are taxa for which the Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions.

Cavity Nesters - Wildlife species, most frequently birds, that require cavities (holes) in trees for nesting and reproduction.

Commercial Thinning - The removal of merchantable trees from a stand to encourage growth of the remaining trees.

Connectivity - The Connectivity / Diversity lands are specific blocks spaced throughout the matrix lands, which have similar goals as matrix but have specific Standards & Guidelines which affect their timber production. They are managed on longer rotations (150 years), retain more green trees following regeneration harvest (12-18) and must maintain 25-30 percent of the block in late successional forest.

Cubic Foot - A unit of solid wood, one foot square and one foot thick.

Cumulative Effect - The impact that results from identified actions when they are added to other past, present, and reasonably foreseeable future actions regardless of who undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

Density Management - Cutting of trees for the primary purpose of widening their spacing so that growth of remaining trees can be accelerated. Density management harvest can also be used to improve forest health, to open the forest canopy, or to accelerate the attainment of old growth characteristics, if maintenance or restoration of biological diversity is the objective.

District Designated Reserves (DDR) - Areas designated for the protection of specific resources, flora and fauna, and other values. These areas are not included in other land use allocations or in the calculation of the ASQ.

Eligible River - A river or river segment, through an interdisciplinary team process and in some cases interagency review, found to meet Wild and Scenic River Act criteria of being free flowing and possessing one or more Outstandingly Remarkable Values.

Endangered Species - Any species defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range and published in the Federal Register.

Environmental Assessment (EA) - A systematic analysis of site-specific BLM activities used to determine whether such activities have a significant effect on the quality of the human environment; and whether a formal environmental impact statement is required; and to aid an agency's compliance with NEPA when no environmental impact statement is necessary.

General Forest Management Area (GFMA) (See Matrix) - This is the federal land not encumbered by any other land use designation, on which most timber harvest and silvicultural activities will be conducted.

Harvested Volume or Harvested Acres - Refers to timber sales where trees are cut and taken to a mill during the fiscal year. Typically, this volume was sold over several years. This is more indicative of actual support of local economies during a given year.

Hazardous Materials - Anything that poses a substantive present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of or otherwise managed.

Land Use Allocation (LUA) - Allocations which define allowable uses / activities, restricted uses / activities and prohibited uses / activities. Each allocation is associated with a specific management objective. Those discussed below include Matrix (or GFMA), Connectivity, LSR, and AMA.

Late Successional Forests - Forest seral stages that include mature and old growth age classes.

LSR – Late-Successional Reserve - Lands which are managed to protect and enhance old-growth forest conditions.

Matrix Lands - Federal land outside of reserves and special management areas that will be available for timber harvest at varying levels.

MMBF - Million board feet of timber.

Noxious Plant/Weed - A plant specified by law as being especially undesirable, troublesome, and difficult to control.

O&C Lands - Public lands granted to the Oregon and California Railroad Company, and subsequently reverted to the United States, that are managed by the Bureau of Land Management under the authority of the O&C Lands Act.

Offered (sold) Volume or Offered (sold) Acres - Any timber sold during the year by auction or negotiated sales, including modifications to contracts. This is more of a “pulse” check on the district’s success in meeting ASQ goals than it is a socioeconomic indicator, since the volume can get to market over a period of several years. It should be noted that for this Annual Program Summary we are considering “offered” the same as “sold”. Occasionally sales do not sell. They may be reworked and sold later or dropped from the timber sale program. Those sold later will be picked up in the APS tracking process for the year sold. Those dropped will not be tracked in the APS.

Off-Highway Vehicle (OHV) - Any motorized track or wheeled vehicle designed for cross-country travel over natural terrain. The term, “Off-Highway Vehicle” will be used in place of the term “Off-Road Vehicle” to comply with the purposes of Executive Orders 11644 and 11989. The definition for both terms is the same. OHV road designations are as follows:

- **Open** - Designated areas and trails where off-highway vehicles may be operated subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343.
- **Limited** - Designated areas and trails where off-highway vehicles are subject to restrictions limiting the number or types of vehicles, date, and time of use; limited to existing or designated roads and trails.
- **Closed** - Areas and trails where the use of off-highway vehicles is permanently or temporarily prohibited. Emergency use is allowed.

Outstanding Natural Area (ONA) - An area that contains unusual natural characteristics and is managed primarily for educational and recreational purposes.

Outstandingly Remarkable Values (ORV) - Values among those listed in Section 1 (b) of the Wild and Scenic Rivers Act: “scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values . . .” Other similar values that may be considered include ecological, biological or botanical, paleontological, hydrological, scientific, or research.

Pre-commercial Thinning - The practice of removing some of the trees less than merchantable size from a stand so that remaining trees will grow faster.

Prescribed Fire - A fire burning under specified conditions that will accomplish certain planned objectives.

Probable Sale Quantity (PSQ) - An estimated volume that can be harvested from matrix and AMA lands based on certain computer modeling assumptions.

“Projected Acres” – Projected acres are displayed by modeled age class for the decade. These “modeled” age class acres are estimates derived from modeling various silvicultural prescriptions for regeneration, commercial thinning, and density management harvest. Modeled age class acre projections may or may not correspond to “Offered” or “Harvested” age class acres at this point in the decade. Additional age classes are scheduled for regeneration, commercial thinning, and density management harvest at other points in the decade.

Purposive Survey- A survey of the best habitat available for a selected species that is being sought.

Regeneration Harvest - Timber harvest conducted with the partial objective of opening a forest stand to the point where favored tree species will be reestablished.

Regional Ecosystem Office (REO) - The main function of this office is to provide staff work and support to the Regional Interagency Executive Committee (RIEC) so the standards and guidelines in the forest management plan can be successfully implemented.

Regional Interagency Executive Committee (RIEC) - This group serves as the senior regional entity to assure the prompt, coordinated, and successful implementation of the forest management plan standards and guidelines at the regional level.

Research Natural Area (RNA) - An area that contains natural resource values of scientific interest and is managed primarily for research and educational purposes.

Resource Management Plan (RMP) - A general land use plan prepared by the BLM under current regulations in accordance with the Federal Land Policy and Management Act.

Right-of-Way - A permit or an easement that authorizes the use of public lands for specified purposes, such as pipelines, roads, telephone lines, electric lines, reservoirs, and the lands covered by such an easement or permit.

Rural Interface Areas - Areas where -managed lands are adjacent to or intermingled with privately-owned lands zoned for 1 to 20-acre lots or that already have residential development.

Seral Stages - The series of relatively transitory plant communities that develop during ecological succession from bare ground to the climax stage. There are five stages:

- **Early Seral Stage** - The period from disturbance to crown closure of conifer stands usually occurring from 0-15 years. Shrubs, grasses, and forbs, are plentiful.
- **Mid Seral Stage** - The period in the life of a forest stand from crown closure to ages 15-40. Due to stand density, shrubs, grasses, or forbs rapidly decrease in the stand. Hiding cover may be present.
- **Late Seral Stage** - The period in the life of a forest stand from first merchantability to culmination of mean annual increment. This is under a regime including commercial thinning, or to 100 years of age, depending on wildlife habitat needs. During this period, stand diversity is minimal, except that conifer mortality rates will be fairly rapid. Hiding and thermal cover may be present. Forage is minimal.
- **Mature Seral Stage** - The period in the life of a forest stand from Culmination of Mean Annual Increment to an old growth stage or to 200 years. This is a time of gradually increasing stand diversity. Hiding cover, thermal cover, and some forage may be present.
- **Old Growth** - This stage constitutes the potential plant community capable of existing on a site given the frequency of natural disturbance events. For forest communities, this stage exists from approximately age 200 until when stand replacement occurs and secondary succession begins again. Depending on fire frequency and intensity, old growth forests may have different structures, species composition, and age distributions. In forests with longer periods between natural disturbances, the forest structure will be more even-aged at late mature or early old growth stages.

Silvicultural Prescription – An action plan, usually written by a forest silviculturist, who prescribes forest vegetative treatments needed to achieve desired future conditions or management objectives.

Site Preparation - Any action taken in conjunction with a reforestation effort (natural or artificial) to create an environment that is favorable for survival of suitable trees during the first growing season. This environment can be created by altering ground cover, soil or microsite conditions, using biological, mechanical, or manual clearing, prescribed burns, herbicides, or a combination of methods.

SEIS Special Attention Species - A term which incorporates the “Survey and Manage” and “Protection Buffer” species from the Northwest Forest Plan. (RMP30)

Special Status Species - Plant or animal species in any of the following categories:

- **Threatened or Endangered Species**
- **Proposed Threatened or Endangered Species**
- **Candidate Species**
- **State-listed Species**
- **Bureau Sensitive Species**
- **Bureau Assessment Species**

Target Volume - As used in this document, target volume refers to the volume to be offered for sale as directed by the annual budgeting documents for the district.

Visual Resource Management (VRM) - The inventory and planning actions to identify visual values and establish objectives for managing those values and the management actions to achieve visual management objectives.

Wild and Scenic River System - A National system of rivers or river segments that have been designated by Congress and the President as part of the National Wild and Scenic Rivers System (Public Law 90-542, 1968). Each designated river is classified as one of the following:

- **Wild River** - A river or section of a river free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. Designated wild as part of the Wild and Scenic Rivers System.
- **Scenic River** - A river or section of a river free of impoundments, with shorelines or watersheds still largely primitive and undeveloped but accessible in places by roads. Designated scenic as part of the National Wild and Scenic Rivers System.
- **Recreational River** - A river or section of a river readily accessible by road or railroad that may have some development along its shorelines, and that may have undergone some impoundment or diversion in the past. Designated recreational as part of the National Wild and Scenic Rivers System.

APPENDIX 2 ACRONYMS/ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
ACS	Aquatic Conservation Strategy
APS	Annual Program Summary
BA(s)	Biological Assessments
BLM	Bureau of Land Management
BMP(s)	Best Management Practices
BRD	Biological Resources Division of USGS
CBWR	Coos Bay Wagon Road
CON	Connectivity/Diversity Blocks
CERTS	Community Economic Revitalization Teams
CFER	Cooperative Forest Ecosystem Research
COPE	Coastal Oregon Productivity Enhancement Project
CT	Commercial Thinning
CX	Categorical Exclusions
CWA	Clean Water Act
CWD	Coarse Woody Debris
DEQ (ODEQ)	Oregon Department of Environmental Quality
DM	Density Management
DPS	Distinct Population Segment
EA	Environmental Analysis
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
ERFO	Emergency Relief Federally Owned
ERMA	Extensive Recreation Management Area
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
FEIS	Final Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
FONSI	Finding of No Significant Impacts
FRESC	Forest & Rangeland Ecosystem Science Center
FS	Forest Service (USFS)
FY	Fiscal Year
GFMA	General Forest Management Area
GIS	Geographic Information System
GTR	Green Tree Retention
IDT	Interdisciplinary Teams
LSR	Late-Successional Reserve
LUA	Land Use Allocation
LWD	Large Woody Debris
MMBF	Million Board Feet
MOA	Memorandum of Agreement

MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NFP (NWFP)	Northwest Forest Plan
NMFS	National Marine Fisheries Service
O&C	Oregon and California Revested Lands
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
OSU	Oregon State University
PACs	Province Advisory Councils
PD	Public Domain
PGE	Portland General Electric
PILT	Payment in Lieu of Taxes
PL	Public Law
PSQ	Probable Sale Quantity
RA	Resource Area
REO	Regional Ecosystem Office
RIEC	Regional Interagency Executive Committee
RMP	Resource Management Plan
RMP/ROD	The Salem District RMP and Record of Decision
RO	Forest Service Regional Office
ROD	Record of Decision
RPA	Reserve Pair Area
RR	Riparian Reserve
R/W	Right-of-Way
SEIS	Supplemental Environmental Impact Statement
S&G	Standard and Guideline
S&M	Survey and Manage
SRMA	Special Recreation Management Area
TMO	Timber Management Objective(s)
TMP	Transportation Management Plan
TPCC	Timber Productivity Capability Classification
UO	University of Oregon
USDA	U.S. Department of Agriculture
USDI	U.S. Department of Interior
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WC	Watershed Council
WFSA	Wildfire Situation Analysis
WQMP	Water Quality Management Plan

APPENDIX 3 SPECIAL FOREST / NATURAL PRODUCT ACTIONS

RMP Authorized Product Sales	Unit of Measure	FY 2006	Total 2 nd Decade FY 2005 - 2014
Boughs	Pounds	103,700	136,200
	Contracts	22	31
	Value (\$)	\$12,054.00	\$15,765.00
Burls and Miscellaneous	Pounds	0	0
	Contracts	0	0
	Value (\$)	\$0.00	\$0.00
Christmas Trees	Trees	2	11
	Contracts	1	8
	Value (\$)	\$20.00	\$151.58
Edibles and Medicinals	Pounds	200	860
	Contracts	1	3
	Value (\$)	\$34.00	\$54.00
Feed and Forage	Tons	0	50
	Contracts	0	1
	Value (\$)	\$0.00	\$200.00
Floral and Greenery	Pounds	26,655	71,930
	Contracts	10	29
	Value (\$)	\$2,132.40	\$5,672.65
Moss and Bryophytes	Pounds	0	500
	Contracts	0	1
	Value (\$)	\$0.00	\$1,846.00
Mushrooms and Fungi	Pounds	27,496.5	51,445.8
	Contracts	187	295
	Value (\$)	\$4,242.19	\$7,248.02
Ornamentals	Plants	0	0
	Contracts	0	0
	Value (\$)	\$0.00	\$0.00
Seed and Seed Cones	Bushels	0	0
	Contracts	0	0
	Value (\$)	\$0.00	\$0.00
Transplants	Plants	450	7,090
	Contracts	4	27
	Value (\$)	\$315.00	\$2,358.00
Firewood and Wood Products**	Cu Ft	20,221.9	36,850.0.
	Contracts	123	221
	Value (\$)	\$2,967.59	\$5,487.99
Totals	Contracts Value	350 \$21,810.68	618 \$38,828.74

APPENDIX 4 LAND ACQUISITIONS BY EXCHANGES OR PURCHASE FISCAL YEARS 95-06

Name	Case File Number	Date	Acres Acquired	Acres Conveyed	Remarks
Aims Exchange	OR50799	2/24/95	0	27.09	The BLM acquired 48.80 acres in Perpetual Scenic Easement to facilitate implementation of the Sandy Wild & Scenic River Management Plan.
Sandy Exchange	OR50419	3/7/95	80.85	0	Five acres of timber only conveyed in return for the acquired acreage. Acreage acquired to facilitate implementation of the Sandy River Management Plan.
Rocky Top Exchange	OR50847	8/3/95	142.82	110.00	Exchange to consolidate ownership and acquire a bald eagle nest site.
River Trail Exchange	OR51155	5/7/96	154.41	80	Exchange to obtain access for proposed Molalla River Trail.
Little N.Fk. Wilson River Exchange	OR51231	6/26/96	525.01	489.93	Exchange to obtain high quality marbled murrelet, spotted owl and salmon habitat.
Wildwood Exchange	OR52446	3/11/98	89.07	80	Also acquired 8.12 acre Perpetual Trail Easement.
Mt.Hood Corridor Exchange	OR53235	1/12/98	3,531.65	1,453.52	Exchange completed per Title IV of the Omnibus Consolidated Appropriations Act for fiscal year 1997. Lands are in view shed of Mt. Hood Corridor.
Fishermen's Bend (Frank Trucking)	OR55115	9/24/01	17.74	0	Purchased with Land and Water Conservation Funds.
Sandy River (Prochnau)	OR56328	9/24/01	152.27	0	Purchased with Land and Water Conservation Funds.
Sandy River (PGE)	OR56330	9/21/01	60	0	Purchased with Land and Water Conservation Funds.
Sandy River (Smekel/ PGE)	OR56329	9/23/02	239.8	0	Purchased with Land and Water Conservation Funds.
Sandy River (Dodge)	OR57278	9/26/02	273.5	0	Purchased with Land and Water Conservation Funds.
Sandy River (Longview)	OR57752	9/16/03	187.2	0	Purchased with Land and Water Conservation Funds.
Sandy River (Winters Group)	OR58455	9/16/03	206.9	0	Purchased with Land and Water Conservation Funds.
Sandy River (Barnett)	OR58456	9/22/04	19.6	0	Purchased with Land and Water Conservation Funds.
Sandy River (PGE)	OR58457	9/29/04	306.9	0	Purchased with Land and Water Conservation Funds.
Sandy River (PGE)	OR59051	9/22/04	117.0	0	Purchased with Land and Water Conservation Funds.

Sandy River (Longview / Schopert / PGE)	OR59052	9/29/04	300.0	0	Purchased with Land and Water Conservation Funds.
Sandy River (TenEyck)	OR59053	9/30/05	127.9	0	Purchased with Land and Water Conservation Funds.
Sandy River (PGE)	OR60666	9/30/05	117.46	0	Purchased with Land and Water Conservation Funds.
Sandy River (PGE)	OR61162	9/20/06	47.3	0	Purchased with Land and Water Conservation Funds.
Sandy River (WEYCO)	OR62002	9/20/06	78.1	0	Purchased with Land and Water Conservation Funds.
Totals			6,775.48	2,240.54	Net Acreage increase to BLM of 4,534.94 acres

Source: Serial Register of Realty Cases - Salem District

APPENDIX 5 LAND SALES FISCAL YEARS 95-06

These land sales were isolated parcels of BLM ownership that were targeted for disposal (land tenure zone 3) or minor sales completed to resolve occupancy trespasses.

Purchaser	Serial Number	Date	Acres Sold
Peter Boden	OR51166	9/25/95	0.43
Robert Dersham	OR51291	2/23/95	0.80
Caffall Brothers	OR51890	1/9/96	2.44
Ray Johnson	OR51998	10/17/95	0.15
Clem Lulay	OR52096	5/26/96	0.19
Clara Taylor	OR52165	10/17/95	0.46
Ervin Simmons	OR52166	10/17/95	0.38
Robert Mommson	OR52644	1/24/97	0.20
Stimson Lumber. Co.	OR53113	8/28/97	0.15
Stimson Lumber. Co.	OR53114	8/28/97	0.60
Morrow For.Pds.	OR53115	11/19/97	1.00
Morrow For.Pds.	OR53116	11/19/97	2.10
Morrow For.Pds.	OR53117	11/19/97	2.60
City of McMinnville	OR54442	6/16/98	3.79
Susi K. Trattner	OR53611	11/6/98	0.19
Konstantin Verbin	OR53985	4/29/99	0.34
Total			15.82

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

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1717 Fabry Rd. SE
Salem, Oregon 97306

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