

**Salem District
Annual Program Summary
Plan Maintenance and Monitoring Report
Fiscal Year 2010**



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.

Cover Photo: Yaquina Head Lighthouse.-At 93 feet, this BLM facility.is Oregon's tallest lighthouse.

In FY 2010, the Salem District worked on nine American Recovery and Reinvestment Act (ARRA) projects. Some of these projects included facility upgrades at Yaquina Head.

BLM/OR/WA/AE-10/055+1792

A Message from the District Manager

This is the 15th Annual Salem District Program Summary.. As in past years, this report highlights accomplishments made during fiscal year (FY) 2010 (October 2009 through September 2010). Where possible, cumulative information covering the period since the beginning of the Resource Management Plan (RMP) (fiscal years 1995 through 2010) is provided. Tables 1 and 2 summarize many of the resource management accomplishments.

Since the withdrawal of the 2008 Western Oregon Plan Revision, the Salem BLM utilizes the 1995 Resource Management Plan (RMP) to guide management activities.

In FY 2010, the District offered 66.5 million board feet (MMBF) of allowable harvest, primarily from commercial and density management thinning. The Salem District's declared Allowable Sale Quantity (ASQ), under the 1995 RMP is 34.8 million board feet (MMBF). Of the total volume offered, 31.9 MMBF counts towards the ASQ volume. In addition, approximately 34.6 MMBF of timber volume was offered as a result of restoration thinning in Late-Successional Reserves (LSR) and Riparian Reserves (RR). These sales were designed to improve habitat conditions for late-successional, old-growth, and riparian dependent species.

In FY 2010, the Salem District worked on nine American Recovery and Reinvestment Act (ARRA) projects. The projects include facility upgrades to the Salem office building, and facility upgrades at the Yaquina Head Outstanding Natural Area and waterline replacements at several recreation sites (see Table 5 for a complete list of these projects).

An estimated 1.5 million visitors enjoyed the numerous recreational opportunities on public lands managed by the BLM. The Salem District manages seven National Landscape Conservation System Units, including the Yaquina Head Outstanding Natural Area, five wild and scenic river segments, and the Table Rock Wilderness.

We hope that you find the information contained in this report informative and we welcome suggestions for improvement.

Miles R. Brown
District Manager

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INTRODUCTION

This Annual Program Summary (APS) is a review of the Salem District programs and accomplishments during fiscal year 2010 (FY 2010). 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 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 various 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 obtain a complete picture of District programs and their progress. The APS provides information about the progress of plan implementation.

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 2010) is provided.



A Spyder excavator places logs in Elkhorn Creek.

Table 1 - Summary of Renewable Resource Management Accomplishments

RMP Management Activity	FY 2010	Cumulative 1995-2010	Projected Decadal Practices (2005-2014 timber only)
Regeneration Harvest (acres sold/offered)	121	2,985	5,558
Commercial Thinning / Density Management / Uneven-age Harvests (acres sold/offered)	2,858	19,887	8,195
Prescribed Burning - Hazard Reduction (acres)	169	1,044	None
Prescribed Burning - Wildlife Habitat (acres)	0	46	None
Prescribed Burning - Ecosystem Management (acres)	0	144	None
Hazard Reduction - Hand Pruning and Pullback (acres)	208	1472	None
Hazard Reduction – Mechanical Piling (acres)	111	unknown	None
Site Preparation - Prescribed Burning (acres)	526	3,014	4,800
Site Preparation - Other (acres)	16	4,113	5,900
Plantation Maintenance - Vegetation Control (acres)	536	26,839	18,500
Plantation Protection - Animal Damage Control (acres)	268	6,983	12,800
Pre-commercial Thinning (acres)	2009	40,805	29,700
Brush Field / Hardwood Conversion (acres)	0	194	900
Planting / Regular Stock (acres)	46	5,286	4,800
Planting / Genetically Selected (acres)	309	2,056	4,500
Fertilization (acres)	0	4,645	6,000
Pruning (acres) ¹	303	3,866	None
New Permanent Road Constructed (miles)	0	27	NA
Roads Fully Decommissioned / Obliterated (miles)	10	142	NA
Roads Closed / Gated (miles)	1	181	NA
Timber Sale Quantity Sold/Offered (million board feet) (allowable sale quantity)	32	438	348
Timber Sale Quantity Sold/Offered (million cubic feet) (allowable sale quantity)	6	79	57
Noxious Weed Control, Chemical (sites/acres)	84/2,295	171/2,767	As Needed
Noxious Weed Control, Other (sites/acres)	44/673	132/4,899	As Needed
¹ Pruning for disease control combined with wood quality			

Table 2 - Summary of Non-Renewable Resource Management Accomplishments

RMP Management Activity	Activity Units	FY 2010	Cumulative 1995-2010
Realty, Land Sales	actions / acres	0 / 0	16/15.82
Realty, Land Exchanges	actions / acres acquired / acres disposed	0/0/0	7/4,524/2,241
Realty, R&PP Leases/Patents	actions	0	3
Realty, Road Easements Acquired for Public / Agency Use	actions	1	25
Realty, Road Rights-of-Way, Permits or Leases Granted	actions	8	152
Realty, Utility Rights-of-Way Granted (linear / areal)	actions	0	37
Realty, Withdrawals Completed	actions / acres	0	2
Realty, Withdrawals Revoked	actions / acres	0	1/16
Mineral / Energy, Total Oil and Gas Leases	actions / acres	1/15,633	1/15,633
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	N/A ¹
Recreation, Maintained Non-Motorized Trails	units / miles	11/58	N/A ¹
Recreation, Maintained Sites	units / acres	19/ 2,000	N/A ¹
Cultural Resource Inventories	sites / acres	9/ 2,381	61 / 24,745
Cultural / Historic Sites Nominated	sites / acres	0/0	0/0
Hazardous Material Sites	identified / cleaned	7 / 5	65/46
¹ Same trails/sites maintained annually - no cumulative number			

BUDGET

Budget Summary

The Salem District was appropriated \$21.7 million in FY 2010. This includes:

Resource management on Oregon and California Railroad Lands (O&C) (for future prepared sales, timber pipeline funds, and recreation pipeline funds)	\$16.2 million
Resource management on public domain lands in Management of Lands and Resources (MLR) accounts (including fire management and preparation)	\$1.5 million
Title II (county payments) projects	\$0.6 million
Construction, deferred maintenance and infrastructure improvements	\$0.8 million
One-time allocation: land acquisition	\$2.6 million

Salem District O&C and MLR funding changed very little from FY2009 to FY2010. Accounts related to special one-time projects fluctuate from year-to-year. The District saw a large decrease in one-time funding from FY2009 to FY2010. This was primarily due to not receiving additional American Recovery and Reinvestment Act (ARRA) funds this year.

Timber Pipeline Restoration Program

The Pipeline Restoration Fund was established under Section 327 of the Omnibus Consolidated Rescissions and Appropriations Act of 1996 (Public Law (PL) 104-134). The Act established separate funds for the Forest Service and BLM, using revenues generated by timber sales released under Section 2001(k) of the FY 95 Supplemental Appropriations for Disaster Assistance and Rescissions Act. PL 104-134 directs that 75 percent of the Fund be used to prepare sales sufficient to achieve the total Allowable Sale Quantity (ASQ) and that 25 percent of the Fund be used on the backlog of recreation projects. BLM's goal is to use the Fund to gain one year's lead time in ASQ timber sale preparation work over a five to seven year time frame, reduce the backlog of maintenance at recreation sites, and address crucial unresolved visitor services or recreation management needs.

Since May 1998, 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 for one year of timber sales package to be completed 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 offered 14.7 million board feet (MMBF) of timber pipeline sales in FY 2010.

Recreation Pipeline Restoration Program

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 3 shows how Salem utilized these funds.

Table 3 - Recreation Pipeline Projects, FY 2010

Project Area	Project Description	Dollars Expended*
Wildwood Recreation Site (H201)	Office Improvement Project	\$35,000
Yaquina Head Outstanding Natural Area (YHONA) (H213)	Gate Replacement	\$5,000
Alea Falls (H201)	Hand Pump Replacement/Well Abandonment	\$18,000
Fishermen's Bend Recreation Site (H202)	Roof Replacement (Group Shelters)	\$180,000
Nestucca Backcountry Byway (H205)	Byway Road maintenance	\$42,000
Wildwood Recreation Site (H201)	Wildwood Sign Replacement	\$30,000
Sandy Ridge Trail Project (H201)	Trail Maintenance and New Trail Construction	\$180,000
Nestucca Backcountry Byway (H205)	Interpretive sign replacement	\$10,000
TOTAL		\$470,000
* Costs include administrative overhead/labor costs		

Challenge Cost Share Funds

The Salem District cooperated in four Challenge Cost Share Projects in 2010. Partners involved with these projects include: WolfTree, Inc., Tillamook Estuaries Partnership, Institute for Applied Ecology, Tillamook Native Plant Cooperative, State of Oregon, Hatfield Marine Science Center and private landowners.

Table 4 - Challenge Cost Share Projects

Project	Funding	
	BLM	Partners
Cascade Stream Watch	\$33,000	\$100,000
Little North Fork Wilson Restoration (Weeds)	\$10,000	\$10,000
Maxfield Oak/Meadow Restoration	\$15,000	\$15,000
Tillamook Resource Area Riparian Restoration	\$25,000	\$60,000
	\$73,000	\$185,000

American Recovery and Reinvestment Act (ARRA) Funds

The Salem District received \$5.5 million in funding for nine American Recovery and Reinvestment Act (ARRA) projects. The projects include a photovoltaic system, domestic hot water boilers, an upgrade to the security system, energy efficient windows and skylights and an energy efficient mechanical system retrofit for the District Office. The projects also include waterline replacements at Alsea Falls, Fishermen’s Bend and Wildwood Recreation Sites. Yaquina Head Outstanding Natural Area projects include installation of a security system, installation of energy efficient windows and doors, applying slurry seal on the roads and parking lots, replacing interpretive wayside exhibits, and reconstructing the trails.

Table 5 - American Recovery and Reinvestment Act Projects

Project Title	Description
Salem Office Photovoltaic System Retrofit	Installation of a photovoltaic cell system on the 29 year old building's roof. The 15-year-old office roof will be replaced to maintain system integrity for the initial 20+ years of service life of the photovoltaic system.
ESPC - Salem Hot Water Boilers	The building's hot water mechanical systems are being upgraded by installing "newer technology" condensing boilers and uncoupling it from the building heating water system.
Salem Office Mechanical System Retrofit	The building's mechanical systems are being updated by the installation of two new high-technology condensing boilers, adding a solar thermal preheater to the hot water system, replacing various exhaust fan motors, insulating supply/return ducting, adding occupancy sensors to specific rooms, and adding new purge fans to the air handling system.
Salem Office Windows and Skylight Renovation	The building's windows and skylights are being replaced with newer technologies that increase energy efficiency.
Salem and Yaquina Security Upgrades	The upgrade to the security systems at both the Salem District office in Salem and the Yaquina Head Outstanding Natural Area in Newport.
Yaquina Head Door and Window Replacement	This project will continue Replacement of the corroded steel doors and frames at the interpretive center and improve the energy efficiency of the building.
Yaquina Head Road and Parking Lot Slurry Seal	The surfaces of access roads and parking areas have been sealed with a slurry seal coating that protects the underlying asphalt and provides a non-skid surface for vehicle and pedestrian traffic at the site.
Yaquina Head Exhibit and Trail Replacement	The asphalt walkways are being replaced throughout the park with concrete walkways. This project will also design and construct new exhibits of non-corrosive and non-fading materials. New exhibits will meet the current BLM graphics standards.
Recreation Site Waterline Replacement	Replacement of the aging public drinking waterlines at the Wildwood Recreation Site, Fishermen’s Bend Recreation Site, and Alsea Falls Recreation Site.

PROGRESS OF RESOURCE MANAGEMENT PLAN IMPLEMENTATION

Land Use Allocations

Most of the changes to Land Use Allocation (LUA) boundaries and acreages reflect acquisitions in the Sandy River Basin. Table 6 shows LUA acreage revisions since Resource Management Plan (RMP) implementation began.

Table 6 - Revised Acreage within Land Use Allocations*

Major Land Use Allocation	Acres in RMP Record of Decision	Acres BEFORE Adjusting for Unmapped LSRs (NSO, MM)	Acres AFTER Adjusting for Unmapped LSRs (NSO, MM)
Late-Successional Reserves outside the Adaptive Management Area	132,100	133,472	135,409
Late-Successional Reserves inside the Adaptive Management Area	79,700	80,409	80,793
Adaptive Management Area	43,700	41,927	41,543
General Forest Management Area (Matrix)	107,300	104,927	104,060
Connectivity / Diversity Blocks (Matrix)	27,400	27,286	26,345
Other	7,900	15,200	15,071
TOTAL	398,100	403,222	403,222

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

LSR = Late-Successional Reserve

NSO = Northern Spotted Owl

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

Late-Successional Reserve Assessments have been completed and reviewed by the Regional Ecosystem Office for all Late-Successional Reserves (LSR) within the Salem District except for 1,986 acres of scattered parcels in the Scappoose block. Many of the LSR assessments were joint efforts involving the U.S. Forest Service and other BLM Districts. During FY 2010, 829 acres of habitat were commercially treated to accelerate the development of late-successional characteristics (32 acres in Adaptive Management Reserves, 371 acres in LSR, and 426 acres in Riparian Reserve). A total of 3,669 acres were treated from 1996 through 2010. The District also completed 1,176 acres of pre-commercial thinning in very young stands in LSRs to accelerate the development of older forest structure.

Northern Coast Range Adaptive Management Area (AMA)

The Salem District's Northern Coast Range 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 described in the Salem District Resource Management Plan. Partnerships and collaboration are a major method of doing business in the AMA; the following are examples:

1. The Tillamook Resource Area is a partner with state and local agencies, and watershed councils in the Native Plant Cooperative. This partnership was formed to (a) share resources to enhance the restoration capacity in our communities, (b) encourage education regarding 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 plants 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 seeds and cuttings, 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. Through this partnership, more than 20 miles of degraded riparian habitat are being improved annually. The success of the Native Plant Cooperative has been recognized by several national awards.
2. Contracting continues to be a primary method used for accomplishing many of the planning, analysis and implementation steps of resource management projects, e.g., surveys to determine the presence or absence of special status species. This method has been very successful and provides job opportunities in the private sector.

During 2009, the Salem District contracted timber cruising and timber sale layout of harvest areas. The BLM staff have historically cruised timber to determine the quantity and quality of the trees and wood fiber, as well as, posted harvest boundaries and painted reserve trees. Learning to contract these services will help BLM have more tools for getting needed work completed. In 2010, cruising and sale layout was completed primarily using traditional methods.

3. The Tillamook Resource Area and the Oregon Department of Forestry (ODF), with support from the Tillamook Estuaries Partnership, Oregon Department of Fish and Wildlife, Weyerhaeuser, 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 within the Elkhorn sub-watershed of the Trask River. (2005-2008). Ongoing monitoring efforts (for winters 2008-09 and 2009-10) indicate a high degree of success in improving spawning and rearing habitat for resident and anadromous fish. Increased over-winter survival of Oregon Coast Coho has been particularly notable.
4. 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 (science, math, language arts, and history) in the classroom. Funding from the Secure Rural Schools and Community Self Determination Act of 2000 has been key to sustaining this cooperative effort. Due primarily to continued funding difficulties, emphasis on this program diminished in 2010.

Tillamook Resource Area hosted a summer crew. The natural resource crew, which included seven students and two teacher/instructors from Nestucca Valley and Tillamook High Schools, did a variety of field projects. BLM managers and school District administrators spent a day in the field with the crew at the end of the summer recapping and critiquing the summer efforts.

5. In 2006, 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 Nestucca River Watershed. Barriers that limit or preclude fish access to valuable habitat have been prioritized. Landowners have made substantial progress in removing the barriers, adding to the Watershed's capacity to support robust native fish populations. The difficult economy continued through 2010 to lessen BLM's and partner's capability to work aggressively towards these goals.
6. The Tillamook Resource Area established a SMILE program (Science & Math Investigative Learning Experiences) in an MOU with Willamina School District and Oregon State University. The SMILE Program involves students in natural resource based field studies associated with BLM-managed lands in the Coast Creek Watershed of the South Yamhill Basin in Yamhill County.
7. The BLM is continuing to work cooperatively with numerous partners on the Trask and Alsea Paired Watershed Study. Substantial Secure Rural Schools Title II funding was recommended for use on this project in 2010 by the Salem Resource Advisory Committee.

PROGRAM ACCOMPLISHMENTS

Air Quality

Air quality continues to be an emphasis on the Salem District. All prescribed fire projects were coordinated with Oregon Department of Forestry (ODF) and done in compliance with the guidelines outlined in the Oregon Smoke Management Plan. Smoke did not intrude into any designated area or Class 1 air shed. The low number of acres burned and burning of piled material during fall damp, unstable atmospheric conditions, helped reduce residual smoke. The lower acres burned in 2010 was in part due to increased efforts to find alternative uses for residual slash material such as chipping for soil amendment, chipping for use in wood products, and chipping for use as hog fuel. Slash piles were distributed throughout the District which reduced the impacts to any one geographic air shed. See Table 7 for site preparation fuel treatments. All burning was closely coordinated with adjacent landowners to assure that management of the air shed was maintained at a high level of quality for visual resources and human health.

Table 7 - Site Preparation Fuel Treatments by Land Use Allocation

	Land Use Allocation					
	Matrix (GFMA)	Connectivity	AMA	LSR	Other	Total
Fire Treatment Acres	695	0	0	0	0	695
Other Treatment Acres*	319	0	0	0	0	319
TOTAL	1014	0	0	0	0	1014

*Includes site preparation acres treated for planting or hazard reduction purposes.

Water and Soil Quality

Water and soils are the primary components for production of renewable resources and the 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 1995 RMP. Salem District's foremost objectives include providing for conditions supporting high quality water for domestic drinking and fish habitat. The District promotes protection of soils to promote soil quality, maintain site productivity, 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 (BMPs)

Best Management Practices (BMPs) are the primary controls for achieving Oregon's water quality standards and are used to meet water quality objectives when implementing site-specific management actions. During the Western Oregon Plan revision process, the BLM reviewed and updated existing BMPs based on implementation and effectiveness monitoring, field experience,

and new science. These revised BMPs represent the BLM's most current set of BMPs. Road related BMP's review process was begun in 2010 and has continued into 2011. The Salem District works with cities to ensure that timber harvest and road building BMP's are designed in a manner to protect water quality in watersheds used by cities for their municipal water supply.

Implementation Monitoring for Water Quality

Performance monitoring, as identified in OAR3400042-0030 (7), is an important component of the Total Daily Maximum Load (TMDL) process and requires annual reporting as outlined in the BLM's Willamette Basin Water Quality Restoration Plans (WQRPs).

BMP implementation monitoring was completed on the AG-47 Timber Sale in the Cascades Resource Area in 2010. Tillamook Resource Area completed BMP implementation monitoring on three timber sales (Blind Barney, Camp One and Flora Fauna) in 2010. These field reviews indicated that BMPs were implemented and they were effective in reducing sediment delivery to the associated stream courses. Mary's Peak did not complete BMP implementation monitoring during 2010. Tillamook completed limited BMP Implementation on road decompaction within the Trask River Watershed.

Effectiveness Monitoring for Water Quality

The Willamette Basin WQRPs include an effectiveness monitoring component. The monitoring plans identify effective shade monitoring which would include a review of riparian management area width, primary shade zone retention, and canopy retention in the secondary shade zone.

From 2008 through 2010, the Mary's Peak Resource Area conducted turbidity and stream flow monitoring on Maxfield Creek. This monitoring is related to the realignment and decommissioning of 0.25 mile of road, the removal of two fish passage barrier culverts and the placement of large woody debris into 2.5 miles of Maxfield Creek.

In 2010, Mary's Peak Resource Area monitored temperature according to the TMDL Shade Monitoring Methodology on the Condensor Timber Sale in the Mill Creek Watershed. The result of the TMDL Shade Monitoring will be used to evaluate the effectiveness of the channel and riparian restoration project and to provide a long term effectiveness monitoring component to the Willamette River Water Quality Restoration Plan.

In 2010, monitoring was collected on the Gordon Creek Timber Sale in the Sandy River Watershed (Cascades RA). The result of the TMDL Shade Monitoring will be used to evaluate the effectiveness of the channel and riparian restoration project and to provide a long term effectiveness monitoring component to the Sandy Basin Water Quality Management Plan.

Water temperature data that was collected in the Molalla Pudding River Watershed during 2008 was analyzed during 2010 in preparation for the development of the Molalla-Pudding River TMDL Water Quality Restoration Plan.

Pesticide spraying, and the associated water quality monitoring, was conducted at Horning Seed Orchard. The monitoring results are in the 2010 Horning Seed Orchard Annual Monitoring Report. This report is available at the Salem District Office and the Horning Seed Orchard. The sample analysis showed no pesticide residue from the spray project.

Baseline Monitoring for Water Quality

No continuous baseline data was collected for TMDL other than using the Shade Temperature Monitoring Methodology as described in the Willamette Basin Water Quality Restoration Plan. Baseline collection is planned to occur in the Molalla-Pudding River and Yamhill River Basins in 2011 in response to TMDL WQRP. The Yamhill River Basin TMDL is in the process of being finalized by DEQ in 2011 and a TMDL WQRP would need to be developed by the BLM in 2012.

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: Nestucca 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>

Water Body and Fragile Area Identification and Protection

The Salem District protects flood plains, wetlands, streams, and lakes through implementation of the Aquatic Conservation Strategy as described on pages 5-7 of the RMP. This is accomplished through on-the-ground identification of 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 RMP aquatic effectiveness monitoring, cumulative watershed assessments, and future project level planning. 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 best management practices to avoid and mitigate disturbance impacts.

Water Quality Restoration

In 2010, the Salem workforce involved with water quality restoration was primarily devoted to completing the Molalla-Pudding River Water Quality Restoration Plan, identifying potential projects in the field, coordinating the NEPA project planning, and seeking funding for the projects.

Cascades Resource Area contracted with the USGS to monitor discharge and turbidity on Evans Creek within the Little North Santiam Watershed as part of a water quality restoration project. A helicopter was used to place large wood in an active landslide area along Evans Creek. The wood provides stability and reduces sediment generated at the slide, thereby reducing the sediment transported downstream to steelhead spawning habitat.

Water quality restoration projects were completed in the Sandy, Clackamas, Molalla and Upper Nestucca Basins in 2010. These projects involved removing and blocking illegal off-highway vehicle trails to improve water quality. Restoration at the Marmot diversion dam site, removed in 2008, continued during 2010.

The Mary's Peak Resource Area provided technical assistance to the Yamhill Basin Council on a project to benefit water quality in Gooseneck Creek. The project placed large wood into a degraded channel and opened a side channel to capture sediment and spawning gravels. In 2010, planting of riparian plants is planned to help stabilize eroding stream banks and to provide additional shade.

303d Listed Streams

The Salem District manages lands in 14 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 ODEQ is required to develop Total Maximum Daily Loads (TMDL) and Water Quality Management Plans (WQMP's) for these sub-basins. The TMDLs describe the amount of each pollutant a waterway can receive and still not violate water quality standards. The WQMP identifies the agencies managing land in the sub basin that are responsible for developing implementation plans, which for the BLM are called Water Quality Restoration Plans (WQRP's). The current status of TMDL and WQRP completion is provided in Table 8. In 2010, the Salem District completed a Draft WQRP for the Molalla-Pudding River.



Nestucca Valley High School students monitor the Nestucca River channel

Table 8 - 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 and WQMP approved by Environmental Protection Agency (EPA) 2001
Nestucca Bay Watershed, Tillamook Bay Watershed	Trask River (temperature) Wilson River (temperature) Nestucca River (temperature, sediment) East Fork Beaver Creek (sediment)	Nestucca: TMDL and WQMP approved by EPA 2002. Tillamook: TMDL and WQMP approved by EPA 2001.
North Coast Sub-basin	East Fork Nehalem (temperature)	TMDL and WQMP approved by EPA 2003.
North Santiam Sub-basin	Little North Santiam (temperature) Elkhorn Creek (temperature) North Santiam River (temperature)	TMDL and WQMP approved by EPA 2006. BLM WQRP completed 2008.
South Santiam Sub-basin	Thomas Creek (temperature) Hamilton Creek (temperature) Crabtree Creek (temperature) Quartzville Creek (temperature)	TMDL and WQMP approved by EPA 2006. BLM WQRP completed 2008.
Clackamas Sub-basin	Clackamas River (temperature)	TMDL and WQMP approved by EPA 2006. BLM WQRP completed 2008.
Lower Willamette Sub-basin	Scappoose Creek (temperature)	TMDL and WQMP approved by EPA 2006. BLM WQRP completed 2008.
Middle Willamette Sub-basin	Rickreall Creek (temperature)	TMDL and WQMP approved by EPA 2006. BLM WQRP completed 2008.
Upper Willamette Sub-basin	Mary's River (temperature)	TMDL and WQMP approved by EPA 2006. BLM WQRP completed 2008.
Alsea Sub-basin	Alsea River (temperature) Fall Creek (temperature) Lobster Creek (temperature) Little Lobster Creek (temperature)	ODEQ has initiated TMDL. (Initial scoping & data collection phase)
Siletz Sub-basin	Siletz River (temperature) Drift Creek (temperature)	ODEQ has initiated TMDL. (Initial scoping & data collection phase)
Yamhill Sub-basin	Mill Creek (temperature) North Yamhill River (temperature) Turner Creek (temperature)	TMDL Report in progress (Data analysis & report writing phase)
Molalla / Pudding Sub-basin	Molalla River (temperature) North Fork Molalla (temperature) Table Rock Fork (temperature) South Fork Molalla (temperature) Pine Creek (temperature)	TMDL and WQMP completed: 2008. BLM WQRP in process with the Final WQRP to be completed in 2011.
Sandy Basin	Salmon River (temperature) Sandy River (temperature)	TMDL and WQMP approved by EPA 2005. BLM WQRP completed 2009.

Terrestrial Habitat and Species Management

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 species ranging 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. Mitigating measures to reduce impacts to wildlife in regeneration harvests or to improve habitat in other kinds of timber treatments include green tree retention, snag retention and recruitment, and management to increase coarse woody debris (CWD). Regeneration harvest was not conducted during FY 2010.

In FY 2010, Salem District treated 1,243 acres to create snags to benefit forest birds, bats, and arboreal rodents. At the same time these acres were treated to create coarse woody debris (CWD) to benefit forest floor species such as mollusks, salamanders, and prey species for northern spotted owls and other raptors. These treatments included work in GFMA and reserves.

Green Tree Retention

In FY 2010, no regeneration harvest was conducted that required green tree retention.

Connectivity / Diversity Blocks

In FY 2010, no treatments were conducted in Connectivity/Diversity blocks to promote late successional/old growth characteristics.

Special Habitats

In partnership with the Nature Conservancy, the Cascades Resource Area completed 965 acres of noxious weed control and habitat improvement along the Sandy River. The Tillamook Resource Area Riparian Restoration Effort Partnership planted 31,850 trees and shrubs along 21 miles of stream and in 3 acres of wetland. The Partnership also maintained 57.5 miles of existing planting in cooperation with 127 landowners.

Nest Sites, Activity Centers, and Rookeries

In FY 2010, no new nest sites, activity centers, or rookeries were discovered. Known nesting trees were protected throughout the Salem District. Active nests, particularly for raptors and special status species like the spotted owl and marbled murrelet, were protected using seasonal restrictions on nearby projects to discourage nest abandonment. Tree topping was completed on 1,450 trees to provide nesting or perching structures for forest raptors.

Elk Habitat

Roads that are unstable, or no longer required, are decommissioned or obliterated to restore watershed conditions. In FY 2010, ten miles of road were decommissioned or obliterated. One mile of road was closed, gated or blocked. 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 (LSR) Habitat Improvement

In FY 210, the Salem District implemented 829 acres of on-the-ground, (not just sold and awarded) density management treatments in 11 project areas. This was done to stimulate the development of old growth characteristics. The District also completed 1,176 acres of pre-commercial thinning in very young LSR stands to accelerate the development of older forest structure.

Special Status Wildlife

Surveys for special status wildlife species (listed as BLM sensitive and federally threatened or endangered) were completed prior to all ground disturbing activities. About 4,934 acres of pre-project surveys were conducted during 2010, bringing the total from 1996 through 2010 to 139,317 acres.

Bureau Sensitive Wildlife

BLM sensitive species are rare species that are managed to prevent federal listing as threatened or endangered. The following species were surveyed during FY 2010:

OREGON RED TREE VOLE: Approximately 194 acres were surveyed to pre-project protocol standards.

BALD EAGLE: Eight known bald eagle nesting sites were surveyed for activity and reproductive success; seven adults and two nestlings were observed. Five eagles were observed during the winter bald eagle count; three eagles were observed at the largest known winter roost site on Salem District. Project development, scoping and NEPA documentation on the Rocky Point Bald Eagle Habitat Enhancement Project was completed.

PEREGRINE FALCON: 50 acres of pre-project surveys were conducted.

HARLEQUIN DUCK: Harlequin duck surveys were conducted on the Salmon (2 miles), Molalla (18 miles), North Santiam (4 miles) Quartzville (9miles) and Nestucca River (8 miles) for a total of 41 river miles. Twenty ducks were observed. In addition, present and historic harlequin duck location information was entered into BLM's special status species database (GeoBOB data entry).

SALAMANDERS: 115 acres of pre-project surveys were conducted for Oregon slender salamanders. Purposive surveys were also conducted at 120 sites (1200 acres) and GeoBOB entry of the results was completed for this species. Monitoring for Southern torrent salamander was conducted at Otter Cliff.

MOLLUSKS: 414 acres were surveyed to protocol for several mollusk species identified as potential inhabitants of the Salem District. They included salamander slugs, warty jumping slugs, spotted tail-droppers, Pacific walker snails, evening field slugs and Puget Oregonian (a snail).

OTHER INVERTEBRATES: Three miles of larval survey near Valley of the Giants was conducted to determine the presence of Johnson's hairstreak, a BLM sensitive butterfly.

Threatened or Endangered (T/E) Wildlife

Interagency teams continued using the Section 7 streamlined consultation process. Level one teams, consisting of local employees from BLM, Forest Service (FS), and Fish and Wildlife Service (FWS), regularly met to accomplish consultations. In FY 2010, consultation for habitat modification activities on both the Willamette and North Coast Provinces to cover 2011 and 2012 were conducted through four batched biological assessments. Two of the biological assessments were done under informal consultation procedures for “not likely to adversely affect” actions. Two letters of concurrence were received for these. Two batched biological assessments for “likely to adversely affect” actions were also prepared and submitted to FWS under formal consultation procedures. Biological opinions are expected back from FWS in the winter of 2011.

MARBLED MURRELET: As of FY 2010, the Salem District has 34 known occupied murrelet sites in reserved land-use allocations in 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 2010, surveys have been completed where required for specific projects, in accordance with established protocol. This year, Salem BLM conducted 10 surveys for marbled murrelets in 2 project areas covering 240 acres. No murrelet presence was detected at the project sites.

Murrelet monitoring in known murrelet habitat was conducted at seven sites including Valley of the Giants (the habitat area on Salem District administered lands with the known highest level murrelet use). Monitoring surveys were completed on 630 acres. Murrelet presence was detected at three of the seven monitoring sites.

NORTHERN SPOTTED OWL: As of 2010, the Salem District has 61 occupied spotted owl sites. Northern spotted owl occupancy was determined through surveys conducted in the past five years. District-wide this year, 14 pre-project northern spotted owl surveys were conducted in 3 project areas covering 2,200 acres. District-wide monitoring of known spotted owl sites (occupied or previously occupied) was conducted on 80,200 acres. Of the 110 sites surveyed, 42 sites were occupied, five spotted owl fledglings were produced, and two juvenile spotted owls were banded. Barred owls were encountered at 69 of the 110 spotted owl sites monitored. Summaries of the spotted owl 2010 survey results are presented below:

Cascades Resource Area – Northern Spotted Owl 2010 Survey Summary

The Cascades Resource Area (CRA) consists of 175,000 acres of Bureau of Land Management (BLM) land in the Cascade Range of Western Oregon. BLM lands are intermingled with state and private industrial landowners. The joint objective is to inventory multi-ownerships for spotted owls through comprehensive surveys 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 cooperative effort occurs across intermingled ownerships with all parties contributing funding and in kind services to accomplish the workload.

In FY2010, a new spotted owl survey contract was developed. The Cascades Owl Survey Contract was awarded to Turnstone Environmental Consultants (TECI). During the survey season, a grand total of 75 known spotted owl sites were surveyed by federal, state, and private parties in the cooperative area. There were no new sites located in 2010. Of the 75 known spotted owl sites surveyed in 2010, the BLM contractor (TECI) and BLM personnel surveyed 45, and state and private surveyed 30. Of the 75 sites surveyed, 13 were occupied by spotted owl

pairs (17%), 15 were occupied by singles (20%) and there were no spotted owl responses in 47 sites (63%). In addition, there were 10 single responses not associated with known spotted owl sites.

2010 was the sixth year in a row of poor reproduction for spotted owls in the cooperative area. There were two known owl sites that fledged three juveniles in 2010. During the winter of 2010, snow accumulation was below average, but during late March, April, and May heavy snow accumulations hindered access above about 2,000 feet. There were two documented nesting failures where pairs were observed exhibiting nesting behavior early in the season, but no juveniles were detected during reproductive surveys. Snow and cold weather during the spring may have affected reproductive success, and there were likely more failures.

Barred owls were documented in 34 of the 75 known spotted owl sites surveyed in 2010 (45%). Fourteen of the 34 detections were pairs and 20 were singles. Eight barred owl young were fledged at 4 known spotted owl sites. The remaining 20 barred owl responses were single adults. There were 33 other barred owl detections (8 pairs and 25 singles), not associated with known spotted owl sites. Eight additional juvenile barred owls were detected that were not associated with known spotted owl sites.

Mary's Peak Resource Area - Northern Spotted Owl 2010 Survey Summary

The Mary's Peak Resource Area (MPRA) consists of 128,000 acres of Bureau of Land Management-administered land in Benton, Lincoln, and Polk counties. With the cooperation of timber companies, consultants, and Pacific Northwest Research Station (PNW), 184 survey visits were conducted at 34 spotted owl sites on BLM and adjacent landowners within the resource area. The PNW owl crew monitored 28 of these sites as part of their Coast Range Demographic Study. Several sites involved cooperative surveys with local landowners or their consultants. The MPRA staff surveyed five spotted owl sites.

Fourteen sites were occupied by spotted owls (10 pairs and 4 resident singles), while 20 sites had no occupancy by spotted owls. One site was occupied by a spotted-barred hybrid male owl with a barred owl female. Twenty of the 34 owl sites contained one or more barred owls. Six spotted owl pairs were confirmed nesting, but 4 pairs failed to fledge any young. Two pairs successfully fledged 1 juvenile each, both of which were banded. The hybrid/barred owl pair was confirmed to have produced 2 fledged juveniles. No new adult spotted owls were banded, but 16 previously banded owls (8 male and 8 females) were confirmed by identification of their color bands.

Tillamook Resource Area – Northern Spotted Owl 2010 Survey Summary

The Tillamook Resource Area (TRA) consists of 106,000 acres of Bureau of Land Management (BLM) 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 historical occupancy status and monitoring history. During the 2010 survey season, five spotted owl sites on BLM or on directly adjacent non-federal lands were monitored through efforts of our cooperators and/or BLM staff. No spotted owls were encountered at the five sites. Barred owls were detected at all five sites.

Special Status 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 species were completed prior to all ground-disturbing activities. Pre-project surveys for special status plant and fungi species were conducted on 5,400 acres, bringing the total from 1996 through 2010 to 84,000 acres.

In the Salem District, one new Bureau sensitive site was discovered in 2010.
LICHEN (*Lobaria linita*): One new site was found in 2010.

NOBLE POLYPORE FUNGUS (*Bridgeoporus nobilissimus*): Work continued with the *Bridgeoporus nobilissimus* (BRNO) working group on the DNA detectability study. Salem District participated in the resampling from known BRNO sites.

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 continued. Four *Cimicifuga elata* sites were monitored in 2010. Monitoring results from one of these sites has shown a trend of increased vigor over the past two years. The number of individual plants has increased from 40 to more than 100 plants and the number of reproductive stems has increased from 30% to 80%. This increase in vigor is most likely a response from an adjacent timber thinning.

FRIGID SHOOTING STAR (*Dodecatheon austrofrigidum*): Two sites of *Dodecatheon austrofrigidum* were visited and were found to be in good condition.

DUPLICATE TUBE LICHEN (*Hypogymnia duplicata*): Two sites of *Hypogymnia duplicata* were visited and were found to be in good condition.

WORKSHOPS

Salem BLM hosted an interagency bryophyte identification workshop.

Threatened or Endangered Plants

NELSON'S CHECKERMALLOW (*Sidalcea nelsoniana*) The Walker Flat *Sidalcea nelsoniana* population was monitored and was found to be healthy and reproductive. Shrub encroachment into the meadow habitat has been identified as a source of habitat loss and will likely be managed in the future.

Fisheries

The Salem District fisheries program continued the on-going work of implementing the aquatic portion of the 1995 RMP. Major duties are divided among the following workloads: NEPA documentation, timber sales and other project reviews, watershed restoration, 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. Bureau of Land Management biologists also participated in The Freshwater Trust's Salmon Watch environmental education program.

Fish Population Monitoring

Salem District personnel conducted adult salmonid spawning surveys in coastal and Columbia Basin streams. Spawning and redd surveys targeted Coho and Chinook salmon and steelhead in the Salmon River (Sandy), Clackamas, Dairy Creek, Luckiamute, Molalla, Nestucca, Wilson, Trask, and Alsea watersheds. Surveys of juvenile fish use in restored habitats were completed in Elkhorn Creek (Trask) and Salmon River (Sandy). Significant increases in juvenile fish abundance and overwinter survival have occurred following LWD placement (2008) in Elkhorn Creek. Partners in these monitoring programs include The Freshwater Trust, Native Fish Society, Forest Service, Oregon Department of Forestry, Oregon Department of Fish and Wildlife (ODFW), Weyerhaeuser, Tillamook Bay Watershed Council and the Tillamook Estuaries Partnership.

The Salem District, in cooperation with ODFW Salmonid Life-Cycle Monitoring Project, completed the 23rd year of smolt monitoring of Oregon Coastal Coho salmon, steelhead, and cutthroat trout in Lobster Creek in the Alsea Watershed.

Fish Habitat Restoration

The Tillamook Resource Area placed approximately 100 pieces of large wood in Kenusky Creek, a tributary to the East Fork Nehalem River, to improve channel habitat diversity and habitat for Coho salmon, steelhead, and resident cutthroat trout. The 2010 project, which was done on Weyerhaeuser lands, compliments a similar project done on BLM land in Kenusky Creek in 2009. Partners in the project included the Upper Nehalem Watershed Council, Weyerhaeuser, and ODFW.

The Cascades Resource Area and the Sandy River Basin Partners continued their efforts to restore habitat for Chinook and Coho salmon and steelhead trout on the Salmon River. In 2010, these efforts focused on 0.5 mile of BLM managed lands on the lower Salmon River by: re-establishing year-round flow to 2 side channels totaling 0.4 mile in length, restoring a riffle-pool-riffle habitat sequence to increase main stem pool and spawning habitat, and constructing 12 engineered log jams (ELJs). ELJs were designed to both provide fish habitat (spawning and rearing areas) and restore channel and floodplain function (in particular increase wood and gravel retention rates). Since 2006, nine side channels, totaling approximately 2.5 miles, have been opened. Partners involved with the Salmon River project include The Freshwater Trust, U.S. Forest Service, and the Sandy River Watershed Council. Project expenditures in 2010 totaled \$385,000, with majority of the funding from an OWEB grant.

The Mary's Peak Resource Area worked cooperatively with the Alsea Watershed Council, the Mary's River Watershed Council, the Forest Service and Weyerhaeuser to develop stream restoration projects.

Fish Passage

The Tillamook Resource Area continued a cooperative effort with the Confederated Tribes of the Grand Ronde and the Yamhill Watershed Council to survey accessibility of culverts for fish passage in the Yamhill River sub watershed. These sub watersheds provide habitat for Coho salmon, steelhead trout and cutthroat trout. The resource area continues to work with Washington County to improve fish passage in the Dairy Creek Watershed. Funding for the replacement of two barrier culverts on Fan Creek, a tributary to the Nestucca River, was secured in 2010. Partners with BLM on this project include OWEB, Tillamook Estuaries Partnership, ODFW, National Fish and Wildlife Foundation, and the Nestucca/Neskowin Watershed Council.

The Mary's Peak Resource Area replaced a culvert on the West Fork of Mill Creek in the Alsea basin that will improve passage for Coho salmon, steelhead and resident trout. Design work for three fish passage culvert replacements for, two in the Alsea watershed and one in the Luckiamute watershed, were completed in 2010 and project implementation is planned for 2011.

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, National Marine Fisheries Service (NMFS), and U.S. Fish and Wildlife Service (FWS), regularly met to assure consultation was accomplished efficiently. There are seven federally-listed fish species on Salem District lands: Oregon Coast Coho salmon, Upper Willamette River spring Chinook, Upper Willamette River winter steelhead, Lower Columbia River steelhead trout, Lower Columbia River Chinook salmon, Lower Columbia River Coho salmon, and eulachon.

Endangered Species Act consultation was completed for seven timber sales. Twenty-one restoration actions, including large wood placement, culvert replacements and invasive weed treatments, were covered with programmatic consultations.

Weed Management

The 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 actively participate in the Northwest Oregon Weed Management Partnership, the Knotweed Working Group, and six Cooperative Weed Management Areas. MOUs were renewed for all six of the Cooperative Weed Management Areas in 2010.

The Salem District continues to inventory BLM-managed land for noxious weeds and other invasive species 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 of Interior 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 9 - Management Actions to Control Invasive Plants. Control efforts are coordinated with adjacent landowners and other interested entities by way of individual contacts and coordination through Cooperative Weed Management Areas and other established partnerships.

Risk assessments have been integrated into all project clearance surveys which have averaged 5,900 acres over the last fourteen years. In all, 7,800 acres were inventoried for noxious weeds in fiscal year 2010. The majority of high priority new invasive plant infestations have been found through systematic roadside inventories, project risk assessments and partnered projects.

Table 9 - Management Actions to Control Invasive Plants

Treatment	Species	Fiscal Year 96-10Acres	Fiscal Year 2010 Acres
	Scotch broom		5
	Canada thistle	979	-
	Himalayan blackberry		74
	English Holly	10	-
	Bull thistle	264	-
	St. John's wort	297	-
	Tansy ragwort	388	91
	Giant knotweed	4	1
		2,382	220
	Himalayan blackberry	952	25
		51	4
	English holly	1	1
	European beach grass	25	25
		289	1
		20	6
	False brome	24	0
	Diffuse knapweed	1	-
	Japanese knotweed	26	-
	Gorse	10	-
	Canadian thistle	518	15
	Bull Thistle	1,062	4
	Tansy ragwort	892	49
	Butterfly bush	1	1
		16	0
	Teasel	30	20
	Evening primrose	30	20
	St. John's wort	146	-
	Shining geranium	146	-
	Policeman's helmet	5	5
	Vinca	4	2
	Peavine	-	-
Biological (arthropods)	Scotch broom	100s	100's
	Canada thistle	500	500
	St. John's wort	200	200
	Bull thistle	250	250
	Tansy ragwort	1,000s	1,000's
Biological	Scotch broom	75	-

Treatment	Species	Fiscal Year 96-10 Acres	Fiscal Year 2010 Acres
(goats, sheep & cows)	Himalayan blackberry	165	85
	Knotweeds (Japanese, Giant, Bohemian)	112	89
	Quack grass	10	-
	Yellow hawkweed	1	-
	False brome	196	387
	Scotch broom	531	143
	Himalayan blackberry	529	618
	Spotted knapweed	1	-
	Tansy ragwort	15	-
	Canada thistle	127	120
	Clematis	225	225
	Bull thistle	15	-
	English Ivy	684	684
	Meadow knapweed	3	2
	Peavine	2	2
	Herb Robert	1	1
	St. John's wort	21	11

Areas of Critical Environmental Concern

In 2006, the Salem District evaluated nominations for Areas of Critical Environmental Concern (ACEC) with an interdisciplinary evaluation process to determine if they met the required relevance and importance criteria for designation. Through this process eleven areas were determined to meet the criteria for designation as potential ACECs. These areas were managed under interim management in FY 2010.

Twenty-four of the twenty-six existing ACECs were found to still meet the relevance and importance criteria needed for ACEC designation.

In FY 2010, twenty-one of the District's existing and potential ACECs were monitored and most were found to be in good or stable condition. No new signs of degradation were observed, but vegetation management is an ongoing management activity in some of the ACECs.

Control of several invasive plant species continued at the Yaquina Head Outstanding Natural Area ACEC and reintroduction of native species is being planned in disturbed areas. Riparian knotweed treatments continued in the Little North Fork Wilson River Potential ACEC.

Interim management in the Sandy River Potential ACEC included the ongoing partnered project with The Nature Conservancy and multiple other partners to inventory, control and monitor invasive plant infestations along the riparian habitats in the Sandy Watershed. Through this partnership more than 760 gross acres of invasive plant infestations on BLM lands and many more on other ownerships were controlled in 2010.

Conifer removal in the Mary's Peak ACEC was implemented to maintain meadow habitat. The conifer encroachment into the meadow at the Walker Flat ACEC will also likely lead to conifer removal.

Cultural Resources

The Salem District Cultural Resource Program identifies and manages cultural resources on BLM-administered lands in accordance with Section 106 of the National Historic Preservation Act of 1996 (NHPA). Eight projects requiring pre-project inventory were surveyed according to Appendix A of the Protocol for Managing Cultural Resources on Lands Administered by the Bureau of Land Management in Oregon. These inventories resulted in the survey of 924 acres and the clearing of 2,024 project acres.

One project needing post-project inventory, according to Appendix D of the Protocol, resulted in the survey of 100 acres and the clearing 357 project acres. No new cultural resources were discovered during these inventories. In some cases, remnants of historic logging practices were observed; one historic railroad incline used for logging had the potential to be eligible. The feature was not formally evaluated but it will be avoided through project design.

The Palomar Gas Transmission Project proposes a pipeline that would possibly transect two archaeological sites on the Salem District, 35CL235, and 35CL353. The sites were tested during 2009, but determinations of eligibility were made during FY 2010. Site 35CL353 was determined to be not eligible for the National Register and 35CL235 remains unevaluated at this time.

The Salem District represented Oregon BLM on the Oregon Archaeology Celebration (OAC) Steering Committee, as well as the Association of Oregon Archaeologists (AOA, parent committee of the OAC). These scientific and educational organizations are dedicated to the protection and enhancement of prehistoric and historic archaeological sites. The Oregon Archaeology Celebration strives to encourage the education and appreciation of Oregon's cultural resources by promoting activities and presentations focused on Oregon's heritage directed towards all age groups. To publicize OAC 2010, the Salem District distributed 1,381 posters and 3,265 calendars of events to 690 locations including all Salem-Keizer schools, all schools in Marion, Polk, Yamhill, Umatilla, Wallowa, Union, and Morrow counties, all Eugene 4-J schools as well as branches of the Washington County and Tillamook County libraries, and to many individual schools, universities, teachers, libraries, and museums statewide.

Table 10 - Cultural Resources Activity Cumulative Totals, FY 1996-2010

Activity	Number
Public education and interpretative programs	370
People directly reached by these program	17,833
Number of locations OAC materials distributed	14,651

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.

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.

Socioeconomic Conditions

The Salem District contributes to local, state, national, and international economies through monetary payments, sustainable use of BLM-managed lands and resources, and use of innovative contracting.

Monetary Payments

The Bureau of Land Management contributes financially to the local economy through Payments in Lieu of Taxes, Oregon and California (O&C) payments, and Coos Bay Wagon Road (CBWR) payments.

Payments in Lieu of Taxes

Payments in Lieu of Taxes (PILT) are federal payments made annually to local governments to help offset losses in property taxes due to nontaxable federal lands (public domain) within their boundaries. The key law that authorizes 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. PILT payments for multiple years can be viewed at <http://www.nbc.gov/pilt/pilt/search.cfm>.

The PILT payments help local governments carry out vital services such as firefighting and police protection, construction of public schools and roads, and search-and-rescue operations. The PILT payments are one of the ways that 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 agency. See Table 11 for FY 2010 PILT payments by counties within the Salem District boundaries

Table 11 - Total Monetary Payments in FY 2010 for Counties within Salem District Boundaries (Excludes Secure Rural Schools)*

County	PILT Payments	Total Federal Acres	BLM Acres
Benton	\$24,218	73,460	56,573
Clackamas	\$204,123	619,157	78,719
Clatsop	\$16,062	1,397	42
Columbia	\$26,280	10,961	10,961
Lane	\$575,146	1,744,566	291,714
Lincoln	\$69,218	209,954	19,946
Linn	\$185,215	561,806	87,655
Marion	\$74,206	225,085	20,904
Multnomah	\$26,488	80,345	4,208
Polk	\$94,273	42,087	40,608
Tillamook	\$43,219	131,093	48,312
Washington	\$33,529	13,984	11,386
Yamhill	\$19,383	58,793	33,370
TOTAL	\$1,391,360	3,772,688	704,398
*FY 2010 PILT payments for federal lands in Oregon totaled \$12,651,531.			

Payments to Counties

Payments are made to counties under The Secure Rural Schools and Community Self-Determination Act of 2000 as amended. 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 74,500 acres of Coos Bay Wagon Road lands in the Coos Bay and Roseburg BLM Districts.

This was the 10th year that payments were made to western Oregon counties under the Secure Rural Schools and Community Self-Determination Act of 2000 (Public Law (PL) 106-393), as amended by (PL 110-343). Beginning in fiscal year 2001 and continuing through sunset of the legislation on September 30, 2011, payments are made based on historic O&C and CBWR payments to the counties. Table 12 displays the statewide payments made in FY 2010 under each Title of P.L. 110-343 as well as the grand total.

Title I payments may be used by the counties in the manner as previous "50-percent" and "safety net" payments, as defined in P.L. 110-343.

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. 106-393 as amended. 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 as amended. These include:

- (1) to carry out activities under the Firewise Communities Program to provide to homeowners in fire-sensitive ecosystems education on, and assistance with implementing, techniques in home siting, home construction, and home landscaping that can increase the protection of people and property from wildfires;
- (2) to reimburse the participating county for search and rescue and other emergency services, including firefighting that are—‘(A) performed on federal land after the date on which the use was approved under subsection (b);’(B) paid for by the participating county; and ‘
- (3) to develop community wildfire protection plans in coordination with the appropriate Secretary concerned.



Field tour of the Butte Creek timber sale

**Table 12 - FY 2010 Secure Rural Schools Payments to Counties
Paid October 29, 2010**

County	Title I Paid to County	Title II Retained By BLM	Title III Paid to County	Grand Total
Benton	\$2,024,196.93	\$190,512.65	\$166,698.57	\$2,381,408.15
Clackamas	\$3,997,969.02	\$376,279.44	\$329,244.51	\$4,703,492.97
Columbia	\$1,483,930.84	\$139,664.08	\$122,206.07	\$1,745,800.99
Coos	\$4,250,093.19	\$750,016.45	\$0.00	\$5,000,109.64
Coos (CBWR)	\$532,080.93	\$93,896.63	\$0.00	\$625,977.56
Curry	\$2,629,294.95	\$247,463.05	\$216,530.17	\$3,093,288.17
Douglas	\$18,044,887.21	\$1,698,342.33	\$1,486,049.53	\$21,229,279.07
Douglas (CBWR)	\$96,187.97	\$9,052.98	\$7,921.36	\$113,162.31
Jackson	\$11,287,959.38	\$1,062,396.18	\$929,596.65	\$13,279,952.21
Josephine	\$8,701,885.73	\$819,001.01	\$716,625.88	\$10,237,512.62
Klamath	\$1,685,630.18	\$297,464.15	\$0.00	\$1,983,094.33
Lane	\$10,999,817.47	\$1,035,276.94	\$905,867.32	\$12,940,961.73
Lincoln	\$259,327.72	\$39,661.89	\$6,101.83	\$305,091.44
Linn	\$1,901,736.61	\$178,986.98	\$156,613.60	\$2,237,337.19
Marion	\$1,051,717.98	\$98,985.22	\$86,612.07	\$1,237,315.27
Multnomah	\$785,186.71	\$73,899.93	\$64,662.43	\$923,749.07
Polk	\$1,555,966.32	\$146,443.89	\$128,138.40	\$1,830,548.61
Tillamook	\$403,398.68	\$71,188.00	\$0.00	\$474,586.68
Washington	\$453,823.51	\$80,086.50	\$0.00	\$533,910.01
Yamhill	\$518,655.44	\$48,814.63	\$42,712.80	\$610,182.87
O&C	\$72,035,477.87	\$7,354,483.32	\$5,357,659.83	\$84,747,621.02
CBWR	\$628,268.90	\$102,949.61	\$7,921.36	\$739,139.87
TOTAL	\$72,663,746.77	\$7,457,432.93	\$5,365,581.19	\$85,486,760.89

Recreation

Recreation visitation on BLM-managed lands in the Salem District is estimated to be 1.5 million visitors. One third of these users visited the 18 developed day-use and overnight recreation sites on the District. The remainder of the use is estimated to include those involved in dispersed recreational activities such as fishing, hunting, hiking, nature viewing, etc.

Recreation Fee Program

Table 13 shows how the Salem District used fee program funds in FY 2010.

Table 13 - Fee Site Expenditures, FY 2010

Site Name	Description	Dollars
Yaquina Head Outstanding Natural Area	Operation and maintenance of facilities, visitor services, and interpretative programs.	\$397,000
Nestucca River Recreation Sites	Operation and maintenance of facilities and visitor services.	\$20,000
Fishermen's Bend Recreation Complex	Operation and maintenance of facilities and visitor services.	\$111,000
Wildwood Recreation Site	Operation and maintenance of facilities and visitor services.	\$63,000
Alsea Falls Recreation Site	Operation and maintenance of facilities and visitor services. Volunteer host stipend.	\$8,000
TOTAL		\$599,000

National Landscape Conservation System Units

The Salem District manages several units. They include:

YAQUINA HEAD OUTSTANDING NATURAL AREA: Yaquina Head 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.

WILD AND SCENIC RIVERS: The rivers are located on BLM-managed lands in designated corridors along 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 finalized an interdisciplinary planning effort along the Sandy River. This effort involved coordination with numerous stakeholders including; private landowners, recreation user groups, local, state, and federal agencies. The end result was a broad based management strategy that outlined future recreation development and a comprehensive restoration strategy. A water trail plan for the Sandy River was completed in 2010. The BLM partnered with several entities to complete this effort including; National Park Service, Oregon Department of State Lands, Oregon State Parks, City of Sandy, and American Whitewater.

WILDERNESS: The Mazamas, Back Country Horsemen, American Hiking Society, and Molalla Riverwatch, along with several other volunteers, continue to help maintain 20 miles of trails in the Table Rock Wilderness. The Columbia River Environmental Youth Corp performed approximately six weeks of trail tread maintenance within the wilderness.

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. 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. The partners include: Molalla Riverwatch, American Wildlife Foundation, Wolfree Inc., Peachuck 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.

In 2010, the BLM continued the development of the Sandy Ridge Trail System, in partnership with the Northwest Trails Alliance, and the International Mountain Bike Association. These two groups provided more than 1,800 hours of volunteer labor towards the development of this non-motorized trail system outside Sandy, Oregon.

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 encouraged appropriate use ethics among visitors to the river. Natural rock and vegetative barriers adjacent to 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 by planting trees and shrubs. Molalla River Watch continued to help 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.

LARCH MOUNTAIN ENVIRONMENTAL EDUCATION SITE: Approximately 500 students participated in natural resource education programs in partnership with the Corbett School District. Three weeks of Columbia River Environmental Youth Crew work was performed at this site to maintain and enhance the non-motorized trail system.

AQUILA VISTA ENVIRONMENTAL EDUCATION SITE: Located in the Molalla River Recreation Corridor, the BLM hosted 440 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. Groups such as the Boy Scouts helped improve and maintain the site. A youth crew, funded by Title II funds from the Secure Rural Schools & Community Self Determination Act of 2000, and Northwest Youth Corp, helped improve trails to make them more accessible to visitors and participants in educational activities.

PEACHUCK LOOKOUT: Located just outside the Table Rock Wilderness, Peachuck 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 "Peachuck Lookouts," completed annual maintenance on the Lookout plus trail maintenance to the Lookout Trail.

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 of 100 participants. All of the monies generated from this event are 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.

SANDY RIDGE TRAIL SYSTEM: BLM staff, International Mountain Biking Association, and Northwest Trails Alliance constructed 4 miles of new trails in this non-motorized trail system located within the Sandy River Basin.

Motorized Roads and Trails

Off-Highway Vehicle Areas (OHVs): Approximately 6,930 people visited the Upper Nestucca OHV trail system. Two OHV events, for up to 75 participants per event, are held each year at the trail system. The Salem District worked in partnership with the Applegate Rough Riders to maintain 10 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 Byways.

Forest Management and Timber Resources

Timber Harvest Activities

The Salem District's declared Allowable Sale Quantity (ASQ) under the 1995 RMP is 34.8 million board feet (MMBF). The ASQ represents the annual volume of timber harvest that is offered from the General Forest Management Area (Matrix) and Connectivity/Diversity Blocks (Matrix) land use allocations. In FY 2010, the District offered 66.5 million board feet (MMBF) of timber, primarily from commercial and density management thinning. Of the total volume offered, 31.9 MMBF counts towards the ASQ volume. This offered timber represents 191.7 percent of Salem's 34.8 MMBF yearly ASQ. In addition to the ASQ volume, approximately 34.6 MMBF of the timber volume was offered as a result of restoration thinning in Late-Successional Reserves and Riparian Reserves.

On October 14, 2009, interior Department Secretary Salazar announced a Program of Work which described a specified level of timber harvest. The target volume for the Salem District was established at 66.6 MMBF.

Cumulative information on timber harvest acres, volumes, and harvest types is shown in Tables 14-17.

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.

Table 14- Summary of Volume Sold

Sold ASQ/Non ASQ Volume (MMBF)	FY 2010	Total FY 2005 - 2010	FY 2005 – 2014 Decadal Projection
ASQ Volume (Harvest Land Base)	31.9	203.5	348*
Non-ASQ - Volume (Reserves)	34.6	101.5	0*
TOTAL	66.5	305.0	348
Sold Unawarded as of 9/30/08) Sold ASQ/Non ASQ Volume (MMBF)	FY 2010	Total FY 2005 - 2010	FY 2005 – 2014 Decadal Projection
ASQ Volume (Harvest Land Base)	8.0	29.7	NA**
Non-ASQ - Volume (Reserves)	1.6	3.5	NA
TOTAL	9.6	33.2	NA
* Includes Riparian Reserve volume and/or acres that are associated with the major land base allocation. ** This information is also contained in the information for the land use allocation that the Riparian Reserve is associated with.			

Table 15 - Volume and Acres Sold By Allocation

	FY 2010	Total FY 2005 - 2010	FY 2005 – 2014 Decadal Projection
ASQ Volume - MMBF (Harvest Land Base)			
Matrix	28.2	144.9	328.6*
Adaptive Management Area	3.7	50.9	19.5*
ASQ Acres -(Harvest Land Base)			
Matrix	1,329	6,280	9,214*
Adaptive Management Area	222	2,561	2,141*
ASQ Volume - MMBF (Key Watersheds)			
Key Watershed	4.6	4.9	32
* Includes Riparian Reserve volume and/or acres that are associated with the major land base allocation.			

Table 16 - Timber Sales Sold By Harvest Types

ASQ Volume - MMBF (Harvest Land Base)	FY 2010	Total FY 2005 - 2010	FY 2005 – 2014 Decadal Projection
Regeneration Harvest	1.9	18.9	298.6
Commercial Thinning & Density Management	30.0	181.2	49.5*
Other (Mortality Salvage)	0.0	0.2	0.0
TOTAL	31.9	200.3	348.1
ASQ Acres (Harvest Land Base)	FY 2010	Total FY 2005 - 2010	FY 2005 – 2014 Decadal Projection
Regeneration Harvest	79	560	5,558*
Commercial Thinning & Density Management	1,472	8,516	5,797*
Other (Mortality Salvage)	0	39	0
TOTAL	1,551	9,115	11,355
Reserve Acres	FY 2010	Total FY 2005 - 2010	FY 2005 – 2014 Decadal Projection
Late-Successional Reserves	896	2,692	1,456
Riparian Reserves	532	3,128	892**
Other Withdrawn Lands	0	17	50
TOTAL	1,428	5,837	2,398
<p>* Includes Riparian Reserve volume and/or acres that are associated with the major land base allocation. ** This information is also contained in the information for the land use allocation that the Riparian Reserve is associated with.</p>			

Table 17 - Timber Sale Acres Sold By Age Class

Regeneration Harvest (Harvest Land Base)	FY 2010	Total FY 2005 - 2010	FY 2005 – 2014 Decadal Projection
0-79 Years	79	372	880
80-149 Years	0	12	4,035
150-199 Years	0	0	175
200+ Years	0	0	468
TOTAL	79	384	5,558
Density Management / Commercial Thinning (Harvest Land Base)	FY 2010	Total FY 2005 - 2010	FY 2005 – 2014 Decadal Projection
0-79 Years	2,882	9,690	5,647*
80-149 Years	18	1,084	150*
150-199 Years	0	0	0
200+ Years	0	0	0
TOTAL	2,900	10,774	5,797*
Mortality Salvage & Other (Harvest Land Base)	FY 2010	Total FY 2005 - 2010	FY 2005 – 2014 Decadal Projection
0-79 Years	0	88	0
80-149 Years	0	0	0
150-199 Years	0	0	0
200+ Years	0	0	0
TOTAL	0	88	0
* Includes Riparian Reserve volume and/or acres that are associated with the major land base allocation.			

Silviculture

In FY 2010, silvicultural accomplishments were diverse and addressed a range of forest management challenges. A narrative that describes the variation in silvicultural activities from assumed levels in the RMP is located in the implementation monitoring section of this report.

Silvicultural Activities

For FY 2010, variation in silvicultural activities from assumed levels in the RMP include the following:

Site Preparation (FIRE) – 695 acres were treated with prescribed fire for site preparation. In FY 2010, 196 acres were burning landings and the remaining 526 acres were for pile burning. The amount of prescribed burning for site preparation last year was 15 percent of the planned amount for the second decade. Low levels of accomplishment are forecast to continue for the short term due to the low levels of regeneration harvest.

Site Preparation (OTHER) – The District treated 16 acres with other site preparation techniques. This mostly included the manually scalping in one timber sale unit. The amount of other types of site preparation last year was less than 1 percent of the planned amount for the second decade. Factors affecting this activity are the same as for prescribed preparation (fire).

Planting (regular stock) – The District planted 46 acres with regular planting stock. The amount of planting with regular stock last year was less than 1 percent of the planned amount for the second decade. This is a result of lower regeneration harvest levels than planned in the RMP.

Planting (improved stock) – The District planted 309 acres with genetically selected conifers. The amount of planting with improved stock last year was 7 percent of the planned amount for the second decade. This is a result of less than expected levels of regeneration timber harvest.

Maintenance/Protection – The District accomplished 804 acres of maintenance and protection treatments. The amount of maintenance and protection last year was 3 percent of the planned amount for the second decade. Very low levels of regeneration harvest since the inception of the 1995 RMP have led to the recent lack of acres in need of treatment.

Pre-commercial Thinning (PCT) – The District completed 2009 acres of release and PCT last year. The amount of release and precommercial thinning last year was 7 percent of the planned amount for the second decade.

Fertilization – No fertilization has been done on the District since 1999, due to Survey and Manage protocols and continued litigation. During the second decade of implementation of the RMP, we have achieved 0 (zero) acres of our decadal fertilization goals. Approximately 303 acres of pruning to improve wood quality and for disease control was completed. No estimate of acres of pruning was projected in the 1995 RMP.

Special Forest Products

A total of 471 contracts for Special Forest Products were issued. The contracts resulted in \$18,775 in receipts. Mushrooms accounted for the greatest number of permits; however, the greatest amount of product (94,000 pounds) was for boughs. The largest amount of receipts (\$6,930) was for firewood. Table 18 summarizes the Special Forest Products sales for FY 2010.

Table 18 – Special Forest Products, FY 2010

RMP Authorized Product Sales	Unit of Measure	FY 2010	Total 2 nd Decade FY 2005 - 2014
Boughs	Pounds Contracts Value (\$)	94,000 12 \$6,930.00	254,079 62 \$30,491.80
Burls and Miscellaneous	Pounds Contracts Value (\$)	0 0 \$0	1,965 7 \$113.60
Christmas Trees	Trees Contracts Value (\$)	0 0 \$0.00	11 8 \$151.58
Edibles and Medicinals	Pounds Contracts Value (\$)	0 0 \$0.00	960 4 \$71.00
Feed and Forage	Tons Contracts Value (\$)	0 0 \$0.00	1,937 6 \$2,030.50
Floral and Greenery	Pounds Contracts Value (\$)	2,745 4 \$418.05	417,050 201 \$33,499.70
Moss and Bryophytes	Pounds Contracts Value (\$)	0 0 \$0.00	500 1 \$1,846.00
Mushrooms and Fungi	Pounds Contracts Value (\$)	36,045 302 \$4,974.75	125,159 923 \$21,165.33
Ornamentals	Plants Contracts Value (\$)	0 0 \$0.00	0 0 \$0.00
Seed and Seed Cones	Bushels Contracts Value (\$)	0 0 \$0.00	120 02 \$120.00
Transplants	Plants Contracts Value (\$)	1,000 1 \$20.00	21,460 85 \$8,490.00
Firewood and Wood Products*	Cu Ft Contracts Value (\$)	82,461 152 \$6,432.67	1,120,000 797 \$29,682.51
TOTAL	CONTRACTS VALUE	471 \$18,775.47	2,096 \$127,706.01

* To avoid double counting, this line does not include saw timber which is reported elsewhere.

Energy and Minerals

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

Locatable Minerals

The rights to explore for, and develop locatable minerals are obtained according to the Mining Law of 1872. Locatable minerals are hard rock minerals such as gold, silver, copper, high grade silica, etc. Most of the public land in the Salem District is open to mining claim location.

One application and Notice of Operation was received for locatable minerals on the Salem District in 2010.

Leasable Minerals

The rights to explore for, and develop leasable minerals are obtained according to the Mineral Leasing Act of 1920. Leasable minerals are minerals such as oil, gas, coal, oil shale, and geothermal hot water.

The BLM 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.

In 2010, the Salem District offered 15,632.19 acres for oil and gas leasing purposes.

Saleable Minerals

Sale of mineral materials from public land is authorized by the Materials Act of July 31, 1947. Saleable minerals are common variety minerals such as sand, gravel, rip-rap, and volcanic pumice. Mineral materials may be provided to federal, state, and local governments at no cost under provisions of free use permits.

The Salem District issued no permits for the sale of mineral material (rock).

Wind Energy

The Bureau completed an Environmental Impact Statement (EIS) for wind energy development on BLM lands nationwide in 2009. 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 nearby existing transmission line facilities will likely preclude their development in the near future.

In 2010, the Salem District received no applications for wind energy purposes.

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, and 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

Eight individual right-of-way grants were issued for a total of 152 since fiscal year 1995. One right-of-way grant was amended.

Land Leases

The Salem District received 6 new applications for communication use leases. No new communication use leases were issued this year. There were no new amendments or case closure actions in 2010.

Recreation and Public Purposes Leases (R&PP)

The Salem District has nine active R&PP leases. In 2010, we continued to process the applications for a new R&PP leases to the Oregon Department of Parks and Recreation and the Pacific City Joint Water and Sanitary Authority.

Land Tenure Adjustments

The BLM acquires and disposes lands to support a variety of recreation and resource program objectives. Refer to Appendix 3 for a summary of completed land acquisitions by exchanges or purchase and to Appendix 4 for a summary of completed land sales.

ACQUISITIONS: In 2010, the Salem District purchased 2 parcels totaling 29.1 acres in Clackamas County. These acquisitions were made with Land and Water Conservation Fund monies. These acquisitions are intended to provide improved access and to protect critical habitat, open space, and the visual resources of the area. Since the Sandy River acquisition project began in 2001, the BLM has acquired 18 parcels totaling 2,453 acres at a cost of \$12,210,000.

EXCHANGES: No land exchanges were completed. Since implementation of the RMP, 4524 acres have been acquired by the BLM in seven land exchanges; 2,241 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

The withdrawal that 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.

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

Compliance

In 2010, the Salem District completed 143 compliance inspections on a variety of right-of-way grants, leases, and permits.

Trespass Abatement

In 2010, the Salem District did not open any trespass cases.

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 timber lands through the complex checkerboard ownership pattern of Salem District BLM 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

Reciprocal right-of-way agreements are used when private property owners need access across public land and the BLM needs access across private property. They consist of the agreement which private land owners use to grant the BLM the right to cross private property, and permits which grant private property owners the right to cross land owned by the BLM. Right-of-way agreements are for the management of timber lands and the removal of timber and other forest products. They do not provide public access across intermingled private timber lands.

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.

The District completed 6 amendments. 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 95 amendments since implementation of the RMP. The District completed 9 assignments.

The District has entered into and administers 107 reciprocal right-of-way agreements. No new right-of-way agreements occurred in 2010.

Unilateral O&C Road Use Permits

Unilateral O&C road use permits are for the removal of timber and other forest products from private property. These permits authorize third parties to construct and/or use existing roads on public land when the BLM does not need reciprocal access across private property. Permittees are required to pay road use, road maintenance, and/or surface replacement fees. The District issued four unilateral road use permits.

Road Easements

Road easements are used by the BLM to obtain the right to cross private property. In the vast majority of cases, easements were obtained to access BLM timber lands for the removal of timber and other forest products from public lands. In a much smaller number of cases, easements were obtained to provide public access to public land or facilities. Easements are either exclusive, where the BLM owns and controls the road, or non-exclusive, where the private property owner owns and controls the road.

Road easements also grant legal use of roads and trails crossing parcels of non-federal land to access BLM land and facilities. Easements will continue to be acquired where and when needed to support BLM program objectives.

The Salem District has obtained and administers 521 road easements. The District completed one easement acquisition in FY 2010. Since Fiscal Year 1995, 25 easements have been acquired.

Transportation and Roads

The Salem District road system includes approximately 2,400 miles of road. Roads decommissioned or obliterated may still be included in BLM's road data base. Funding levels for road maintenance have not been and are not adequate to maintain this system. The Salem District has deferred maintenance identified on approximately 1,700 miles of road. Maintenance Level 4 and 5 roads are maintained yearly because of manual requirements and active use by BLM, private timber, and the public users. The stated goal of the Salem District road maintenance program 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 as the maintenance crew and Resource Area contracts are covering only about 2/3 of the annual requirement for road maintenance.

Road maintenance personnel performed maintenance on approximately 487 miles of road. This maintenance consisted of grading aggregate roads (259 miles), cutting brush to increase visibility (254 miles), cleaning ditches (1,270 miles), and right-of-way cleaning (removing slide or slough material) (16,405 cubic yards). Other types of maintenance such as bridge deck cleaning (31 bridges), culvert cleaning (1,760 culverts), culvert replacement, surface rock replacement, road shoulder maintenance on asphalt roads, asphalt road patching and cleaning, and removing trees and vegetation blown down on roads by winter storms was also performed.

Contract road system maintenance was completed through timber sales and other contracts or agreements. These activities were responsible for decommissioning of roads (10 miles), miles of roads blocked or gated (1 mile), water barring or storm proofing roads (24 miles), striping asphalt roads (20 miles), improving or reconstructing existing roads (13 miles), construction of new roads

(none in 2010), construction of temporary roads (to be decommissioned upon timber sale completion) (7 miles), number of gates installed (3 gates), and the replacement or installation of new culverts (84 culverts).

There were 41 miles of road maintained by industry users under right-of-way agreements or permits. This work consisted of brushing, surface grading, ditch cleaning, and the placement of rock.

The Salem District also replaced 1 culvert which constituted a barrier to fish. The new culvert improved or allowed access to an additional 1/2 mile of fish habitat..

Hazardous Materials

In Fiscal Year 2010 there were 7 possible hazmat sites of which 5 were cleaned up. Two marijuana sites were identified. The first site was hazardous and the second one was a marijuana store that was located inside a military ordinance tube. A 55 gallon barrel containing 3 gallons of Hydrochloric Acid washed up on the beach at Yaquina Head Outstanding Natural Area (YHONA) . A log truck driver lost his fuel tank and leaked about 25 gallons of fuel (cleaned up by Hancock Forest Management). Twice in 2010 hazardous waste were brought into the Salem District Office and District personnel had to dispose of these hazardous materials. In 2010, a fluorescent green dye was poured into the Molalla River (nonhazardous) and turned the river florescent green.

Salem District recycled 50 lbs. of mercury containing fluorescent bulbs and disposed of 200 pounds of hazardous wastes accumulated in the Tree Marking Paint waste barrel.

Since fiscal year 1995, the BLM has identified 65 potentially hazardous abandoned waste sites on agency-managed lands. Of the 65 sites, 46 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.

Five environmental site assessments were conducted in support of easement acquisitions.

Wildfire

Fiscal year 2010 was an average year for wildfires on the Salem District. The District experienced a normal winter and spring snow pack. Rainfall tapered off by late June and the District entered into the normal summer pattern with a limited amount of lightning activity. There were 23 fires resulting in 2.3 acres burned on BLM-administered lands. The 10-year average is 21.2 fires and 2.2 acres burned.

A high number of abandoned campfires on the Salem District in fiscal year 2010 continue to be a serious concern. An increased effort on signage and public education was made in 2010 and will continue into 2011 in an effort to reduce campfire escapes. The number of deliberately set fires has dropped significantly in the past several years. The increased emphasis on signage and patrols in the Molalla and Quartzville Corridors seem to have been very beneficial.

Fire prevention, detection, and suppression continued to be provided through the Western Oregon Protection Contract with the Oregon Department of Forestry. Payment is based on a per acre assessment of the approximately 402,006 acres in the Salem District.

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, and the Tillamook Field Office Ranger.

Rangers work several different kinds of cases ranging from recreational activities to stolen vehicles, theft of special forest products and marijuana eradication from public lands. Law Enforcement Assistance (LEA) Agreements/ Contracts with Linn, Marion, Polk, Yamhill, Benton, Tillamook, and Clackamas Counties allow the BLM to fund officers’ time in county forest deputy programs. The law enforcement agreements enable the counties 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 91 law enforcement incidents reported in 2010. The law enforcement incidents were lower in number compared to last year. This was due to the training and orientation of both the new District ranger and the Cascade field office ranger position during 2010. See Table 19.

There were 68 misdemeanors, 0 felonies, and 47 federal citations. There were also five assists to local agencies.

Table 19 – Law Enforcement Incidents, FY 2010

Incidents	#	Incidents	#
Natural Resource Violations	11	Search and rescue	0
Fire	1	Weapons violation	0
Drug violations	4	DUII/ liquor law violations	0
Stolen vehicles recovered	3	Camping violations	7
Thefts - other	3	Littering/dumping	12
Theft of special forest products	13	K-9 utilizations	0
Vandalism	8	OHV violations/incidents	29

Cadastral Survey

In FY 2010, Cadastral Survey crews completed 16 surveying projects ranging from 0.25 miles to 15 miles in length. In total, 52.7 miles were surveyed and 58 monuments were set. Five surveys, totaling 7.25 miles, 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 contributed approximately \$30,700 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 (GPS) technology or surveying to high precision stations, GIS land line inventories and maps are more precise.

Salem Cadastral Survey also completed the Panther Creek LiDAR project control survey which determined geodetic control for 77 existing study plot centers and established 34 additional reference stations. This control will assist with providing accurate location data and information to numerous public and private partners involved in the LiDAR project.

Education and Outreach

Fishermen's Bend Recreation Site provided 15 different types of environmental presentations and activities for youth and families at the site. 10 volunteers, hosts and employees of Fishermen's Bend conducted presentations and activities ranging from 30 minutes to an hour and 30 minutes, totaling 20 hours and 30 minutes of presentations. These presentations reached 660 people. Presentations and activities included; what forest do you live in? Reduce, reuse, recycle, Introduction to Geocaching, Hummingbird feeder building, Forests Forever, Tread Lightly, Leave No Trace, Water Safety, Pollination, Solar System, Compass building, Star Gazing, Creepy Crawlies, Riparian Zones, and Maps Skills for Treasure Hunting.

The Salem District participated in the 2010 Oregon Envirothon at the Oregon Gardens in Silverton. Wildlife questions were prepared for about 135 students from 24 different high schools across the state. BLM employees also helped with the testing and grading for the event.

The Tillamook Resource area, along with the Willamina School District and Oregon State University continued to use a Memorandum of Understanding (MOU) for Willamina High School's SMILE program (Science & Math Investigative Learning Experiences). This educational outreach program is aimed at teaching students the basics of natural resource management and field studies. Thirty high school students and ten middle school students spent three separate days in the field taking stream temperatures, measuring stream flow, identifying trees and plants as well as studying fish populations and collecting macro invertebrates for classroom study.

Employees of the Tillamook Resource Area participated in a woodland tour that taught 480 Yamhill County fifth graders about the relationships between plants and wildlife. They also participated in outdoor school presentations for 260 sixth graders from Tillamook County talking about plant identification, soil classification and wildlife.

Twelve Salem District employees talked to approximately 1,050 students about careers with the BLM during classroom visits and career fairs. Six Salem District employees and one volunteer provided outreach and educational opportunities to 387 people. These educational events

covered topics including invasive species effects on forests, and riparian areas, tree growth and timber uses, basic first aid and CPR skills, tree identification and seasonal changes, firefighting, and wildlife. These presentations total 32 hours of educational outreach.

Overall, the Salem District reached 3,002 people (does not include YHONA outreach) in their environmental education and outreach activities. These presentations and activities totaled over 117 hours of direct interaction with local students and the community.

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. Thirteen different programs at YHONA draws 2,273 people to participate for a total of 208 hours of presentations. The programs included Rocky Shores training, Lighthouse Halloween, National Public Lands Day, Youth employment recruitment fairs, winter whale watch week, Know your Newport, Yaquina Century Bike Race, Pacific Shores Nighttime Lighthouse Tour, Environmental Education Spring Staff Training, BLM Retirees Lighthouse visit, Lincoln County Outdoor School, counselor training and O-camp Teacher workshops.

YHONA hosts educational groups for schools all over Oregon. A total of 3,397 students and 565 chaperones visited YHONA and participated in tide pool orientation (assisted by rangers) for teacher-led intertidal ecology walks. Rangers in period costume interpreted lighthouse tours for 90,420 visitors. Rangers guided 3,501 students in tide pool explorations. The YHONA staff presented stewardship information for sensitive resources such as the tide pools, birds and sea mammals to 29,123 visitors, and gave interpretive orientations about the lighthouse history, natural history of Yaquina Head, and tide pool ecosystems to 92,563 visitors.

Table 20 – Education and Outreach Cumulative Totals, FY 1996-2010

Activity	Amount
Number of school-based environmental education presentations	1,569
Number of students participating in these programs	33,808
Kids Day for Conservation participants	7,215
Students participating in YHONA intertidal ecology programs (FY99-10)	81,480

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; and other federal agencies. The Biological Resources Division 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 Biological Resources Division conducted an annual evaluation of ongoing and proposed research projects, choosing which ones to fund in the context of current and future management needs. Projects supporting ongoing implementation of the 1995 RMP 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 was to facilitate ecosystem management in the Pacific Northwest with emphasis on meeting the 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 NW Forest Plan: 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.

Two good sources of information on the CFER program are the CFER Annual Report for 2006, and the CFER web site at <http://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 have significantly aided the BLM in meeting the requirements for effectiveness and validation monitoring identified in the 1995 RMP.

Although this information is available and the density management studies continue, federal funding for CFER has not been available since 2007. As the program dissolved, CFER cooperators went on to form the Forest Science Partnership (FSP) to continue to address forest research needs in the Pacific Northwest. Like CFER, FSP seeks to develop and communicate forest-related research information to natural resource managers throughout the Pacific Northwest. At the present time, FSP consists of the USGS Forest and Rangeland Ecosystem Science Center (FRESC), Oregon State University (OSU), the Bureau of Land Management (BLM), and the Oregon Department of Forestry (ODF). However, additional partners and cooperators may be added as the partnership develops.

The Trask River Watershed Study is researching the effects of harvesting on small non-fish bearing streams and on downstream fish-bearing streams. The parameters being collected include water temperature, flow, suspended sediment, turbidity, macro invertebrates, amphibians, dissolved nutrients and fish abundance and condition metrics. Forest management treatments will include road construction, regeneration harvest and commercial thinning in the headwater basins. Timber thinning and control treatments are scheduled for 2012.

The study area is in the upper reaches of the East Fork of the Trask River which is located in the Coast Range of northwest Oregon. It is located in an area managed by the Tillamook Field Office of the Salem District BLM. Since the BLM manages land in the study area, this offers us a rare opportunity to monitor BLM actions in a paired watershed study.

COORDINATION AND CONSULTATION

Federal Agencies

The Provincial Interagency Executive 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 Fisheries Service, and 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.

Salem District routinely consults with the Fish and Wildlife Service and National Marine Fisheries Service on actions that may affect species federally listed as threatened or endangered under the Endangered Species Act.

State of Oregon

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 such as timber sale planning, fish habitat inventory, wildlife population and water quality monitoring, hazardous material cleanup, air quality maintenance, and wildfire suppression. The State of Oregon was also a cooperator in the Western Oregon Plan revisions process.

Counties

The Salem District administers land in 13 counties. While involvement levels vary between counties based on the amount of BLM 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. We frequently communicate with the Association of O&C counties on issues of mutual interest.

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 RMP. 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 (WC). 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 21 shows the current status of Salem District involvement in watershed councils.

Table 21 – Salem District Involvement with Local Watershed Councils

Watershed Council	Resource Area	Status of Involvement 2010
Alsea	Mary's Peak	Limited involvement. Maintain communication, provide technical support. Cooperating with council on restoration project, provided technical assistance and planning to provide in-kind contribution of LWD.
Clackamas River Basin	Cascades	Share a seat on the council with the Forest Service. FS 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 (Tillamook Riparian Restoration Effort). Provide technical committee support as requested.
Luckiamute	Mary's Peak	Attend monthly meetings, provide technical assistance in planning and project implementation. Provide project support consistent with MOU's and Letters of Support with the watershed council for multiple restoration projects in watershed. Actively partners with the watershed council in OWEB grants for stream restoration actions in conjunction with a BLM timber sale. The Salem District actively partners with the watershed council in OWEB grants to conduct fish distribution surveys across watershed.
Mary's River	Mary's Peak	Limited involvement. On mailing list.
Mid-Coast	Mary's Peak	Limited involvement. Maintain communication, provide technical support. Cooperating with council on restoration project, provided in-kind labor and equipment for OWEB project.
Nestucca/Neskowin	Tillamook	Work together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Tillamook Riparian Restoration Effort). Provide technical committee support as requested.
North Santiam	Cascades	Limited involvement. Maintain communication, provide technical support.
Pudding River	Cascades	Limited involvement. Maintain communication, provide technical support.
Rickreall	Mary's Peak	Limited involvement. On mailing list.
S. Santiam	Cascades	Limited involvement. Maintain communication, provide technical support.
Sandy Basin	Cascades	Maintain regular communication and involvement with occasional projects.

Watershed Council	Resource Area	Status of Involvement 2010
Scappoose Bay	Tillamook	Work together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Tillamook Riparian Restoration Effort). Provide technical committee support as requested.
Siletz	Mary's Peak	Not involved at this time.
Tillamook Bay	Tillamook	Work together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Tillamook Riparian Restoration Effort). Provide technical committee support as requested.
Tualatin	Tillamook	Work together to improve riparian habitat for fisheries and wildlife by sharing resources, producing specialized plant material and providing education to the local community (Tillamook Riparian Restoration Effort). Provide technical committee support as requested.
Upper Nehalem	Tillamook	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 (Tillamook Riparian Restoration Effort). Provide technical committee support as requested.
Yamhill Basin	Tillamook & Mary's Peak	Limited involvement. Maintain communication, provide technical support. Cooperating with council on restoration project, provided technical assistance and in-kind contribution of LWD. 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 (Tillamook Riparian Restoration Effort)

Resource Advisory Committee (RAC)

The Secure Rural Schools and Community Self-Determination Act of 2000 (Public Law 106-393) established a Salem District 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 15 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>. Congress passed a one year extension of the Act in 2007 and therefore the RAC was convened again to review projects in accordance with Title II of the Act.

On October 3, 2008 (Fiscal Year 2009) Secure Rural Schools and Community Schools Self-Determination Act of 2000 was reauthorized via Public Law (PL) 110-343 through fiscal year 2011 by Congress and was approved by the President. The bill retroactively funded Titles I, II and III of the Act for FY 2008, in addition to funding FY 2009.

In FY 2010, the Salem District Resource Advisory Committee (RAC) recommended for approval \$1.4 million in Title II projects to be funded for Fiscal Years 2011. Please reference the Salem BLM web site at: <http://www.blm.gov/or/Districts/salem/rac/index.php> for information on projects that were approved in FY 2010 and for a schedule for 2011.

Partnerships, Volunteer Activities and Accomplishments

Tillamook Resource Area Riparian Restoration Effort

The Tillamook Resource Area Riparian Restoration Effort is a continuing collaborative endeavor. It began in 2002 with the signing of a Memorandum of Understanding (MOU) and is expected to continue for another 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 Greater Yamhill Council.

The primary objective of the partnership is to promote healthy forest/riparian ecosystem conditions throughout the Tillamook Resource Area by collecting and growing native plant seeds and cuttings to develop into large planting stock better able to withstand competition and depredation for management plans and restoration activities on lands administered by BLM and on lands of interest by the various watershed and bay area councils. In addition to providing shade and filtering to improve salmonid habitat and water quality, much of the riparian planting is also used to help control invasive species such as Reed canary grass, Scotch broom, English ivy, Himalayan blackberry, and Japanese knotweed that presently occupy project sites. The partnership is designed to encourage application of innovative solutions to forest/riparian health conditions on an ongoing basis across the landscape to help implement the Oregon Plan for Salmon and Watersheds and meet multiple BLM strategic goals and planning objectives, including but not limited to community support, partnerships, youth, fish and wildlife habitat, water quality, and biological system integrity.

Cooperating with 127 landowners in FY 2010, the partnership planted about 31,850 trees and shrubs along 21.4 miles of stream 3 acres of wetland, and maintained 57.6 miles of existing planting. About 6.3 miles of riparian fence was constructed by the partnership during 2010. Since the signing of the MOU, the partnership has restored about 229 miles of stream, 92 acres of wetland and constructed about 47 miles of riparian fencing. See Table 22 for a summary of the accomplishments since the signing of the MOU.

During 2010 for out-year field planting, BLM propagated about 39,200 plants (plugs, potted, and bare root stock), Camp Tillamook propagated about 12,900 trees and shrubs (primarily potted) and the rest of the partners propagated about 14,700 plants.

Since the MOU, about 391 miles of stream where riparian planting had been conducted were monitored by volunteers or personnel with the local watershed councils. Monitoring of project restoration sites is an important step in ensuring that the riparian plantings are successful. Many sites require follow-up maintenance in order to increase plant survival and maintain fence integrity when and where the landowner's attempts prove to be inadequate.

Public tours of the restoration sites and activities are conducted every year by the partners in the restoration effort. Since the MOU, at least 248 education sessions or demonstration tours, attended by about 6,900 people have been conducted. Riparian restoration updates are provided at watershed council meetings and in the watershed coordinator's and agency reports.

The following is a summary of the work completed since the MOU was signed in 2002, through September 30, 2010:

Table 22 - Tillamook Resource Area Riparian Restoration Effort Accomplishments

Activity	Measure	FY2010	Total FY 2002 - 2010
Streams Planted	miles	21.4	229.27
Wetlands Planted	acres	3	92.03
Riparian Fence Constructed	miles	6.26	47.21
Project Maintenance	miles	57.56	311.13
Landowners Involved	number	127	1,526
Future Land Owner Contact	number	657	1,549
Plants Propagated (other than at Horning or Camp Tillamook)	number	14,718	51,930
Education Sessions or Tours	number	55	248
	people	1,229	6,934
Monitoring	miles	77.76	391.33
BLM / NFWF Funds Expended		\$71,887	\$684,671
Partner Donation Value (includes OWEB funding)		\$146,720	\$1,653,675



Two volunteers planting trees during the “Down by the Riverside Event” along Upper Nehalem River sponsored by Solve, Intel, and the Upper Nehalem Watershed Council. The volunteers are readying a gallon size Oregon Ash grown by BLM for field planting on 9/25/2010, as part of the implementation of the Tillamook Resource Area Riparian Restoration Effort.

Native Plants

In 2009, the Salem District formalized a partnership with the USDA Forest Service, Cascade Pacific Resource Conservation and Development; USDI National Park Service; USDI U.S. Fish and Wildlife Service, Institute for Applied Ecology, NRCS Corvallis Plant Materials Center; and The Nature Conservancy by signing an MOU establishing the Native Plant Development Cooperative Project at the Walter Horning Tree Seed Orchard. In March of 2010, the Horning Native Plant Center was established when a Director was contracted by the Cascade Pacific Resource Conservation and Development, Inc. to coordinate native plant materials development projects at the Horning Seed Orchard.

Work continues in the Northwest Weed Management Partnership to ensure seamless and broad technology transfer and information sharing among members. The members include six established cooperative weed management areas in northwestern Oregon and southwestern Washington, four invasive species working groups, the Oregon Department of Agriculture Plants Division and the Oregon Invasive Species Council. In 2010 new Memoranda of Understanding (MOUs) were established for all six of the Cooperative Weed Management Areas. The CWMA's are dynamic enough that several organizations had joined since the original MOUs were established in 2005.

Volunteer Program

Approximately, 570 volunteers contributed 35,393 hours to the Salem District. Their contributions are valued at \$738,000, based on the 2009 dollar value of a volunteer hour at \$20.85/hour. This is equivalent to 2 percent of the Salem District's \$27,600,000 budget for FY 2010. 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 while others want to contribute toward a worthwhile project.

Youth Program

In FY 2010 the Salem District Office provided 26,552 hours of youth employment. The District worked with a wide variety of youth crews on several diverse projects including; annual trail maintenance, wilderness trail work, new trail construction, invasive non-native species removal, park maintenance, timber management, and fence removal. Table 14 shows a resource area breakdown of individual youth organizations, projects areas and total hours of youth employment.

Table 23 Salem District Youth Program, FY 2010

Cascade Resource Area				
Youth Organization	Project Area	# of Youth	Hours/Youth	Hours Total
Northwest Youth Corps	South Cascade Recreation Sites	8	80	800
Northwest Youth Corps	North Cascade Recreation Sites	8	360	2880
Columbia River Youth Corps	Horning Seed Orchard	8	200	1600

Columbia River Youth Corps	North Cascades Molalla River	8	30	240
Columbia River Youth Corps	North Cascades Sandy Ridge	16	320	5120
Todos Juntos	North Cascades Molalla River	8	320	2560
Portland youth Explorers	North Cascades Barlow Trail Park	8	200	1600
WOAPE	North Cascades Sandy Ridge	8	320	2560
Cascade Resource Area Total Hours				17,360

Mary's Peak Resource Area				
Youth Organization	Project Area	# of Youth	Hours/Youth	Hours Total
Northwest Youth Corps	Across Resource Area	12	40	480
Hoopla Tribe	Across Resource Area	7	160	1120
Resource Education Intern	YHONA	1	1600	1600
Mary's Peak Resource Area Total Hours				3,200

Tillamook Resource Area				
Youth Organization	Project Area	# of Youth	Hours/Youth	Hours Total
Columbia River Youth Corps	Across Resource Area	6	240	1440
Columbia River Youth Corps	Across Resource Area	8	200	1600
Tillamook Natural Resources Crew	Across Resource Area	9	320	2880
Nestucca Valley Youth Crew	Across Resource Area	3	24	72
Tillamook Resource Area Total Hours				5,992

Oregon Watershed Enhancement Board (OWEB)

The Oregon Watershed Enhancement Board (Board) is a state agency led by a policy oversight board, which promotes and funds voluntary actions that strive to enhance Oregon's watersheds. The Board fosters the collaboration of citizens, agencies, and local interests. The OWEB administers a grant program funded from the Oregon Lottery as a result of a citizen initiative in 1998. The grant program supports voluntary efforts by Oregonians seeking to create and maintain healthy watersheds. To accomplish this, OWEB relies on regional application review teams which on a voluntary basis help determine which grant projects to recommend for funding. In 2010, the Salem District provided two staff hydrologists to participate on the Willamette and North Coast regional review teams.

National Environmental Policy Act

The Salem District quarterly Project Update publishes the availability of specific environmental documents and their stage of preparation. Project Update serves as a vital part of scoping and solicitation of public comment for all projects. Availability of individual project National Environmental Policy Act (NEPA) documents is advertised in local newspapers during the public review period. Project Update can be obtained by joining the mailing list or by viewing it on the Salem District website at: <http://www.blm.gov/or/districts/salem/plans/index.php>

PLAN REVISION AND MAINTENANCE, FY 2010

In December 2008, the Salem District and other Districts in western Oregon completed a revision to their existing 1995 Resource Management Plans. Records of Decision were issued on December 30, 2008.

On July 16, 2009, the U.S. Department of the Interior withdrew the 2008 Records of Decision and directed the BLM to implement actions in conformance with the resource management plans for western Oregon that were in place prior to December 30, 2008.

As a result of the withdrawal of the 2008 Record of Decision, the Salem District is again operating under the 1995 Record of Decision and Resource Management Plan (1995 RODs/RMPs) as amended and maintained.

Best Management Practices (BMPs)

The BMPs are the primary controls for achieving Oregon's water quality standards and are used to meet water quality objectives when implementing site-specific management actions. During the western Oregon plan revision process, the BLM reviewed and updated existing BMPs based on implementation and effectiveness monitoring, field experience, and new science. These revised BMPs represent the BLM's most current set of BMPs. The revised BMPs (as contained in Appendix I of the Final Environmental Impact Statement for the Revision of the Resource Management Plans of the Western Oregon Bureau of Land Management, 2008) are available for use when designing individual projects and for water quality restoration planning activities.

IMPLEMENTATION MONITORING REPORT, FY 2010

Introduction

Monitoring is an essential component of natural resource management because it provides information on the relative success of management strategies.

On December 30, 2008, the Assistant Secretary of the Interior approved the Record of Decision and Resource Management Plan for the Salem District, which revised the Record of Decision and Resource Management Plan, signed in 1995. Included as part of the 2008 RMP was direction to implement a new monitoring plan that was different than the 1995 RMP.

When the 2008 Record of Decision was withdrawn by the Secretary of the Interior on July 16, 2009, there was a need to return to the monitoring prescribed in the 1995 plan. While there were various project level monitoring efforts in FY 2010, there was no formal, District-level review of project implementation. For FY 2011, the District plans on conducting implementation monitoring that is based on the 1995 plan.

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 66.5 million board feet (MMBF) of timber for sale during FY 2010. This total was comprised of 31.9 MMBF of allowable sale quantity timber and 34.6 MMBF of additional volume resulting from the treatment of wildlife habitat in the Late-Successional Reserves. These combined offerings represent 99.8 percent of the 66.6 MMBF that Salem was directed to offer in the Annual Work Plan and the Secretary of Interior's Program of Work.

Silvicultural Activities

For FY 2010, variation in silvicultural activities from assumed levels in the RMP include the following:

Site Preparation (FIRE) – 695 acres were treated with prescribed fire for site preparation. In FY 2010, 196 acres were burning landings and the remaining 526 acres were for pile burning.

Site Preparation (OTHER) – The District treated 16 acres with other site preparation techniques. This mostly included the manually scalping in one timber sale unit.

Planting (regular stock) – The District planted 46 acres with regular planting stock.

Planting (improved stock) – The District planted 309 acres with genetically selected conifers. The amount of planting with improved stock last year was 7 percent of the planned amount for the second decade.

Maintenance/Protection – The District accomplished 804 acres of maintenance and protection treatments. The amount of maintenance and protection last year was 3 percent of the planned amount for the second decade.

Pre-commercial Thinning (PCT) – The District completed 2009 acres of release and PCT last year.

No fertilization has been done on the District since 1999 due to Survey and Manage protocols and continued litigation. .

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 Federal 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 within this document 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, invasive, troublesome, and difficult to control.

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

Offered (sold) Volume or Offered (sold) Acres - Any timber sold during the year by auction or negotiated sales, including modifications to contracts. This is more of a "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 (APS) 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. Off-highway vehicle 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.

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 BLM 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.

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

- Threatened or Endangered Species
- Proposed Threatened or Endangered Species
- Candidate Species
- Bureau Sensitive 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 National 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
AMA	Adaptive Management Area
APS	Annual Program Summary
ARRA	American Recovery and Reinvestment Act
ASQ	Allowable Sale Quantity
BLM	Bureau of Land Management
BMP(s)	Best Management Practices
CBWR	Coos Bay Wagon Road
CFER	Cooperative Forest Ecosystem Research
CX	Categorical Exclusions
CWA	Clean Water Act
CWD	Coarse Woody Debris
DEQ (ODEQ)	Oregon Department of Environmental Quality
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
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
NRCS	National Resource Conservation Service
O&C	Oregon and California Revested Lands
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
OSU	Oregon State University
OWEB	Oregon Watershed Enhancement Board

PACs	Province Advisory Councils
PD	Public Domain
PGE	Portland General Electric
PILT	Payment in Lieu of Taxes
PIEC	Provincial Interagency Executive Committee
PL	Public Law
RA	Resource Area
RAC	Resource Advisory 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
TMDL	Total Maximum Daily Load
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 (FWS)	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WC	Watershed Council
WFSA	Wildfire Situation Analysis
WSR	Wild and Scenic River
WQMP	Water Quality Management Plan
WQRP	Water Quality Restoration Plan

APPENDIX 3 LAND ACQUISITIONS BY EXCHANGES OR PURCHASE, FY 1995-2010

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 North Fork 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	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.

Name	Case File Number	Date	Acres Acquired	Acres Conveyed	Remarks
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.
Sandy River (Halvorson)	OR63984	9/24/07	157.23	0	Purchased with Land and Water Conservation Funds.
Sandy River (Clackamas Co.)	OR64381	9/16/08	30.0	0	Purchased with Land and Water Conservation Funds.
Sandy River (Clackamas Co.)	OR65373	9/21/09	9.6	0	Purchased with Land and Water Conservation Funds.
Sandy River (Clackamas Co.)	OR65973	9/21/09	19.5	0	Purchased with Land and Water Conservation Funds.
TOTAL			6,991.81	2,240.54	Net Acreage increase to BLM of 4751.27 acres
Source: Serial Register of Realty Cases - Salem District					

APPENDIX 4 LAND SALES, FY 1995-2010

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