

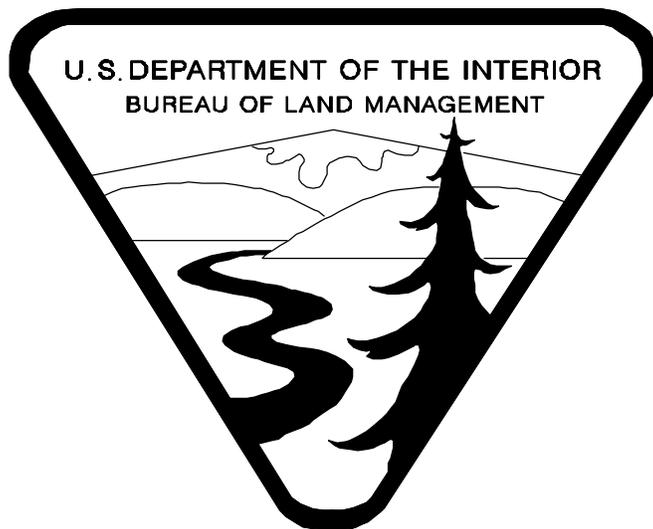
1997

ANNUAL PROGRAM SUMMARY

for the

BLM SALEM DISTRICT

(April 1998)



The Annual Program Summary (APS) is required by the Salem District Record of Decision and Resource Management Plan (ROD/RMP). The APS reports progress of ROD/RMP implementation in the Salem District. It summarizes the results of the district implementation monitoring accomplished in accordance with the district monitoring plan. It also documents RMP maintenance that has been accomplished to date.

Bureau of Land Management

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A Message from the District Manager

The year 1997 continued to be a challenge. With the budget basically steady, workforce costs going up, contract and supply costs increasing, and ever increasing workloads being levied on a shrinking workforce, I am proud of district accomplishments. We completed numerous riparian, road, recreation site and Late Successional Reserve restoration projects. We continued to make progress on flood repair damage from the flood of 1996. We met our district timber PSQ (probable sale quantities). We completed 100% of the needed silvicultural projects. The employees of the district deserve the credit for accomplishing these goals under such stressful conditions.

We continued to monitor the implementation of the Northwest Forest Plan and the Salem District Resource Management Plan, at province and district levels. The monitoring demonstrates that a very large majority of our actions met all implementation standards perfectly. There were fewer implementation errors and fewer documentation problems in FY97 than had been identified last year. We were able to identify some problem areas which we intend to correct. We have found that the monitoring program is an important and integral part of our adaptive management concept within the district. Adoption of a tracking form for FY98 projects should help reduce the implementation and documentation errors to near zero.

We are experiencing unprecedented interest from the public. City and county governments are expressing greater interest in what we do, particularly when community watersheds are involved. The public is involved in Province Advisory Committees and watershed councils throughout the district. All of these public forums provide a much needed perspective in our planning efforts, and we appreciate their contributions to our decision making process.

Van Manning
District Manager

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Progress of Resource Management Plan Implementation

Accomplishments

Restoration Projects

Watershed restoration is a long-term program to restore watershed health and aquatic ecosystems, including the habitats supporting fish and other aquatic and riparian-dependant organisms. Late Successional Reserve (LSR) restoration is a program to improve the structure and composition of habitats within LSRs. During FY 97, several types of restoration activities occurred in the Salem District:

- a. NF Clackamas Tree Falling & Helicopter placement project. This was a fish habitat restoration project which placed full length trees into the river for structure.
- b. Riparian restoration projects including riparian conifer planting, brushing around existing seedlings, and installation of brush mats to reduce future brush encroachment around the seedlings. This was accomplished on over 28 sites in the Marys Peak and Cascades Resource Areas.
- c. An ongoing LSR enhancement project was started in the Marys Peak Resource Area, where suppressed roadside conifers were released from competition by removing alder. Another project was completed in the Tillamook Resource Area by girdling tops of green trees to create wildlife trees on five sites.
- d. Road resurfacing and road erosion and sediment stabilization projects, such as removing slides and replacing culverts, were completed on Quartzville Road (Panther Creek Culvert), Lukens Creek Road, Honeygrove Road, Williams Creek Road, Willamina Creek Road and Klickitat Road. Other work is ongoing at numerous locations.

Key Watersheds were identified in the Northwest Forest Plan to serve as refugia for at-risk stocks of anadromous salmonids and resident fish species. The FY97 riparian restoration projects mentioned in paragraph b above were completed in Key Watersheds during FY97. In addition, two salvage timber sales and 106 silviculture projects were completed within Key Watersheds.

Watershed Analyses

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

Watershed analyses included:

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

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

Watershed analysis proceeded at a consistent pace. Eight analyses were completed during FY 97. Close coordination occurred between the BLM Salem District and adjacent National Forests to assure that watershed analysis in areas of joint ownership had appropriate participation from both agencies. Normally, the lead agency was the one with the majority of land ownership in the watershed. The status of watershed analysis is shown in the following table.

Table 1- WATERSHED ANALYSIS STATUS

	Watershed Analysis Areas	Number of key watersheds	BLM Acres	Percent of total acres
Completed through FY97	28	12	182,259	45%
Ongoing FY98	9	2	138,727	34%
Remaining FY99+	23	2	87,282	21%
Total	59	16	408,268	100%

Watershed analyses completed through FY 97 include :

COAST PROVINCE

Drift Creek (Alsea)	Drift Creek (Siletz)	East Fork Nehalem River
Nestucca River	North Fork Alsea	South Fork Alsea
Upper Siletz	Yaquina/Big Elk	Five Rivers / Lobster
Yahats	Middle Fork of the North Fork Trask River	

WILLAMETTE PROVINCE

Abiqua Butte	Eagle Creek	Hamilton Creek
North Fork Clackamas	Upper Clear Creek	Upper Sandy
Salmon River	Scappoose Creek	Shot Pouch(S.Santiam)
Thomas Creek	North Yamhill	Benton Foothills
Bull Run / Little Sandy	South Fork Clackamas	Lower Clackamas
Upper Fish Creek	Collawash	

Watershed analysis ongoing or proposed in FY 98 include :

COAST PROVINCE

Kilchis River	Lower Alsea	Upper Salmon
Little Nestucca		

WILLAMETTE PROVINCE

Little North Santiam Molalla River Tualatin
Combined - Willamina Creek, Panther Creek, Baker Creek, Deer Creek and South Yamhill(part)
Combined - Luckiamute River, Rickreall Creek, Mill Creek, South Yamhill River(part)

Watershed Councils

The Salem District is gradually increasing its involvement and support of local Watershed Councils (WC). This provides excellent communication between the BLM and all of the interested shareholders who are interested in their local watersheds and the activities therein. The following table indicates current status of Salem BLM involvement in local Watershed Councils.

Table 2 - Salem District Involvement with Local Watershed Councils

Watershed Council	Resource Area	Status of Involvement 1997
North Santiam	Cascades	Attend some meetings
Clackamas River Basin	Cascades	Not involved at this time
Lower Columbia River WS Council	Cascades	Not involved at this time
Lower Nehalem WS Council	Tillamook	Not actively involved at this time. Occasional meetings with members.
Marys River WS Council	Marys Peak	Attend monthly council meetings. Member of the council.
Mid-Coast WS Council	Marys Peak	Attend monthly council meetings and technical committee meetings. BLM Not a member of the council. Trying to jointly fund a watershed analysis for Rock Creek subwatershed.
Nestucca/Neskowin WS Council	Tillamook	Attend monthly council meetings and technical committee meetings. BLM not a member of the Board. W.C. reviews BLM projects.
Rickreall WS Council	Marys Peak	Attend monthly council meetings. Member of the council.
S.Santiam WS Council	Cascades	Attend most monthly council meetings. Member of the council.
Sandy Basin WS Council	Cascades	Attend some monthly council meetings. Member of the council.
Tualatin WS Council	Tillamook	Attend monthly council meetings and technical committee meetings. Not a member of the council. Working on joint Watershed Analysis/Assessment.
Upper Nehalem WS Council	Tillamook	Attend some meetings and provide technical support. Working on joint project planning.
Yamhill Basin Council	Tillamook & Marys Peak	Attend meetings. W.C. participates in BLM Adaptive Management Area (AMA) planning. W.C. reviews BLM projects. BLM member of council.
Scappoose Bay WS Council	Tillamook	Attend meetings. W.C. involved in BLM project review. Working on joint restoration projects.
Tillamook Bay WS Council	Tillamook	Member of Board. Attending startup organizational meetings.
Alsea WS Council	Marys Peak	Attending startup meetings

LSR Assessments

All habitat manipulation activities in LSRs during FY 97 were covered either by initial LSR assessments or full LSR assessments completed in accordance with the RMP and NFP. Progress toward completing final LSR assessments was improved during FY 97.

Assessments completed FY 96

ALate Successional Reserve Assessment, Oregon Coast Province - Southern Portion@

Assessments ongoing during FY 97

One LSR assessment, titled ALate Successional Reserve Assessment, Oregon Coast Province - Northern Portion@, was prepared jointly by the Siuslaw National Forest and the Salem, BLM District. The assessment covered two designated LSRs (RO 267 & RO 268) totaling 546,252 acres of federal land in the north half of the Oregon Coast Province. The assessment area generally encompassed the area of the Northern Coast range Adaptive Management Area. It ranges from the Yaquina river drainage on the south to the Wilson and Kilchis River drainages in the north, and between the Pacific Ocean and the Willamette Valley. During FY 1997, the district also continued work with the Mt.Hood National Forest and Willamette National Forest on two LSR assessments covering the east side of the Salem District.

The LSR assessment includes: 1) Appropriate silvicultural prescriptions, 2)Landscape treatment priorities, 3) Listings of noxious weeds and non-native species which may impede our ability to attain LSR objectives, 4)Management proposals to deal with noxious weed species, and 5) A fire management plan.

15 Percent Analysis

The NFP/ROD (pg C-44) and ROD/RMP (pg 48) require that BLM and USFS provide for the retention of late successional / old growth fragments in the matrix where little remains. The standards and guidelines are to be applied to any fifth field watershed in which federal forest lands are currently comprised of 15 percent or less late-successional forest (LSF), considering all land allocations. Agency guidance dictates that late successional forests in current reserves within each fifth field watershed be identified first, before looking at the matrix. All Salem District FY 97 sales sold under the NFP have complied with the 15 percent rule per the initial analysis.

In 1996, the Salem District completed an initial screening of watersheds with the Siuslaw, Mt. Hood and Willamette National Forests. When considering existing reserves(Late Successional Reserves(LSR), Riparian Reserves (RR), etc), the screen indicated that 47 of the 75 fifth field watersheds (63%) already exceeded the 15 percent threshold. Many other watersheds will exceed the 15% level when forests outside of the existing reserves attain late successional characteristics. On the Salem District, most of the watersheds with low percentages of LSF were BLM scattered tracts, many

of which had been harvested over the past 30 years. A rough estimate of fifth field watershed late successional forest components is shown on the following table. These are estimates based on early interagency analysis between the BLM Salem District and its three adjacent National Forest. The numbers will be revised when agency guidance is finalized in 1998.

Table 3 - Numbers of Fifth Field Watersheds by LSF category *

Category	Salem BLM / Mt. Hood NF	Salem BLM / Willamette NF	Salem BLM / Siuslaw NF	Total
15% LSF or less in Reserves	6	1	5	12
16-25 % LSF in Reserves	2	3	1	6
26-49 % LSF in Reserves	5	20	2	27
50% or more LSF in Reserves	4	4	2	10
Total	17	28	10	55

* These are not all shared watersheds. They simply fall into the shared area covered by the noted BLM / FS ownerships and have some BLM acres

Continuation and refinement of the 15 percent analysis, as well as mapping of individual stands, remains on hold pending resolution of various issues by the Regional Ecosystem Office (REO), the Regional Interagency Executive Committee (RIEC), the Forest Service Region 6 Office and the Oregon BLM State Office. Projects will be implemented using the existing initial analysis pending that resolution by REO/RIEC.

Adaptive Management Area Activities

The finished AMA Guide was published in January, 1997 and distributed to federal, state, and local government offices, libraries, schools, and to a large number of interested local citizens. This Guide was developed as a joint USFS-BLM effort, and included creative ideas and suggestions from the Province Advisory Committee, the Siletz and Grand Ronde tribes, and many other organizations and individuals. The Guide was prepared to meet the Northwest Forest Plan requirement that each AMA prepare an AMA Plan. It provides a concise description of the reason for having AMAs, a vision for the future, a summary of past history and present conditions, and a framework for the future. The most important function of the Guide is to inform and motivate our partners and stakeholders to participate in planning, implementing, and monitoring AMA programs. Though the Guide has been printed and distributed, we will continue to revise and add to it as we learn new ways of doing business in the AMA.

A Social Assessment for the AMA was completed in June of 1997. BLM, Forest Service, Oregon Department of Forestry, and many other agencies and organizations cooperated in gathering information for this document. Agency managers and staff will be able to use this assessment to better identify the likely social and economic effects of proposed actions. Thus, it will help the agencies to make decisions that consider the social environment of local communities as well as the expected biological and physical effects of each action.

In the public involvement arena, we are continuing to work closely with the Coast Range Province Advisory Committee (PAC) and the PAC's AMA subcommittee. The subcommittee has continued to analyze current issues facing federal land managers and to bring specific recommendations to the PAC for its consideration. For example, the subcommittee has recommended to the PAC that the Forest Service and BLM initiate a large-scale landscape design study in the AMA. This proposal involves the testing of different management strategies for promoting the development of mature and old-growth forest on large blocks (perhaps 5,000 to 10,000 acres each) of the landscape. The AMA's federal managers are now considering how to collaborate with a wide range of AMA partners and stakeholders in putting together a design for this study. Scientists at the Forest Service's PNW Research Station in Corvallis will be key players in designing the project.

We have also been developing good working relationships with watershed councils in the AMA, including the Nestucca/Neskowin Watershed Council and the Yamhill Basin Council. Both of these councils have established subgroups to address forest land management issues. Watershed councils have the potential of being an excellent channel for creative ideas and local participation in management of the AMA.

Forestry Program

During the first few years of RMP implementation, the timber harvest program reflects a mix of the **AOld@** and **ANew@**. Old sales were sold under the previous land use plan but just recently harvested. New sales were designed and sold under the standards and guidelines of the RMP. Four of the **AOld@** sales were released in accordance with Sec.2001(k)(1) of the 1995 Rescissions Act (PL 104-19). A plan evaluation on the rescission sales was completed in March 1998, separately from the Annual Program Summary.

In the RMP, an allowable sale quantity (ASQ) of 34.8 million board feet (5.7 million cubic feet) was declared. As stated in the RMP:

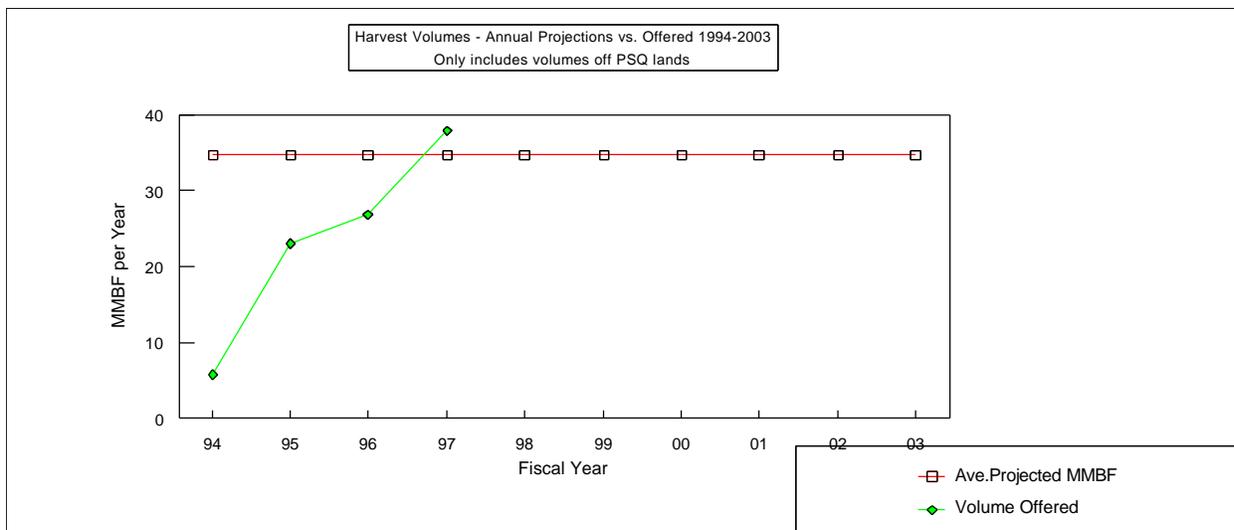
AThe allowable sale quantity for the resource management plan is an estimate of annual average timber sale volume likely to be achieved from lands allocated to planned, sustainable harvest. This estimate, however, is surrounded by uncertainties. The actual timber sale levels may differ, as timber sale levels will be an effect of overall forest management rather than a target that drives that management. Harvest of this approximate volume of timber is considered sustainable over the long term. This is based on assumptions that the available land base remains fixed, and that funding is sufficient to make planned investments in timely reforestation, plantation maintenance, thinning,

genetic selection, forest fertilization, timber sale planning, related forest resource protection, and monitoring.

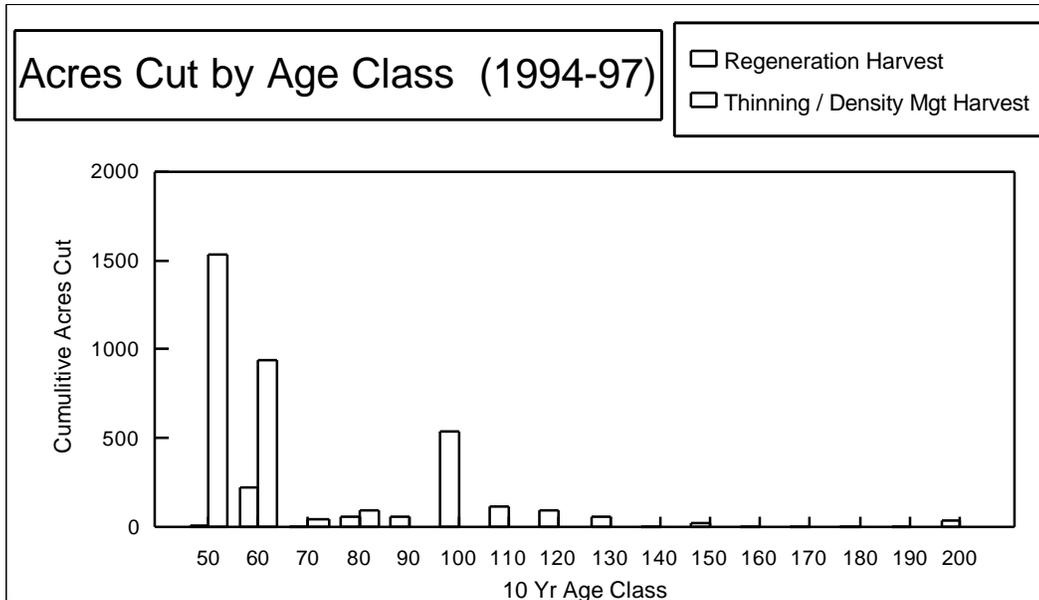
The allowable sale quantity represents neither a minimum level that must be met nor a maximum level that cannot be exceeded. It is an approximation because of the difficulty associated with predicting actual timber sale levels over the next decade, given the complex nature of many of the management actions/direction. It represents BLM's best assessment of the average amount of timber likely to be awarded annually in the planning area over the life of the plan, following a start-up period. The actual sustainable timber sale level attributable to the land use allocations and management direction of the resource management plan may deviate by as much as 20 percent from the identified allowable sale quantity. A

During the third year evaluation, we may evaluate the assumptions used in determining the ASQ, which involves several of the items listed above. We may consider noted differences in volume per acre being realized during harvest, differences in acreage available for harvest, differences in age classes being harvested compared to estimates and numerous other factors. For that reason, we are generally tracking some of these factors. They are displayed in appendices which report timber harvest, thinning, and silviculture activities during FY 97, as well as some cumulative data on timber sales and a glossary of terms.

It was recognized that implementation of the full PSQ would be gradual. As expected, the target volumes during the startup period were below the PSQ of 34.8 MMBF to account for expected difficulties getting sales prepared under the revised NFP standards. This is reflected in Appendix 1. By 1997 the district had ramped the sale volumes up to the ASQ, with some to spare to make up for previous years shortages.



One public concern has been the perception that we are harvesting all of our old growth timber. To assess that perception, we have included appendices 3A, 3B, and 8-11 to show the age classes and types of stands where harvesting has been done. In the Salem District, nearly all regeneration harvest has been completed in stands less than 130 years old and thinning is primarily in stands 50-60 years old. In reality, we are harvesting our oldest available stands at a slower rate than younger stands.



SILVICULTURAL PRACTICES

Silvicultural activities are primarily focused on units which have been harvested in the past 10-20 years. There is some increase in silvicultural activity in projects designed to improve riparian habitat, mainly by establishing a conifer component. Activities during FY97 are shown in Appendix 12. This information will be tracked and used in evaluation of computer modeling projections. The actual amounts shown represent **100%** accomplishment of needed treatments during FY97. The primary reason the levels of needed treatment are lower than projected is the slowness of implementing the timber sale program under the RMP as noted above. Now that we are on target for timber sale activity, levels of needed silvicultural treatments would be expected to increase correspondingly.

Fire/burning

During FY 97, 11 Units totaling 237 acres received site preparation by prescribed burning. All burning was done in compliance with the Oregon Smoke Management Plan, and no intrusions of smoke into designated areas resulted from any of the BLM burning. This was due to a combination of experienced personnel, well written burn prescriptions, good mixing and dispersal conditions on days of the burns, and rapid mop up to reduce residual smoke.

There were no escaped fires during FY 97 which would have required an Escaped Fire Situation Analysis.

Fire management planning in LSRs and AMAs is continuing on the same schedule as the LSR assessments and AMA guide reported earlier.

Special Forest Products (SFP)

The Salem District follows the standards and guidelines set forth in the Oregon/Washington Special Forest Products Procedure Handbook. Each resource area established specific guidelines for the management of individual special forest products within their area using an interdisciplinary approach. These guidelines can be found in each resource area's NEPA document for SFP. They were developed to help insure sustainability of individual special forest products within their resource area. Appendix 13 reflects the SFP sales for FY 1997 on the Salem District. It provides an opportunity to observe fluctuations from year to year, and to identify which products were of most interest during the reporting year. There are no estimates or projections for Special Forest Products that need to be compared to the sold quantities shown.

Botany

Most botany program time is spent on Survey & Manage species, which is discussed below. Several interagency conservation strategies have been developed for the plants *Cimicifuga elata* and *Aster gormanii* (*Piper*) *Blake* to conserve the species and prevent the need for listing.

Fish

A significant amount of fisheries program time was spent on project level NEPA documents, watershed analysis, inventory, monitoring and T&E program requirements.

Salem District personnel continued to conduct spawning surveys and habitat inventory on federal land. This is an important first step in identifying opportunities for restoration projects which will help meet ACS objectives. There was only one fish project accomplished during FY 97. The North Fork Clackamas River habitat restoration project took full length trees, with root wads attached, and placed them by helicopter into the stream to improve fish habitat. Some maintenance was completed on previously constructed fish structures where necessary to assure their continued value.

Local cooperative efforts increased, focused mainly on watershed analysis, base line data collection, and ongoing support and technical assistance to various watershed councils. The Salem District entered into challenge grant agreements with the Oregon Department of Fish and Wildlife(ODFW), Pacific NW Range and Experiment Station (PNW), Mt. Hood National Forest and Portland General Electric (PGE) for one adult trapping and two smolt trapping operations, part of the baseline data collection efforts.

We also coordinated with FS, National Marine Fisheries Service (NMFS) and ODFW on numerous occasions. Salem also contributed a fishery biologist to the state-wide effort on improving the GIS fish/hydro theme, an important component of watershed analysis.

Wildlife

All of the timber sales in LSRs and AMAs that were reported earlier in this report were designed specifically to enhance late successional forest characteristics for wildlife habitat. They will not be discussed further, but it is important to remember that their objectives were wildlife oriented. There was one small project initiated specifically for wildlife habitat, a wildlife tree creation project, where trees were topped or girdled to provide future snag habitat. As with fisheries, a significant amount of wildlife program time was spent on project level NEPA documents, watershed analysis, inventory, monitoring and T&E program requirements(survey and consultation). Biologists commonly inventory, identify and mark wildlife trees, retention trees and Coarse Woody Debris (CWD) on timber sale units, both before and after sales. An increasing workload and associated learning curve was experienced in FY97 with regard to Survey and Manage (S&M) species of plants and animals. We are still required to conduct a two year survey for marbled murrelet on all suitable habitat modification projects.

T&E Species and Section 7 Consultation

In FY97, interagency teams continued using the Section 7 consultation streamlining effort. Level I teams, consisting of local employees from BLM, USFS, NMFS and U.S. Fish and Wildlife Service (USFWS), regularly met to assure consultation was accomplished efficiently and speedily. Four wildlife programmatic consultation packages were prepared, one each for disturbance and habitat modification for the Willamette Province and Coast Range Province. This helped avoid numerous

redundant consultation efforts for normal, repetitive situations.

All ongoing and proposed activities within the range of anadromous fish which are proposed for federal listing are conferenced with NMFS. Much progress was made on development of a programmatic Biological Assessment (BA) for anadromous fish, dealing with numerous minor types of projects with fish disturbance or habitat modification issues, such as trails, in-stream inventory work, conifer stand maintenance, & development, recreation, salvage, etc. This BA will not include major activities such as timber sales or road building.

Salem provided a fishery biologist to work with the FS(R6) to prepare a Biological Assessment (BA) for the implementation of the RMPs (BLM) and LRMPs (FS) throughout the Cascade Range of Oregon and Washington. The BA covered steelhead and bull trout, and was submitted to both NMFS and USFWS.

Salem has been actively involved in bald eagle recovery for several years. Among the most important actions have been inclusion of known and potential bald eagle nest sites and roost areas into Areas of Environmental Concern (ACECs), to protect them in the long term, as identified in the Recovery Plan. There are also recently approved recovery plans for the peregrine falcon and marbled murrelet which are also being implemented on the Salem District. The Late Successional Reserves (LSRs), established under the Northwest Forest Plan, provide additional protection for several of these species.

Survey & Manage Species(S&M)

We are managing known sites for survey strategies 1 and 2 Survey and Manage (S&M) and Protection Buffer species and surveying prior to most ground disturbing activities.

Nearly every project which had botanical surveys completed during FY97 had at least one S&M species plant found. A cursory check of records showed that from 1 to 4 survey strategy 1 species were found on the surveyed projects. The presence of these species became one additional factor to consider in the project planning. On timber sales, several types of actions were taken to manage these sites, including: alterations of boundaries; locating green-tree retention blocks around the S&M sites; dropping units for future consideration; and buffering the sites for protection. One proposed land exchange dropped six parcels with S&M populations from consideration.

It is expected that organized surveys for survey strategy 3 and 4 S&M species will eventually be done at the regional level, not the local level. Protocols are being developed for many of the species. Survey strategy 3 & 4 species, particularly lichen and fungi, were encountered on nearly every project during botanical surveys in FY 97 (from 1-10 species), were appropriately documented, and managed in those cases where it was deemed appropriate. Alterations to projects for strategy 3 & 4 species

was much less frequent than for the strategy 1 species.

A few survey protocols and management recommendations have been approved and disseminated to field units for implementation. Others will continue until completed for all species or species groups.

Land Exchanges

While the Salem District was actively working on several large land exchanges during FY 97, none were completed.

Areas of Critical Environmental Concern

Management plans for Areas of Environmental Concern (ACECs) are in various stages of completion and revision. Some are adequate and will remain in effect. Others were revised for RMP consistency. New ones were also written. Status of plans through FY 97 is shown in the following table.

Table 4 - STATUS OF ACEC MANAGEMENT PLANS

Number of ACECs (Table 2-RMP)	Number of ACECs Which had Mgt. plans in 1995	Number of 1995 existing plans which are still valid	Number of 1995 existing plans that have been updated	Number of 1995 existing plans that still need to be revised	Number of ACECs that need new plans OR new plan completed in 1997
26	16	6	6	4	10

Wild & Scenic Rivers

The Salem District manages or shares management of five designated Wild and Scenic Rivers -- Sandy River, Salmon River, Clackamas River and Quartzville Creek and Elkhorn Creek. Implementation of the respective management plans, except Elkhorn Creek which is not completed, continued with resource and water quality monitoring programs, visitor information and education efforts, resource protection and fisheries habitat restoration projects, recreation improvements and visitor service patrols, development design reviews, landowner cooperative efforts, and the development of public/private partnerships for river management. The RMP also identified segments of the Nestucca and Molalla rivers as suitable for inclusion in the national system. The values of these segments were protected during 1997 pending further study.

Yaquina Head Outstanding Natural Area (YHONA)

FY 97 marked the completion of 16 years of land acquisition, planning and

development of the Outstanding Natural Area. Planning work, begun in the early 1980s, came to final completion on May 10, 1997. On that date, the new Interpretive Complex, consisting of the Interpretive Center, Maintenance Facility, Entry Booth and numerous waysides & trails, were dedicated, officially joining the recently developed accessible tide pools, marine garden access stairs, lighthouse decks and improved access road, to form one uninterrupted educational facility.

During the dedication, the acting BLM Director honored Yaquina Head volunteers with the BLM's prestigious "Health of the Land" award. This national award is well deserved recognition for the many hours of service which YHONA's numerous volunteers have provided. Also at the dedication, Dr. Jeff Price, Director of the American Bird Conservancy's Important Bird Area program, presented the BLM with a plaque recognizing YHONA as an Important Bird Area, one of just 10 such areas recognized on America's public lands.

YHONA was one of about 200 sites authorized nationwide under the Recreation Fee Demonstration Program to initiate fees for the operation and maintenance. The decision for the first year was to charge small fees for tours of the lighthouse and entry into the exhibit hall at the Interpretive Center. Fees went into effect on July 15, and through Sept., gross collections were \$27,600. After expenses, the net collections were \$3,100. During FY97, YHONA was visited by approximately 486,000 persons.

Other significant accomplishments included the transfer of Yaquina Head Lighthouse from the U.S. Coast Guard to the BLM and the signing of an agreement with the Friends of Yaquina Lighthouses to provide support for the BLM's activities at the site.

Table Rock Wilderness Area

The Salem District manages the 6,000- acre Table Rock Wilderness. Implementation of the management plan continued with resource and water quality monitoring programs, visitor information and education efforts, resource protection and erosion control projects, recreation sign and facility (trail head toilets) improvements, backcountry patrols, and the development of cooperative management partnerships with user interest groups.

Cascade Streamwatch Project

The Cascade Streamwatch project is a collaborative effort by BLM, USFS, the non-profit educational organization Wolfree, Inc. and numerous other agencies and private corporations. Its purpose is to develop a comprehensive education program and an innovative interpretive site, focusing on watersheds and fisheries. The project, located at the BLM's Wildwood Recreation Site, now provides outdoor study areas, trails, shelters and other facilities to support cooperative and experimental science-based resource education programs. The project was expanded in 1997 with the initiation of construction of additional accessible interpretive trails, an underwater stream profile chamber, a group education shelter and other innovative interpretive and educational

elements. The new facilities are expected to be completed in June of 1998. All facilities are within an hour of Portland, are fully accessible and provide unique opportunities for a multitude of hands-on field education activities. In 1997, over 3,000 school children from 40 Portland area schools participated in the program. The science-based education program is supported by over 150 resource professionals. In 1997, BLM's Challenge Cost-Share funds for the education program was increased tenfold by the Forest Service and over 50 private corporations, businesses, foundations and agencies.

The Cascade Streamwatch partnership and project has been recognized by several national awards including the BLM Health of the Land Award, the Forest Service's National Fisheries Award and the BLM Directors 1997 Award for innovation and achievement.

Transportation / Roads

The Western Oregon Transportation Management Plan was completed in FY96. One of the stated objectives of the plan is to comply with ACS objectives. The Salem District is developing Transportation Management Objectives (TMOs) for the road and trail network.

Cultural

Relationships with American Indian groups have broadened as a result of the NFP. Several tribes are represented on the Coast Range Provincial Interagency Executive Committee, where they participate with other executives in providing coordinated direction of activities within the province. Traditional contacts were made where tribes were notified of all FY 97 projects.

The district actively promoted appreciation of cultural resources through public education and interpretive programs. Outdoor education programs were presented to over 2000 students ranging from first grade through college level. These presentations included classroom activities, outdoor school experiences, job shadowing opportunities, research projects, and cooperative education programs at the Salem District's environmental education site and Areas of Environmental Concern. School teachers were trained in use of the "Exploring Oregon's Past" teachers activity guide at three in-service workshops. Approximately 500 of the guides were distributed.

Socioeconomic Conditions

The Salem District provides employment opportunities to local companies and individuals as it implements the components of the Northwest Forest Plan. Timber sales, silvicultural treatments such as pruning, thinning and planting trees, the collection of ferns, mushrooms and firewood, and the recreational use of public lands provide work opportunities.

Salem BLM, in coordination with other federal, state and local governments, participates in the Northwest Forest Plan's Jobs in the Woods (JIW) / Watershed Restoration program. The program provides on-the-job training opportunities for workers displaced from forestry related work. The workers are hired to work on crews restoring fish and forest habitat. In addition to hiring crews, part of the money is used to hire local area contractors to do restoration work. In FY 97, the Salem District expended over \$2.05 million on JIW projects. In addition to the restoration projects noted on page 3, JIW projects included recreation site rehabilitation, fence removal, stream and noxious weed inventory, noxious weed removal, native seed collection and other tasks related to the overall restoration program.

The Oregon and California (O&C) Grant Lands Act of 1937 provides that revenues from the O&C lands be distributed back to the 18 O&C counties. Historically, O&C receipts from the harvest of timber in western Oregon have been and remain a significant source of revenue to both the U.S. Treasury and the O&C Counties. However, due to resource conflicts, harvest levels have dropped significantly from historical levels, significantly impacting local economies. The traditional O&C Act payment formulas were modified in the Omnibus Budget Reconciliation Act of 1993. The Act provides the western Oregon counties a special payment amount based on an annually decreasing percentage of a five year average (1986-1990), replacing the old O&C payment. Table 5 shows the total payment schedule through the year 2003. Counties will receive the Special Payment Amount from 1994 to 1998. From 1999 through 2003, payments to counties will be the greater of either the special payment amount identified, or fifty percent of total receipts, whichever is greater.

Table 5 - Payment to Counties from Western Oregon Timber Receipts*

FY	O&C Special Payment
1994	\$ 78,586,460
1995	\$ 75,812,820
1996	\$ 73,039,180
1997	\$ 70,265,540
1998	\$ 67,491,901
1999	\$ 64,718,261
2000	\$ 61,944,621
2001	\$ 59,170,981
2002	\$ 56,397,341

2003	\$ 53,623,702
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* State total is reallocated to counties by formula.

The distribution to counties within the boundaries of Salem District consists of about 35% of the total statewide distribution. Calculated shares by county are shown in the following table.

Table 6 - PAYMENTS TO COUNTIES WITHIN SALEM DISTRICT

County	Payments for FY 97
Benton	\$1,974,462
Clackamas	\$3,899,738
Clatsop	\$0
Columbia	\$1,447,470
Lane	\$10,729,548
Lincoln	\$252,956
Linn	\$1,855,010
Marion	\$1,025,877
Multnomah	\$765,894
Polk	\$1,517,735
Tillamook	\$393,487
Washington	\$442,673
Yamhill	\$505,912
Total	\$24,810,762

Third Year Evaluation

A third year evaluation of the Westside Resource Management Plans is in the early planning stages at this time. It will be completed in FY 1999, covering the implementation period 1996-1998.

MONITORING

Salem District implementation monitoring

Implementation monitoring was based on a process developed by the Salem District CORE team. The original basis was Appendix J of the ROD/RMP, but questions from the interagency monitoring effort were also incorporated or used to clarify issues of concern during FY 96. In FY97, the CORE revised and improved the questions to facilitate monitoring. Three district monitoring teams, one to monitor each resource area were identified. The teams consisted of district CORE team members, resource area representatives and Operations Support Team members. The monitoring teams selected projects for monitoring and prepared individual resource area reports based on the evaluation of the results. Detailed information on the monitoring process is available for review in the Salem District Office. A summary of the district monitoring follows, with supporting tables in the appendices.

Province level implementation monitoring

Two separate teams, one to monitor the Willamette Province and one to monitor the Coast Range Province, were selected to complete the second year of Province level implementation monitoring. There were federal agency representatives and community members on the team. The teams addressed from 87-129 revised and improved questions on randomly selected timber sales, road projects and restoration projects. Only two projects were selected within Salem District: Roland Minto timber sale and Rye Mountain timber sale. Specific results can be seen in the report titled, *AResults of the FY 1997 Implementation Monitoring Program*, which should be available from REO later this year, or, individual reports may be reviewed at the Salem district office.

Effectiveness monitoring

Effectiveness monitoring is a longer range program than implementation monitoring, and time must pass to measure many of the factors of concern. The Salem District is assisting the Siuslaw National Forest and Pacific Northwest Experiment Station, to develop a Pilot Effectiveness Monitoring Plan for the Coast Province. This will continue into FY 1998. Results will provide direction to the interagency effort at REO. In addition, Salem District began development of a district level effectiveness monitoring program during FY97. This will also continue into FY98.

FY 97 IMPLEMENTATION MONITORING SUMMARY REPORT SALEM DISTRICT

Introduction

There are three types of monitoring required under the Northwest Forest Plan (NFP) and the Salem District Resource Management Plan (RMP); implementation, effectiveness and validation monitoring. Implementation monitoring determines if the standards and guidelines (S&Gs) are being followed, generally by evaluation of selected projects to determine if they were consistent with direction in the management plan. Effectiveness monitoring is a longer term view, evaluating whether application of the management plan achieved the desired goals, or if the objectives of the Standards & Guidelines were met. Validation monitoring determines if underlying management assumptions used in the plan were correct. Effectiveness and validation monitoring are more research oriented and are long term projects. This report is limited to implementation monitoring of projects on the Salem District which were completed in Fiscal Year (FY)1997.

Salem district employees are commended for their efforts to properly implement the NFP and RMP. During FY97 monitoring, more examples were noted of well written prescriptions and project plans that were consistent with the NFP and of accurate and thorough documentation and rationale. There was much evidence of field personnel doing their best to properly implement the plan. However, there were some areas where improvement is needed. The specifics, including answers to specific monitoring questions, are documented in resource area monitoring files, available for review at the Salem District Office. Some results are discussed below and others are included in the appendices to this Annual Program Summary.

To put the results of the implementation monitoring into perspective, each of the 35 projects (62 Units) was evaluated against 66 questions. There was a total of 4092 individual responses, of which only 73 (<2%) were ANo@ or ADoes Not Meet@. Of the 35 projects monitored, 20 (41 Units) met all S&Gs, district policies and district documentation requirements. This reflects, to some degree, an application of the 1996 monitoring recommendations. The other 15 projects (21 Units) had a variety of results, ranging from a single question missed (6 projects) to more than 10 questions missed (4 projects). Those 4 projects were all salvage timber sales completed under the same environmental document, which had been prepared prior to FY96 district monitoring recommendations. As a result, there were minor documentation discrepancies noted that were tallied against each sale, even though the discrepancies only occurred in a single document. A frequency distribution of ANo or Does Not Meet@ responses for all projects is found in appendix 4.

A Tracking form was developed by the district in FY97. This optional form has been adapted by the resource areas for FY98 projects. Utilization of the tracking form

should eliminate most of the noted discrepancies in FY 98 projects.

Following is a list of the questions which had either a **ANo** or a **ADoes Not Meet** response. They are listed in two groups: Implementation errors and Documentation deficiencies.

IMPLEMENTATION ERRORS

- Q1. FOUR projects were implemented without required watershed analysis .
The North Fork Siletz and Boulder Creek bridges were replaced to correct an extreme safety hazard. The WA was on-going during NEPA documentation and completed prior to project implementation. Three salvage sales (Kootchie-Koo, Bald Panther and Overfloeter) were all scattered blowdown along road systems. Most of the blowdown occurred in areas where Watershed Analyses were completed (Nestucca, Scappoose, EF Nehalem), but a few isolated locations occurred in the Panther and Willamina drainages where WA was not completed. The monitoring team felt that there were no significant negative environmental effects resulting from these errors except for removal of CWD where one analysis had identified it as lacking in the watershed. The district project tracking form which is being implemented includes a check-off for watershed analysis. This should prevent future occurrences of this type of error.
- Q3. THREE projects did not identify all streams.
Two of the projects were salvage sales (Kootchie-Koo and Overfloeter) involving removal of isolated roadside blowdown, some of which was in riparian reserves. The only environmental impact noted was the removal of CWD from the RR when the habitat needs had not been identified. The other project was the Hardy Creek Trailhead parking lot expansion. There were some environmental effects to a small wetland at the parking lot location. The tracking form being implemented includes a check-off for stream identification.
- Q4. FOUR projects did not establish Riparian Reserve boundaries correctly.
These included the same projects noted for Q3 above plus Bald Panther Salvage. The project contract administrator felt that establishment of RR boundaries was not necessary on the salvage sales. Environmental effects were as noted above. Failure to establish a proper RR boundary around the wetland near the parking lot expansion created some environmental impacts.
- Q7. THREE projects were implemented inconsistent with the EA or decision .
The Noxious Weed contract used methods different from those authorized in the NEPA / Decision documents. The road maintenance project cleaned ditches during rain, inconsistent with BMPs. One PCT unit had cutting along the stream, within the No-Cut area identified in the contract. There were no apparent adverse environmental effects noted during monitoring. Future

monitoring will include ongoing monitoring done during the project implementation rather than afterwards to better assess impacts of certain types of projects.

- Q8. FOUR projects, on an overall basis, did not meet the Standards & Guidelines for riparian reserves.
The NF Clackamas Fish Enhancement project cut large trees from within the Riparian Reserve without evaluation of the impacts of the proposal or other options. The other three projects are the salvage sales mentioned under Qs 3 - 4 above. Since this is an overall summary question, previous comments suffice.
- Q17. TWO projects did not obtain REO review.
Kootchie-Koo and Bald Panther salvage sales, both including LSR lands, were subject to review by REO (ROD 66, C13).
- Q19. TWO projects did not limit salvage in an LSR to areas greater than 10 acres and less than 40% canopy closure.
Kootchie-Koo and Bald Panther salvage sales focused on roadside salvage. The monitoring team felt the resource area had salvaged trees too far out from the road prism to be considered roadside salvage or to consider theft as a serious problem.
- Q38. ONE project did not implement the designed BMPs .
Road Maintenance did not implement BMPs regarding ditch cleaning during rainy periods.
- Q42. TWO projects did not retain and protect sufficient CWD during and after LSR / RR harvest activities.
Kootchie-Koo and Bald Panther salvage sales removed some blowdown from areas deficient in CWD in the LSR, and in the opinion of the monitoring team, not all of it subject to theft.
- Q43. ONE project did not identify and protect special habitat within the project.
Hardy Creek Trailhead parking lot expansion did not protect a small wetland.
- Q46. TWO projects did not implement the fish related design features and mitigation measures.
The Cascades PCT failed to implement the No Cut Buffer on the stream on at least one unit. Bald Panther Salvage removed CWD from riparian reserves.
- Q49. One project did not adequately consider special status species in deciding whether to go ahead with the project.
While Overfloeter Salvage timber sale initially considered these species, self imposed follow-up requirements were overlooked and not completed.

Q50. FOUR projects did not mitigate disturbance where actions might impact special status species.

Three salvage sales (Kootchie-Koo, Bald Panther and Overfloeter) failed to include terms and conditions regarding daily timing restrictions from the Biological Opinion (B.O.) in the NEPA document or the contracts. Rock Trout Salvage failed to include the daily timing restrictions required by the terms and conditions of its B.O. in its contract. Biological impacts are unknown, but are likely to be minor.

Q51. One project failed to properly complete consultation with both USFWS and NMFS on all actions.

The NF Clackamas tree falling contract accomplished proper consultation at the beginning of the project but failed to initiate reconsultation when a revision to the project, blasting of trees, was approved.

DOCUMENTATION DEFICIENCIES: The Salem District added numerous documentation requirements to the implementation monitoring questions. This was done to assure that we evaluated all issues and to help complete monitoring more efficiently. Thus, this group of responses is more of a pulse check on how we are doing at improving our documentation. It is important to note that they are not violations of NEPA, but deficiencies in documenting supporting evidence for decisions. For example, one monitoring team found that issues had been considered and discarded for good reason, but the ID Team had not documented the process. The monitoring teams noted that many of the FY 97 projects were completed under NEPA documents prepared prior to development of the revised district documentation policy and monitoring questions. Generally, the projects prepared under recently developed NEPA documents tended to be the projects that met all standards & guidelines. We noted a significant decrease in documentation deficiencies, particularly in silviculture projects. A tracking form has been prepared for use in FY98 projects that should eliminate most of these deficiencies in the future, as well as some of the implementation errors.

Q2. One project did not address concerns from the WA in the NEPA document.
Kootchie -Koo Salvage did not address deficient CWD, which had been identified in the Nestucca Watershed Analysis.

Q5. SIX projects did not clearly define and stipulate proposed activities in the riparian reserves.

This involved Kootchie-Koo, Bald Panther, Overfloeter salvage sales, wildlife tree creation, Lukens Creek Rd.. Maintenance, and the Hardy Creek Trailhead parking lot expansion.

- Q6. EIGHT projects did not document how the project met ACS objectives.
This involved the same projects as in Q5 above plus Rock Trout salvage and Cascades Manual Maintenance.
- Q14. THREE projects did not identify all potentially impacted species and habitats in the EA.
This involved Kootchie-Koo and Bald Panther salvage sales, and the wildlife tree creation project.
- Q22. TWO projects did not identify and protect Reserve Pair Areas in project planning. This involved Kootchie-Koo and Bald Panther salvage sales. There were no known adverse effects from failing to note the RPA location.
- Q36. FIVE projects did not identify all of the potentially affected beneficial uses in the EA.
This involved the Kootchie-Koo, Overfloeter, and Rock Trout salvage sales, Firry Goon timber sale and the new restroom project.
- Q37. ONE project did not identify appropriate BMPs to mitigate potential impacts to beneficial uses.
Overfloeter salvage did not identify BMPs.
- Q44. SEVEN projects did not identify potential adverse impacts to fish habitat and fish stocks in the EA.
This involved Kootchie-Koo, Bald Panther, Overfloeter salvage sales, wildlife tree creation, Routine Rd.. Maintenance, the Hardy Creek Trailhead parking lot expansion, and the NF Clackamas Tree Falling & Placement project.
- Q45. FOUR projects did not identify fish related design features and mitigation measures in the EA.
This involved Kootchie-Koo, Bald Panther, Overfloeter salvage sales and the Hardy Creek Trailhead parking lot expansion.

Resource Management Plan Maintenance

The Salem District Resource Management Plan and Record of Decision (ROD/RMP) was approved in May 1995. Since then, the district has been implementing the plan across the entire spectrum of resources and land use allocations. As the plan is implemented, it has become necessary to make minor changes, refinements, or clarifications of the plan. These actions are called *plan maintenance*. They do not result in expansion of the scope of resource uses or restrictions or changes in the terms, conditions, and decisions of the approved ROD/RMP. Plan maintenance does not require environmental analysis, formal public involvement or interagency coordination.

Certain Plan Maintenance was published in the FY96 Annual Program Summary. The following FY97 minor changes, refinements and clarifications have been implemented as part of plan maintenance for the Salem District RMP.

Clarification from OSO/REO

None in FY97

Clarification developed within Salem District

Page 55, at the end of the Land Tenure Adjustment Management Actions / Direction - All Land Use Allocations section, add the following: *Where survey hiatuses and unintentional encroachments on public lands are discovered in the future, which meet the disposal criteria, the lands may be automatically assigned Zone 3 for disposal.*

Page 76, under Monitoring: Replace paragraphs 2 and 3 with the following clarifications:

Monitoring results will be reported in an Annual Program Summary, which will be published starting the second year following initial implementation of this resource management plan. The Annual Program Summary will track and assess the progress of plan implementation, state the findings made through monitoring (addressing specific monitoring questions only as needed for clarification of the findings) and serve as a report to the public.

Line managers will be responsible completing monitoring in accordance with the current district monitoring plan. The district monitoring plan supersedes Appendix J of the original RMP ROD and will be updated as needed.

Monitoring

A district monitoring plan has been developed over the past two years. It consists of revision and reorganization of the questions in Appendix J for clarity (15+ pgs), as well as development of a process (18+ pgs)for accomplishing the implementation monitoring in an efficient and credible manner. The revisions to the questions are not substantially changed from Appendix J. The process defines the technical aspects of the monitoring program, therefore we have not included the 33+ pages of text in this program summary. Both the revised questions and the process are available upon request, or can be reviewed in the Salem District Office.

Additions from Congress

None in FY97

Updated Information

None in FY97

Correction of Errors and Omissions

None in FY97

APPENDICES

Glossary

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GLOSSARY

Allowable Sale Quantity (ASQ) - an estimate of annual average timber sale volume likely to be achieved from lands allocated to planned, sustainable harvest. ASQ is used interchangeably with PSQ in this Annual Program Summary to avoid confusion related to technical differences in their definitions. See Salem FEIS glossary for technical differences.

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

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.

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 PSQ goals than it is a socioeconomic indicator, since the volume can get to market over a period of several years. It should be noted that for this Annual Program Summary we are considering offered the same as sold. Occasionally sales do not sell. They may be reworked and sold later or dropped from the timber sale program. Those sold later will be picked up in the APS tracking process for the year sold. Those dropped will not be tracked in the APS.

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.

MMBF - abbreviation for million board feet of timber

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

General Forest Management Area (GFMA) or 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.

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.

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

AMA - Adaptive Management Area - 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 objectives.

Commercial Thinning - an intermediate harvest where some trees are removed and sold. The objective is to increase growing space and growth rates of remaining trees to meet timber harvest objectives. For commercial thinning harvest, projected harvest acres were grouped to simplify modeling. Projected acre harvest is scheduled to occur in other age classes where suitable acres are available. Commercial thinning harvest is scheduled to occur in conifer stands aged 30 to 70 years old.

Density Management - An intermediate harvest where some trees are removed. The objectives are for wildlife

habitat enhancement. Prescriptions may vary significantly from those found on a commercial thinning.

For density management harvest, projected harvest acres were grouped to simplify modeling. Projected acre harvest is scheduled to occur in other age classes where suitable acres are available. Density management harvest is scheduled to occur in conifer stands aged 30 to 110 years old.

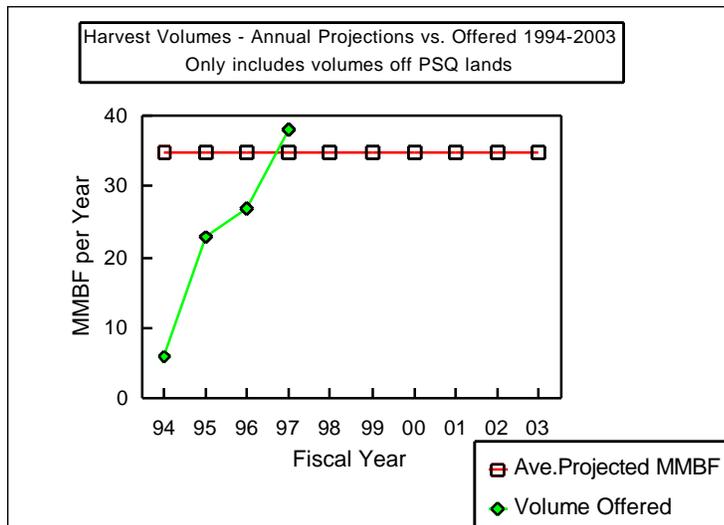
Regeneration Harvest - Timber harvest conducted with the partial objective of opening a forest stand to the point where favored tree species will be reestablished. Often considered the "final harvest" prior to beginning a new stand by planting seedlings. Regeneration harvest is scheduled to occur in hardwood stands aged 50 to 100 years old and in conifer stands aged 60 to 200+ years old. Regeneration harvest is not applicable to LSR or AMA lands, so only thinning and density management data is shown for those LUAs.

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.

Harvest Volumes - Annual Projections vs. Offered FY 94-97*

Land Use Allocation	Volume(MMBF)**				
	Projected @ Full PSQ	Offered FY 94	Offered FY 95	Offered FY 96	Offered FY 97
AMA***	1.95	0	2.281	1.779	5.549
Matrix (GFMA)	29.75	5.832	20.664	24.375	32.370
Conn.	3.11	0	0	0.733	0
Total Volume off PSQ lands	34.81	5.832	22.945	26.887	37.919
LSR volume	N/A	0	2.622	.302	0
Misc. Volume	N/A	0	0	.94	.576
Total volume offered	N/A	5.832	25.567	28.129	38.495
District Budget target volume	N/A	30	23	29	35

* Total volume off PSQ lands does not include LSR volume offered since it was not used in PSQ projections. Volumes do not include scattered salvage and misc. Volume.
 Note: Projected figures are 1/10th of the decadal projection.
 ** MMBF = million board feet
 *** No regeneration harvest projected in AMA



ppendix 1

Volume per Ac. by Harvest Type - Projections vs. Offered FY 94-97

Type of Harvest	Probable Sale Quantity Estimated Volume/Acre MBF (thousand board ft.)*	FY 1994 Sales Actual Volume /Acre MBF (thousand board ft.)	FY 1995 Sales Actual Volume /Acre MBF (thousand board ft.)	FY 1996 Sales Actual Volume /Acre MBF (thousand board ft.)	FY 1997 Sales Actual Volume /Acre MBF (thousand board ft.)
Regeneration - Matrix	55	None	36	47	54
Commercial Thinning - Matrix & Connectivity	8	16	19	15	16
Density Mgmt - LSR*	12*	None	15*	17*	None
Density Mgmt - AMA	9	None	10	25	18

* Estimates were determined from summary PSQ tables by dividing total volume by total acres for each LUA. LSR estimate line is not related to PSQ, but is merely an estimate of volume that might be recovered through density management projects.

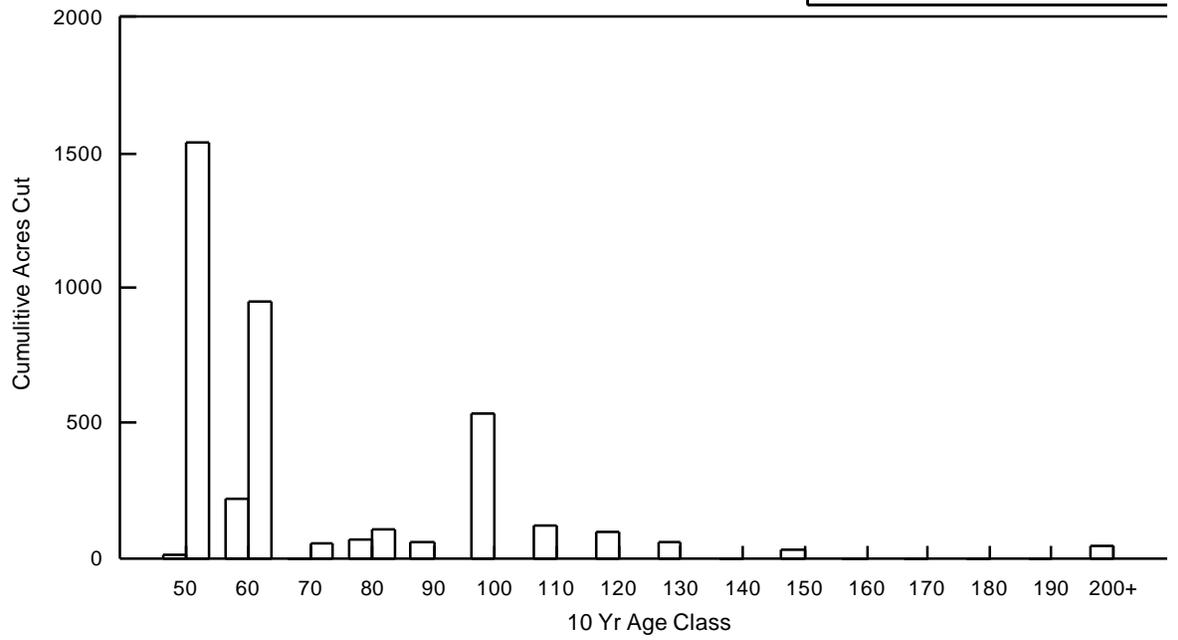
Types of Stands Harvested During FY 97 (AOld@ & ANew@)

Sale	Type of Harvest	Harvest Acres/ Total sale Ac.	Age	Stand Type
Lookout Mountain*	Regeneration	31 / 85	350+	Old-growth Douglas-fir and hemlock
Super Hammer Thinning	Thinning	68 / 200	50	Douglas-fir stand with scattered western hemlock and red alder
Jackson Five	Regeneration	60 / 117	85 -124	Mature Douglas-fir and Hemlock
Earnest Creek Thinning	Thinning	4 / 121	55	Douglas-fir and Red Alder
Sand Creek Thinning	Thinning	29 / 71	70	Douglas-fir
Scott Hamilton Thinning	Thinning	138 / 173	35 - 50	Douglas-fir
Clear Creek Thinning	Thinning	36 / 65	50 - 70	Douglas-fir
Boot Hill	Regeneration	32 / 54	70 - 100	Mature Douglas-fir
Hardrock	Regeneration	6 / 59	70 - 100	Mature Douglas-fir
Bullwinkle	Regeneration	27 / 57	114	Mature Douglas-fir
Over Floeter Salvage	Scattered Salvage	14 / 14	60	Douglas-fir
Bald Panther	Scattered salvage	37 / 37	80+	Mature Douglas-fir
Firry Goon 1	Regeneration	12 / 12	60	Western Hemlock and Red Alder
Firry Goon 2	Thinning	23 / 25	60	Douglas-fir
Kutchie-koo	Scattered Salvage	52 / 52	80+	Mature Douglas-fir

* This was an AOld@sales sold prior to Northwest Forest Plan(NFP)- not designed to NFP standards.

Acres Cut by Age Class (1994-97)

- Regeneration Harvest
- Thinning / Density Mgt Har



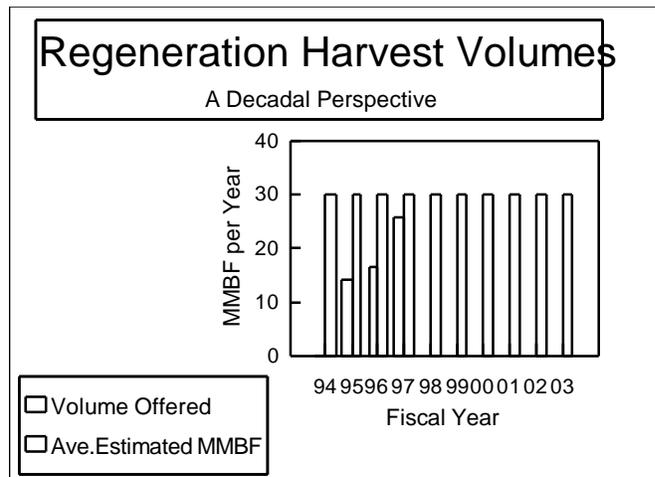
REGENERATION HARVEST VOLUME - A Decadal Perspective

Comparison of projected vs. offered harvest volume by Land Use Allocation (LUA) - FY 94-97

Land Use Allocation	District MMBF* Offered FY 94	District MMBF Offered FY 95	District MMBF Offered FY 96	District MMBF Offered FY 97	Total District Cumulative MMBF Offered FY 94-97	Total District Projected MMBF For Decade 1994-2004	Percent Dis H F (40%
Matrix(GFMA)	0	14.233	16.440	25.322	55.995	274.5	
Connectivity	0		0.276	0	0.276	24.1	
LSR***	0		0	0	0	N/A	
AMA***	0		0	0.394	0.394	N/A	
Totals	0	14.233	16.716	25.716	56.665	298.6	

Volume based on sales sold. * MMBF = million board feet ** Percents are only valuable for evaluating the line they : compared to each other ***No regeneration harvest projected in LSR or AMA

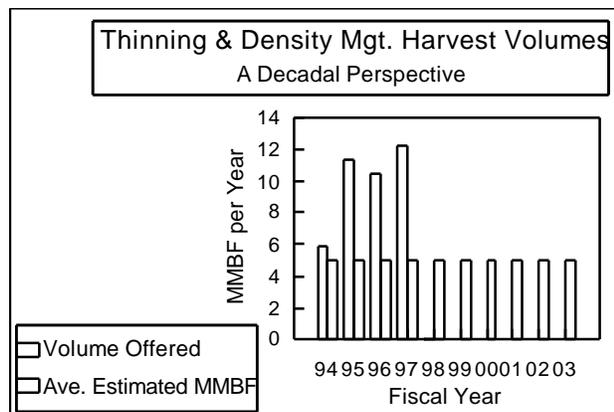
Appendix 4



THINNING & DENSITY MANAGEMENT HARVEST VOLUME- A Decadal F Comparison of projected vs. offered harvest Volume by Land Use Allocation (L

Land Use Allocation	District MMBF* Offered FY 94	District MMBF Offered FY 95	District MMBF Offered FY 96	District MMBF Offered FY 97	Total District Cumulative MMBF Offered FY 94-97	Total District Projected MMBF For Decade 1994-2004	Percent Dis H F (40%
Matrix*** (GFMA)	5.832	6.431	7.935	7.048	27.246	23.044	
Connectivity***	0	0	0.457	0	0.457	6.952	
LSR****	0	2.622	0.302	0	2.924	N/A	
AMA****	0	2.281	1.779	5.155	9.215	19.477	
Totals	5.832	11.334	10.473	12.203	39.842	49.473	

Volume based on sales sold. * MMBF = million board feet ** Percents are only valuable for evaluating the line they : compared to each other *** Commercial thinning projected in these LUAs. **** Density Management projected in these



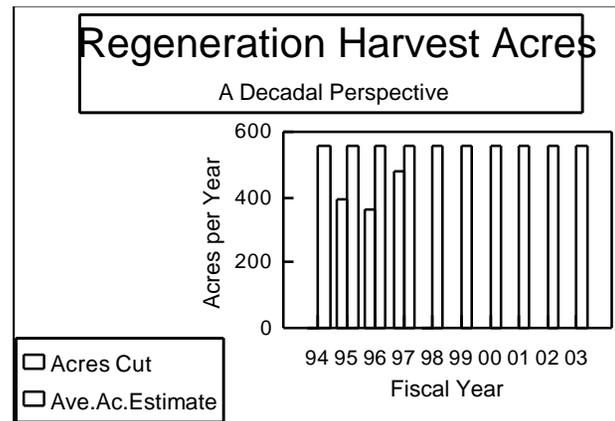
REGENERATION HARVEST ACRES - A Decadal Perspective

Comparison of projected vs. offered harvest acres by Land Use Allocation (LUA) - FY 94-97

Land Use Allocation	District Acres Offered FY 94	District Acres Offered FY 95	District Acres Offered FY 96	District Acres Offered FY 97	Total District Cumulative Acres Offered FY 94-97	Total District Projected Acres For Decade 1994-2004	Percent** of Projected District Acres Harvested FY 94-97 (40% of decade)
Matrix(GFMA)		395	346	471	1212	4971	24%
Connectivity			12	0	12	587	2%
LSR*				0	0	N/A	N/A
AMA*				10	10	N/A	N/A
Totals	0	395	358	481	1234	5558	22%

Acres based on sales sold. * No regeneration harvest projected in LSR or AMA

** Percents are only valuable for evaluating the line they are on. They cannot be compared to each other.



Appendix 6

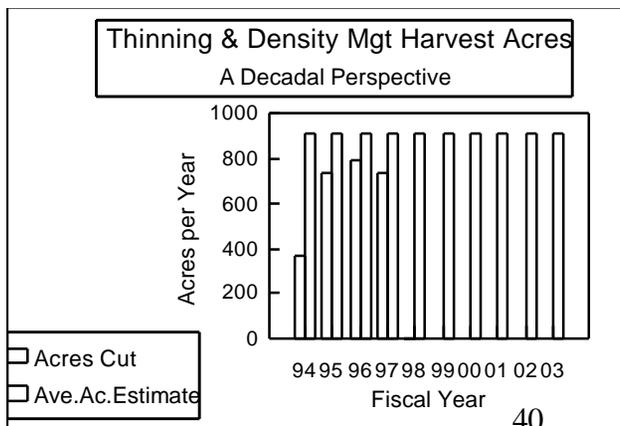
THINNING & DENSITY MANAGEMENT HARVEST ACRES- A Decadal Perspective

Comparison of projected vs. offered harvest acres by Land Use Allocation (LUA) - FY 94-97

Land Use Allocation	District Acres Offered FY 94	District Acres Offered FY 95	District Acres Offered FY 96	District Acres Offered FY 97	Total District Cumulative Acres Offered FY 94-97	Total District Projected Acres For Decade 1994-2004	Percent* of Projected District Acres Harvested FY 94-97 (40% of decade)
Matrix** (GFMA)	367	343	518	446	1674	2920	57%
Connectivity**	0	0	25	0	25	736	3%
LSR***	0	171	173	0	344	3316	10%
AMA***	0	223	72	294	589	2141	28%
Totals	367	737	788	740	2632	9113	29%

Acres based on sales sold. * Percents are only valuable for evaluating the line they are on. They cannot be compared to each other

** Commercial thinning projected in these LUAs. *** Density Management projected in these LUAs.



MATRIX - REGENERATION HARVESTS

Comparison of projected vs. offered harvest acres by age class - FY 94-97

1992 Age Class*	District Acres Offered FY 94	District Acres Offered FY 95	District Acres Offered FY 96	District Acres Offered FY 97	Total District Cumulative Acres Offered FY 94-97	Total District Projected Acres For Decade 1994-2004	Percent** of Projected District Acres Harvested** FY 94-97 (40% of decade)
50				10	10	24	42%
60		170	40		210	625	34%
70						92	0%
80			71	50	62	90	69%
90			30		59	84	70%
100		108	73	320	531	1189	45%
110		117			117	965	12%
120			90	61	94	921	10%
130					57	139	41%
140						257	0%
150				30	30	123	24%
160						51	0%
170						1	0%
200			42		42	410	10%
Totals	0	395	346	471	1212	4971	24%

Acres based on sales sold

* These are the 10 year age classes used to group stands in the computer data base. For example anything between ages of 36 and 45 would be age class 40. Age class 200 includes anything 196 or older. The age classes modeled for above projections were as of 1992. Stands continue to grow into new age classes, and a total adjustment of the 10 year age classes was made to the data base in 1996.

** Percents are only valuable for evaluating the line they are on. They cannot be compared to each other.

MATRIX - THINNING HARVESTS

Comparison of projected vs. offered harvest acres by age class - FY 94-97

1992 Age Class*	District Acres Offered FY 94	District Acres Offered FY 95	District Acres Offered FY 96	District Acres Offered FY 97	Total District Cumulative Acres Offered FY 94-97	Total District Projected Acres For Decade 1994-2004	Percent** of Projected District Acres Harvested FY 94-97 (40% of decade)
30					0	58	0%
40	78		177		0	0	NA
50	219	284	147	343	1226	1645	75%
60	70	59	194	74	419	1217	34%
70					0	0	NA
80				29	29	0	NA
Totals	367	343	518	446	1674	2920	57%

Acres based on sales sold

* These are the 10 year age classes used to group stands in the computer data base. For example anything between ages of 36 and 45 would be age class 40. Age class 200 includes anything 196 or older. The age classes modeled for above projections were as of 1992. Stands continue to grow into new age classes, and a total adjustment of the 10 year age classes was made to the data base in 1996.

** Percents are only valuable for evaluating the line they are on. They cannot be compared to each other.

CONNECTIVITY- REGENERATION HARVESTS

Comparison of projected vs. offered harvest acres by age class - FY 94-97

1992 Age Class*	District Acres Offered FY 94	District Acres Offered FY 95	District Acres Offered FY 96	District Acres Offered FY 97	Total District Cumulative Acres Offered FY 94-97	Total District Projected Acres For Decade 1994-2004	Percent** of Projected District Acres Harvested FY 94-97 (40% of decade)
40					0	0	N/A
50					0	0	N/A
60			12		12	60	20%
70					0	79	0%
80					0	63	0%
90					0	74	0%
100					0	48	0%
110					0	82	0%
120					0	53	0%
130					0	70	0%
200					0	58	0%
Totals	0	0	12	0	12	587	2%

Acres based on sales sold

* These are the 10 year age classes used to group stands in the computer data base. For example anything between ages of 36 and 45 would be age class 40. Age class 200 includes anything 196 or older. The age classes modeled for above projections were as of 1992. Stands continue to grow into new age classes, and a total adjustment of the 10 year age classes was made to the data base in 1996.

** Percents are only valuable for evaluating the line they are on. They cannot be compared to each other.

CONNECTIVITY - THINNING HARVESTS

Comparison of projected vs. offered harvest acres by age class - FY 94-97

1992 Age Class*	District Acres Offered FY 94	District Acres Offered FY 95	District Acres Offered FY 96	District Acres Offered FY 97	Total District Cumulative Acres Offered FY 94-97	Total District Projected Acres For Decade 1994-2004	Percent **of Projected District Acres Harvested FY 94-97 (40% of decade)
30						0	N/A
40						180	0%
50						309	0%
60			25		25	75	33%
70						172	0%
Totals	0	0	25	0	25	736	3%

Acres based on sales sold

* These are the 10 year age classes used to group stands in the computer data base. For example anything between ages of 36 and 45 would be age class 40. Age class 200 includes anything 196 or older. The age classes modeled for above projections were as of 1992. Stands continue to grow into new age classes, and a total adjustment of the 10 year age classes was made to the data base in 1996.

** Percents are only valuable for evaluating the line they are on. They cannot be compared to each other.

AMA - DENSITY MANAGEMENT HARVESTS

Comparison of projected vs. offered harvest acres by age class - FY 94-97

1992 Age Class*	District Acres Offered FY 94	District Acres Offered FY 95	District Acres Offered FY 96	District Acres Offered FY 97	Total District Cumulative Acres Offered FY 94-97	Total District Projected Acres For Decade 1994-2004	Percent** of Projected District Acres Harvested FY 94-97 (40% of decade)
30						0	
40						1472	0%
50				139	139	0	N/A
60		223		155	378	519	73%
70						0	N/A
80			72		72	150	48%
90						0	N/A
100						0	N/A
110						0	N/A
Totals	0	223	72	294	589	2141	28%

Acres based on sales sold

* These are the 10 year age classes used to group stands in the computer data base. For example anything between ages of 36 and 45 would be age class 40. Age class 200 includes anything 196 or older. The age classes modeled for above projections were as of 1992. Stands continue to grow into new age classes, and a total adjustment of the 10 year age classes was made to the data base in 1996.

** Percents are only valuable for evaluating the line they are on. They cannot be compared to each other.

LSR - DENSITY MANAGEMENT HARVESTS

Comparison of projected vs. offered harvest acres by age class - FY 94-97

1992 Age Class*	District Acres Offered FY 94	District Acres Offered FY 95	District Acres Offered FY 96	District Acres Offered FY 97	Total District Cumulative Acres Offered FY 94-97	Total District Estimated Acres For Decade 1994-2004	Percent** of Projected District Acres Harvested FY 94-97 (40% of decade)
30						0	N/A
40						1110	0%
50		171	123		294	790	37%
60						183	0%
70			50		50	243	21%
80						249	0%
90						0	N/A
100						585	0%
110						156	0%
Totals	0	171	173	0	344	3316	10%

Acres based on sales sold

* These are the 10 year age classes used to group stands in the computer data base. For example anything between ages of 36 and 45 would be age class 40. Age class 200 includes anything 196 or older. The age classes modeled for above projections were as of 1992. Stands continue to grow into new age classes, and a total adjustment of the 10 year age classes was made to the data base in 1996.

** Percents are only valuable for evaluating the line they are on. They cannot be compared to each other.

Comparison of intensive silviculture practices - Model projections vs. Actual

Silviculture Practice	Annual Projected Amount (acres)	Actual Amount (Acres) Accomplished in FY 97
Site preparation / Prescribed fire*	480	232
Site preparation / other*	590	159
Maintenance / protection**	3130	2632
Release / Precommercial thinning (PCT)**	2970	1509
Stand conversion**	90	0
Plant regular stock*	480	542
Plant genetic stock*	450	143
Fertilization**	600	0***
Pruning	None projected	59

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

** These items are related to need and budget levels, so actual amounts will vary from year to year. Funding was sufficient to complete all available acres during FY97. No stand conversions were planned for FY97

*** A contract for 1671 acres was awarded during FY97 but completion did not occur until FY98 so the acres will be reported in the FY98 APS.

Special Forest Product Sales FY 97

Product	# of Contracts	Quantity Sold	Government Revenue
Boughs - Coniferous	17	127,860 Pounds	\$ 6027.50
Christmas Trees	0	0 Trees	\$ 0
Edibles & Medicinals	7	2,570 Pounds	\$ 313.70
Feed & Forage	4	22.6 Tons	\$340.00
Floral & Greenery	63	56,364 Pounds	\$4,431.10
Liquid Commodities	5	Gallons	\$ 0
Mosses - bryophytes	150	256,025 Pounds	\$ 10,252.44
Mushrooms - fungi	119	18,411 Pounds	\$ 1,941.70
Seed & Seed Cones	6	365 Bushels	\$ 253.00
Burls & Misc.	1	1,250 Pounds	\$ 200.00
Ornamentals	1	500 Units	\$ 10.00
Transplants	16	4955 Plants	\$ 612.23
Wood Products/Firewood	167	221,863 Bd. Ft.	\$ 24,418.96
Totals	551	N/A	\$ 48,800.63

SUMMARY OF NUMBERS AND TYPES OF PROJECT UNITS MONITORED FY97

Project Type	# Tillamook R.A.	# Marys Peak R.A.	# Cascades R.A.	Total # District
Timber Sales	5	1	9	15
Silviculture Projects	15	4	4	23
Riparian Projects	0	3	0	3
Fish Habitat Projects	0	0	1	1
Wildlife Habitat Projects*	5	1	0	6
Prescribed Burns	0	2	6**	8
Road Restoration / Bridge Replacement	0	4	2	6
Other Projects	0	3	1	4

* Several timber sales selected (first line in table) were wildlife habitat projects in AMA and LSR.

** Four of these were also tallied under timber sales above (double counted)

Selection categories from Database	# Project Units Done FY97	# Project Units monitored FY97	% Monitored
Ground Disturbing Activities	50	34	68%
Projects occurring in Riparian Reserves	213	42	20%
Structures within Riparian Reserves	7	7	100%
Projects in Late Successional Reserves	160	33	21%
Projects in Adaptive Management Areas	30	10	33%
Timber Sales in watersheds w/ <15% Late Successional Forest*	9	9	100%
Matrix Regeneration harvests	14	5	36%
Density Management / Commercial thinning	5	5	100%
Salvage Timber Sales	6	5	83%
Projects in Community Watersheds	136	30	22%
Projects within or adjacent to Special Areas	11	6	55%
Projects which include or are adjacent to special habitats	9	5	56%
Projects in VRM II or III areas	63	13	21%
Projects in Wild & Scenic River Corridors	9	3	33%
Projects in Rural Interface	34	7	21%
Noxious Weed Project	1	1	100%
Prescribed Burn Projects	11	8	73%
Projects which required dust abatement	0	0	N/A