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FOREST GROVE DISTRICT

2009 ANNUAL OPERATIONS PLAN

INTRODUCTION

The scope of this annual operations plan (AOP) covers State forest land within the Forest Grove District for the time period of July 1, 2008 to June 30, 2009 (FY09). This document summarizes the activities and projects in FY09 that are designed to achieve the goals, strategies and objectives of the NW Oregon State Forests Management Plan, the Tillamook State Forest Recreation Action Plan, the Forest Grove District Implementation Plan, and portions of the (DRAFT) Western Oregon Habitat Conservation Plan.

The summary document of the AOP is divided into five major categories: Integrated Forest Management, Planning and Information Services, Public Information and Education, Administration, and Appendices. Appendix A contains summary tables for commercial forest management (financial summary, stand structure summary, and roads), young stand management, recreation, and salmon anchor habitats. Appendix B is the largest component of the AOP and contains pre-operations reports and maps for individual harvest operations. A summary concerning the results of the public involvement process will be added to the final plan.

The management activities planned for FY09 are based on the range of objectives established in the Implementation Plan (Table 1 below). The objectives and specific plans for timber harvesting and the associated roadwork provide an accurate picture of what will be designed and prepared for contract in FY09. Due to the time lag associated with contract duration, most of the actual on-the-ground logging and road operations will not happen until a one to three year time period beyond the end of the fiscal year.

In contrast to the timber harvest and road plans, the reforestation, young stand management, recreation management, road maintenance, planning and information activities detailed in this plan will actually occur within the FY09 time period. The planned amount and location of these management activities are based on the latest site-specific assessments and estimates of operational, growth, and seasonal variables. These management activity levels will be adjusted and modified to account for any significant changes to the variables.

Harvest Levels:

In accordance with the guidance on the 2009 harvest levels¹, the district has included 62.5 MMBF of timber harvest in this AOP (Table A-1). This harvest level is consistent with the district's intensive review² of the outputs from the Department's recently completed Harvest and Habitat Model Project. The district has included four alternate operations in this AOP. These alternate operations may be used to replace regular sales that cannot be completed as planned.

Additionally, the department is continuing its review of Implementation Plan outputs following the guidance provided by the State Forester³. Initial analysis of this process consisted of additional model runs that help inform the 2008 & 2009 harvest levels. Subsequent analysis will examine the implementation planning framework, and associated policies and procedures; alternative strategies for the management and protection of species of concern; and upgrades to the program's model, including significant improvements to the forest inventory and yield tables. This phase is expected to be completed by the end of 2008.

As previously noted from the Harvest and Habitat Model Project⁴, changes are likely to include adjustment to the mixture of regeneration and partial cut harvests needed to meet Forest Management Plan goals and objectives.

Table 1. Annual Operations Plan objectives compared to annual objectives identified in the Forest Grove District Implementation Plan (Table A-1). All values are net acres.

Silvicultural Activity	IP Annual Objective		2009 AOP Objective
	Low	High	
Conifer Partial Cut	2,365	3,547	2,337
Conifer Regeneration Cut	338	1,100	781
Hardwood Partial Cut	0	0	0
Hardwood Clearcut	0	0	0
Rehabilitation	0	0	0
Reforestation (Initial Planting)	250	650	517
Precommercial Thinning	100	300	300
Fertilization	3,000	6,000	4,000
Pruning	100	400	110

¹As per Program Director guidance for FY 09 State Forest Harvest Levels.

²Model Solution Review Report of the 'Forest Management Plan with Habitat Conservation Plan' Alternative

³Memo RE: State Forest Implementation Plans dated June 5, 2006 from the State Forester

⁴Harvest & Habitat Model Project Final Report completed March 8, 2006 by the Oregon Department of Forestry

INTEGRATED FOREST MANAGEMENT OPERATIONS

Timber Harvest Operations

Overview of Timber Harvest Operations

The following planned commercial forest management activities are within the guidelines and objectives outlined in the Forest Grove District's approved Implementation Plan. Tabular summaries, a vicinity map, and detailed pre-operations reports and maps for each planned timber sale are attached.

As described in the approved Implementation Plan, the FY09 AOP emphasizes partial cuts due to the high percentage of Closed Single Canopy (CSC) and Understory (UDS) stand structures existing within the Forest Grove District. CSC and many UDS stand structures are characterized by the closed crowns of the overstory trees, which limits the amount of sunlight reaching the forest floor. This low light level precludes the introduction of both brush and shade tolerant conifer species in the understory, thus leaving the forest floor sparsely vegetated. Of all the structure types, CSC is the least used by wildlife species, especially those that require more complex habitats. Stands of CSC structure, (that are not "over-dense"⁵), and even most Understory (UDS) stands respond well to partial cutting. While all these partial cut prescriptions will increase tree growth in the overstory, response in the understory will vary depending on several factors. Some of these factors include, but are not limited to: density of residual overstory, available seed source of shade tolerant tree species, existing ground cover, and site preparation. With the right combination of these factors initiation of a shade tolerant conifer understory is very likely. In other cases shade tolerant trees may have to be planted if a layered stand structure is desired. Then again, some partial cuts may be followed by clearcut at the next active management entry. In these cases establishment of an understory stand is not a priority.

Overall, this sale plan will reduce the district percentage of CSC and UDS, moving most of it towards the eventual development of more complex stand structures. Layered stands (LYR) are in a more developed stage than UDS. A stand reaches Older Forest Structure (OFS) when a Layered stand attains several structural characteristics that are normally associated with older forest conditions. Throughout this plan the term General management (GEN) will be used to describe the desired future condition (DFC) of stands

⁵ Over-dense stands can be characterized by trees growing so close together that virtually all sunlight is blocked from direct contact with the forest floor. These trees will have very high height to diameter ratios, (tall and skinny), and have very low live crown to bole ratios. These stands are usually growing at a very slow rate and may not respond well, (or at all), to partial cut prescriptions.

that are not planned for OFS or LYR in the Forest Grove District's landscape design for complex structures.

The process of producing an array of forest stand structures across the landscape is a gradual one. A variety of sound silvicultural practices will be used to actively move the forest towards the desired range of stand structures outlined in the Implementation Plan.

The DFC landscape design for the Forest Grove district was done using a "broad brush" method incorporating a variety of landscape design principles and strategies. Actual boundaries between complex and general DFC's are determined on the ground during the sale planning and preparation process. Minor changes in the DFC landscape design may occur on an annual basis due to a variety of reasons. These reasons include; refinement of the DFC boundary on the ground, forest health issues, and fitting a stand to a more appropriate or realistic pathway based on additional data collected through Stand Level Inventory (SLI) and field observations during the AOP planning process.

The "non-thinnable" areas that are often delineated within partial cut sales are made up of either well-stocked red alder, sparsely stocked conifer, a mix of both conifer and alder, or non-merchantable conifer trees. These non-thinnable areas usually range in size from 1 acre to 20 acres. Leaving these areas unharvested helps contribute to the biological diversity across the landscape.

The stands targeted for regeneration harvest in this sale plan fit into one or more of the following categories: over-stocked dense stands, under-stocked sparse stands, diseased stands, stands that are surplus to the complex structure targets in the desired future condition landscape design, highly marketable stands in areas where regeneration harvest would result in minimal resource impacts, and stands in areas that would provide an opening in the landscape to temporarily serve as big game foraging habitat. The 781 acres of regeneration harvest planned for FY09 represents 0.7 percent of the district. During the year 2008 approximately 381 acres will grow out of the Regeneration (REG) stand type, resulting in a 0.3 percent increase in the district percentage of the REG stand type. Of the 781 acres planned for regeneration harvest 100 percent will be designed as modified clearcuts. Of the 2,337 acres of partial cut, approximately 95 percent are planned for moderate partial cut and 5 percent are planned for heavy partial cut. Complete harvest type definitions can be found at the following site (scroll to bottom of this web page):

http://egov.oregon.gov/ODF/STATE_FORESTS/planning.shtml#ANNUAL_OPERATION_S_PLANS_AOPs

Overview of Structural Components

Structural habitat components such as snags and down woody debris (DWD) may be considered for all harvest prescriptions; however, the emphasis will be placed on regeneration harvest and partial cuts with larger diameter trees. In the case of

regeneration harvests, it is essential to incorporate structural habitat components into the management prescription to ensure they are retained. Therefore, in regeneration harvest units, two snags per acre will be created and 5-7 green trees/acre will be left standing. Green tree retention may be scattered throughout the unit or left in clumps.

In partial cuts with a larger average DBH, snags will be created at a frequency of 1 per every 2 acres to 1 per acre, depending on the amount of previous snag creation and natural mortality in the surrounding stands. Recent on-site observations have revealed that additional snag recruitment frequently occurs adjacent to topped trees in partial cuts due to bark beetle activity. Obviously, numerous green trees are retained on each acre of a partial cut allowing for additional snag and DWD recruitment through natural processes over time. The recent wind events of 12/06, 11/07, & 12/07 made significant contributions to snag and DWD levels despite the salvage of some large concentrations and roadside blowdown. Stand Level Inventory (SLI) data through 2006 indicates an average of 1.0 class 1 & 2 snags per acre and 215 cubic feet of class 1 & 2 DWD over the district. These numbers do not include additions from recent wind events or all of the snags & DWD created with recent timber sale contracts.

Another opportunity for natural recruitment of snags and DWD is created by laminated root rot disease (*Phellinus wereii*). In severe cases of root rot, we attempt to retard the spread of the disease by cutting out the infected trees. In other cases we do not cut out the infected trees. This allows the disease to spread at a rate of approximately one foot per year slowly adding snags and DWD to the stand. Whether laminated root rot is treated or untreated, we know from experience that additional trees will be infected by the disease, creating snags and eventually DWD.

Within a given annual operations plan, snags and DWD may be retained at higher levels in some units and at lower levels in other units, with the intent of achieving the landscape targets outlined in the Forest Management Plan strategies. The estimates used in the pre-operation reports for existing snags and DWD are based on SLI for the sale area or the basin average when not available for the sale area. The estimates for post harvest expectations are based on contract requirements, monitoring results, and SLI data from the previous ten years of regeneration harvests. The contract requirement to top two trees per acre on all regeneration harvest units ensures that at least two hard snags per acre exist post harvest. Only three clearcut units have been monitored by Salem staff. The results show an average of 1,050 cubic feet of class 1 and 2 DWD per acre post harvest. Stand Level Inventory data collected on sales harvested over the past 10 years show an average of 665 cubic feet per acre of Class 1 and 2 DWD for regeneration harvest units, and 605 cubic feet per acre of Class 1 and 2 DWD for partial cut units. These post harvest DWD results can be attributed to natural recruitment from green tree retention, residual logging slash, and tree topping.

A historical perspective on implementation of structural components in association with timber harvest operations within the Forest Grove district might be useful in understanding the importance this district has placed on providing for “some of all of the pieces” when planning timber harvest units. The Forest Grove district began leaving

green trees within clearcut units in 1987, four years prior to the Forest Practices Act requirement and 14 years prior to the Forest Management Plan. Green tree retention levels began at one tree per every 2 acres and slowly increased up to the current level of five to seven trees per acre. In 1992 we begin to incorporate tree topping in our timber sale contracts. Albeit, at much lower levels than currently required. However, since that time there have been approximately 30,000 trees topped to create hard snags on the Forest Grove district. Beginning in 1997 the district restricted windthrow salvage to large concentrations and roadsides allowing for DWD contributions across the landscape. While landscape DWD levels are still below the FMP targets it is believed that over time these targets will be achieved through a combination of natural processes and the ODF salvage policy. Where we have completed modified clearcuts the data we have to date supports the fact that we are meeting FMP targets.

Table 2. Stand Structure Development – This table summarizes how the timber harvest operations in this AOP will contribute to achieving the District’s desired future condition. All values are net acres.

Stand Structure	REG	CSC	UDS	LYR	OFS	GEN¹
Current	0	1,374	1,745	0	0	0
Post Harvest²	781	0	2,337	0	0	0
Desired Future	0	0	0	914	917	1,288

¹ General (GEN) is not a stand structure, but identifies those stands that are not targeted for Layered or Older Forest Structure in the district landscape design. These stands may develop into any of the five stand structures.

² The Post Harvest stand structure is an estimate of how the stands will develop in five to ten years after the operations are completed. Post-harvest condition will exist for approximately 5 to 15 years. Desired Future Condition stand structures will be attained approximately 40 to 80 years in the future.

The FY09 AOP is estimated to generate gross revenues of approximately \$20,546,000 and net revenues of \$18,831,000. Refer to the attached Financial Summary Table (Appendix A, Table A-1) and/or pre-operation reports for more detail.

Summary of Operations by Basin

In the following section, the commercial forest management operations planned for FY09 will be summarized in the context of the eleven management basins on the Forest Grove District. Several resource specialists reviewed the FY09 AOP and provided input. The summary for each sale reflects resources requiring special consideration that were identified by the management unit of the Forest Grove District and/or the resource specialists. Individual pre-operation reports include information regarding riparian protection and structural components such as snags, down wood, and green tree retention. Since the Forest Management Plan strategies provide standards for these components, they are not discussed under “Special Concerns”. Road concerns and standards are discussed in the Roads and Engineering section.

Table 3. Summary of Timber Harvest Operations by Basin. All values are net acres.

Basin	Total Acres	2009 AOP		Cumulative Operations ¹ (FY 02 through 09)	
		Partial Cut	Regen	Partial Cut	Regen
Bell Mountain	1,728	0	0	133	0
Isolated Tracts	554	0	0	0	0
Gales Creek	10,166	375	107	1,955	561
Larch Mountain	13,157	0	0	1,969	157
McGregor	10,618	0	0	2,761	726
Rogers	20,844	524	182	4,762	920
Scoggins Creek	3,018	0	0	340	43
Sunday Creek	15,287	1,035	261	5,102	407
Upper Salmonberry	18,879	287	179	3,739	738
Wheeler	16,142	0	0	2,849	597
Wilark	4,596	116	53	602	223
	114,989	2,337	781	24,212	4,372

¹The Cumulative Operations include all Timber Harvest Operations, prepared and proposed, under the current implementation plan period (July 1, 2001 through June 30, 2011). Operations or units that were proposed, but have been subsequently dropped, are not included in the total.

Acreage for each sale is net acres. Gross acres were first derived using GIS. Roads, stream buffers, non-thinnable areas, and green tree retention areas were then subtracted from the gross acres to calculate net acres.

Bell Mountain Basin

There are no harvest operations planned in this basin for FY09.

East District Isolated Tracts

There are no harvest operations planned in this basin for FY09

Gales Creek Basin

There are two harvest operations planned in this basin for FY09. In addition, one alternate sale is partially within this basin.

Pole Cat: This is a 312 acre moderate partial cut. It is located in an isolated 2,600 acre tract, which was occupied by a pair of spotted owls from 1996 to 2000. The presence of spotted owls has not been detected in the Wildcat Mountain tract during the last seven years of survey. Therefore, the occupancy status of the owl site is considered "historic"

and no additional protective measures are required. Access to the sale area is controlled by ODF gates to the west and east, and a private gate (with ODF lock) to the south.

South Gale: This is a combination sale consisting of 107 acres of modified clearcut and 63 acres of heavy partial cut. The sale is located adjacent to the Wilson River Highway. Sale design will incorporate the required scenic buffer and some additional green tree retention beyond the scenic buffer to further reduce the visual impacts from the highway. Access to the sale area is controlled by a Stimson Lumber Company gate located just off the highway.

Big Bell (alternate): This sale is a 250 acre moderate partial cut which will include scattered gaps $\frac{1}{4}$ to 2 acres in size. Approximately one third of the sale is located within the Gales Creek basin and two thirds is within the Wheeler basin. Approximately 88 acres of this sale are within the Lousignont Creek Salmon Anchor Habitat Area. The sale is essentially a ridge top sale with all new spur construction planned for ridge tops only.

Larch Mountain Basin

There are no harvest operations planned in the Larch Mountain basin for FY09.

McGregor Basin

There is one alternate harvest operation planned in this basin for FY09.

Moose and Squirrel: This is a 106 acre modified clearcut with 10 acres of moderate partial cut planned for the inner and outer zones of the riparian management area along the Medium Type F stream located on the west border of the sale. This sale is located in Columbia County. An access agreement will need to be obtained from Longview Timber.

Rogers Basin

There are three harvest operations planned in this basin for FY09.

Chicken Combo: This is a combination sale with 222 acres of moderate partial cut and 69 acres of modified clearcut. Of special concern are the OHV trails within or adjacent to the operation area. Temporary trail closures and post harvest trail cleaning will be part of this operation.

Still Coping: This is a 302 acre modified clearcut. This stand was initially commercially thinned in 1994 as part of a COPE study on the effects of thinning on birds and small mammals. During on-site consultation with OSU researchers and ODF biologist it was determined that a second entry partial put would not compromise the integrity of the study. The original "control" area will not be included within this proposed sale. There is one short OHV trail within the sale. Trail blocking during logging, trail protection, and trail

cleaning after logging will be address in the contract. Marketing unit personnel have been involved with Recreation unit personnel to develop measures to minimize impacts to this resource.

Wood Row Wilson : This is a 113 acre modified clearcut. There are no recreational trails within this sale area.

Scoggins Creek Basin

There are no harvest operations planned in the Scoggins Creek basin for FY09.

Sunday Creek Basin

There are four harvest operations planned in this basin for FY09.

Blind Faith: This is a 113 acre modified clearcut. The sale is within the Tualatin River watershed, a municipal water source. However the sale is located 1,000 to 2,000 feet upland from the river and there are no high risk slopes within the unit. In addition, spur construction is minimal and will not cross any streams.

Grindstone Cowboy: This is a combination sale consisting of 273 acres of moderate partial cut and 148 acres of modified clearcut. All spur road construction is located on ridge tops. Sale access is via the Stimson Mainline. An access agreement will need to be obtained from Stimson.

Month O' Sundays: This is a 266 acre moderate partial cut. An old legacy road leading down to Sunday Creek will be vacated with this sale.

Sunday Addition: This is a 496 acre moderate partial cut. Access is via the Stimson Mainline. A license agreement will need to be obtained from the BLM to access the SW corner of the sale.

Upper Salmonberry Basin

There are two harvest operations planned in the Upper Salmonberry basin for FY09. In addition a portion of an alternate sale and a whole alternate sale are within this basin.

Steelhead Falls: This is a three area Partial cut. Two of the areas, totaling 224 acres, are a moderate partial cut and one area is a 63 acre heavy partial cut. The sale is located a minimum of 1,500 feet upslope of the North Fork Salmonberry River. New spur road construction will not cross any streams.

Van Salmon: This is a 179 acre modified clearcut made up of two separate areas. All new spur roads will be located on ridge tops and no streams will crossed.

Rolling Rocks (alternate): This is a combination sale consisting of a 105 acre modified clearcut and a 91 acre moderate partial cut. The sale is within the South Salmonberry Salmon Anchor Habitat Area. All sale spurs are located on ridge tops and do not cross any streams.

Cochran The Third (alternate): This is a 218 acre moderate partial cut made up of two areas. The 179 acre Area 1 is located in both the Upper Salmonberry basin and the Wheeler basin. The portion in the Wheeler basin is also within the Lousignont Creek Salmon Anchor Habitat Area. Area 1 will include numerous small skips (areas to remain unthinned) for greater stand diversity. The 39 acre Area 2 is located entirely within the Upper Salmonberry basin and will not include skips although it does have two significant alder stringers adding to the stand's diversity.

Wheeler Basin

There are portions of two alternate harvest operations planned in the Wheeler basin for FY09.

Big Bell: (See the Gales Creek Basin above).

Cochran The Third: (See the Upper Salmonberry Basin above).

Wilark Basin

There is one harvest operation planned in this basin for FY09.

Holey Oak: This is a combination sale consisting of 53 acres of modified clearcut and 116 acres of moderate partial cut. New spur road construction will not cross any streams.

Forest Roads Management

Overview

Roads are a valuable and necessary asset, providing access to the forest for all forms of activities including forest management activities, fire protection, and recreation. Roads can also be a source of sediment and can impact wildlife, and require significant work and investment to construct and maintain.

In order to provide access to the forest and minimize impacts to the environment, an environmentally sound yet economically efficient road management program is in place on the District. Visions, guiding principles, and techniques that are the backbone of the District's road management program are discussed in detail in the Implementation Plan and the Forest Roads Manual (2000), and govern the planning and implementation of the activities discussed in this section. Planning of the road-related activities is Level III planning, as discussed in the Forest Road Manual.

Road Management Activities under this plan are broken into four categories: Road Construction, Road Improvement, Road Closure/Vacation, and Road Maintenance. Activities are further categorized according to road classification. Refer to the attached Roads Financial Summary Table (Appendix A, Table A-3) and/or presale reports for more detail.

Under this Plan, 16.8 miles of road will be constructed, and 12.7 miles of road will be improved. Of the roads to be improved, all are collector or spur roads that are part of the existing road system and will be improved to maintain current road standards. An estimated 1.0 miles will be closed or vacated, for a net gain of approximately 15.8 miles of road to the District's active road system.

Table 4. Summary of Road Management Activities. All values are in miles.

	Mainline (High Use)		Collector (Medium Use)		Spur (Low Use)	
	AOP	IP¹	AOP	IP¹	AOP	IP¹
Road Construction	0	0	0	3-4	16.8	6-9
Road Improvement	4.0	8-9	2.0	6-7	6.7	1
Road Closure/Vacation	0	0	0	0	1.0	7-9
Road Maintenance – District²	0	-	130	-	40	-
Road Maintenance – Active Operations³	14.5	-	85	-	24.5	-

¹ These are annual estimates derived from Table 4-7 (Potential Road Activities FY 2001-2011) of the 2001 District Implementation Plan. The values here were derived by dividing the values in the Potential Road Activities table by 10.

² The road maintenance estimates include only the work to be completed during Fiscal Year 2008 by the district road crew or service contract. Estimates of road maintenance were not made in the Implementation Plan.

³ This is a broad estimate of the road maintenance that may be accomplished during the fiscal year, through active commercial operations. However, the exact amount can not be predicted at this time. Included are third party roads used to access timber sales.

Road Management Considerations

High Landslide Hazard Locations (High Risk Sites)

Roads proposed for construction under this plan will be located on ridge tops or stable side slopes. Geotechnical review is in progress at this time to determine the presence of steep slopes and hazards, and to assess risks. Preliminary reconnaissance indicates that no High Landslide Hazard Locations will be crossed with new road construction in these sales. If locations that have HLHL characteristics are encountered during final reconnaissance or road location on these sales or any others, the NWOA Geotechnical Specialist will be consulted to assess risk and provide design guidance.

Fish Bearing Streams

Eight known Type F streams and one assumed Type F stream will be crossed with road improvement (Steelhead Falls and Still Coping), and one known Type F stream will be crossed with new road construction (Sunday Addition). Fish-passage structures will be installed at each of these crossings. Both new construction crossings are spur roads that will be evaluated for closure upon completion of harvesting, firewood cutting, and/or regeneration. If the roads are closed, the crossings will be removed and the stream channels restored.

In addition there are several small streams that will be crossed with new construction or improved roads. Fish presence or absence will be determined during sale preparation. If fish presence is verified, fish-passage structures will be installed at each of these crossings.

If other streams that appear to have fish-bearing characteristics are encountered during final reconnaissance or road location, they will be assessed by ODFW fish biologists to determine fish presence and the appropriate crossing structures will be designed.

All Type F crossings will be accomplished using bridges, culverts, or other drainage structures that will be designed to ensure fish passage through the structure, according to the current fish-passage guidelines.

Disconnecting the Drainage System

Water from road drainage ditches can add sediment to a stream. A strategy to reduce the amount of sediment entering a stream from ditches has been adopted, in which extra cross drains are installed, as close to the stream crossings as possible. Water from these culverts has an opportunity to filter through natural vegetation, filtering out sediments before the water enters the stream. In this manner, the ditches are “disconnected” from the stream system.

All roads to be constructed or improved under this plan will have culverts installed to disconnect the ditches from streams. In addition, ditch lines will be disconnected on approximately two miles of existing collector roads that will be used to access the timber sales.

Road Surfacing

Road surfacing is an important component of any road-related activity. Quality surfacing supports all-weather use while reducing road-related impacts to water quality and wildlife habitat.

Approximately 65,800 cubic yards of rock will be mined or taken from existing stockpiles to surface the roads planned for construction and improvement. Rock required for maintenance will be taken from existing stockpiles.

Of the rock required for construction and improvement, 12,600 cubic yards will be 6"-0 pit run, and 53,200 cubic yards will be crushed rock. The rock will be mined from nine existing rock pits, each of which will be expanded. No new pits will be opened.

Sufficient rock is available at the pits, but the situation might arise that multiple operators will need to use the pit at the same time. In order to avoid this type of conflict, District personnel will work with purchasers to schedule the work.

Water Quality

All road-related work will be done in a manner that minimizes water quality impacts associated with roads. The following steps will be taken to maintain or enhance water quality in all basins, and apply to all road construction, improvement, closure, and maintenance activities:

Soil disturbance will be kept to a minimum. The normal operating period for project work is set in the Timber Sale Contract as that period between April 1 and October 31. Within that time frame, project work will be permitted only when soil conditions allow the work to be accomplished with a minimum amount of sedimentation. Erosion control structures such as silt barriers or hay bales will be used to minimize the movement of sediments.

All work in live streams will be restricted to the in-stream work periods suggested by ODFW (guidelines dated June 2000). The suggested periods vary by basin, and the memorandum will be consulted to ensure that the proper dates are assigned for planned work. On occasion, emergency maintenance will require activities that may produce sediment, such as cleaning a plugged culvert. The risk of sedimentation from the activity being done will be weighed against the risk of sedimentation if a failure occurs as a result of no action.

All drainage structures on Type N streams will be designed to pass the 50-year flow, as a minimum. Drainage structures on Type F streams will be designed to pass the 100-year flow, and will be designed to allow passage of adult and juvenile fish.

Water quality is an important concern in all basins, but the Gales Creek and Sunday Creek basins will receive additional emphasis. These basins are tributary to the Tualatin River, a municipal water source.

Slope Stability

During road improvement and maintenance activities, opportunities will be looked for to mitigate excess sidecast material on older existing roads. The current road inventory indicates no risk of sidecast failure in any of the sale areas, but additional reconnaissance will be done during sale layout. If any areas of unstable sidecast are encountered, the unstable material will be pulled back and deposited in stable locations.

Stream Enhancement

ODFW has identified possible opportunities for stream enhancement projects in areas adjacent to two FY09 sales (Holey Oak, Moose and Squirrel). If these projects prove to be feasible, they will be accomplished as timber sale project work. ODFW will be responsible for planning and designing the project, obtaining all necessary permits, and filling all pertinent reports. ODF will be responsible for incorporating the projects into the timber sale contracts. ODFW will administer the projects to ensure design compliance and ODF will administer the projects to ensure contract compliance.

Other Program Support

Other District programs will require support, usually in the form of heavy equipment, as described below:

Public use damage repair - involves repairing damage to roads and adjacent areas due to inappropriate public use, such as motorcycle riding on cut banks or mud holes created by 4-wheel drive vehicles.

Recreation – involves repair or improvement of existing recreation facilities and assistance in the development of new facilities. In addition, assistance will be provided in the form of design consultation and construction administration during the development of planned recreational facilities.

Reforestation - involves opening spur roads to access units requiring some form of management activity, minor amounts of slash piling to facilitate planting, and the maintenance of heliports. Heliports are strategically located around the District, and provide helicopter access in the event of fire, emergency evacuation of injured people and for fertilization or spray projects.

Road Construction

The road construction activities discussed below are based on the information found in Pre-Operations Reports for FY09. Refer to these reports for maps showing proposed road locations and cost estimates.

Approximately 16.8 miles of roads will be constructed as designated project work for timber sales in the FY09 sale plan. The activity will be in the following basins:

Gales Creek Basin	Polecat	1.5 miles
	South Gale	1.3 miles
Rogers Basin	Chicken Combo	1.6 miles
Sunday Creek Basin	Blind Faith	1.0 miles
	Grindstone Cowboy	1.2 miles
	Month O' Sundays	1.8 miles
	Sunday Addition	3.4 miles
Upper Salmonberry Basin	Rolling Rocks	1.7 miles
	Steelhead Falls	0.9 mile
	Van Salmon	1.3 miles
Wilark Basin	Holey Oak	1.1 miles
Alternate Sales	Big Bell	0.8 miles
	Moose & Squirrel	0.1 miles

All of the roads to be constructed are spurs, which are connected to collector roads or other spur roads. These spurs provide access to segments of harvest areas, and will only be used for current harvesting and future management activities in the immediate area. Most of the spurs range between 0.1 and 0.5 miles in length, with one or two spurs between 1.0 and 1.5 miles. These spurs will be constructed to the minimum width necessary to allow operations, and will be evaluated for closure or vacation at the completion of harvest or subsequent reforestation operations.

No collector or mainline roads will be constructed during this planning period.

Road Improvement

Approximately 12.7 miles of roads will be improved as designated project work for timber sales in the FY09 sale plan. The activity will be in the following basins:

Gales Creek Basin	Polecat	1.2 miles
Rogers Basin	Still Coping	4.0 miles

Sunday Creek Basin	Grindstone Cowboy	3.1 miles
	Month O' Sundays	1.5 miles
Upper Salmonberry Basin	Rolling Rocks	0.9 miles
	Steelhead Falls	2.0 miles
Alternate Sales	Cochran the Third	0.7 miles
	Moose & Squirrel	0.25 miles
	Wood Row Wilson	2.25 miles

Approximately 2.0 miles of existing spur roads will be improved to maintain their standard. These roads provide access to harvest units proposed in this plan. Improvement will consist of removing vegetation, excavating material as necessary to improve alignment, improving drainage, and adding surfacing. These roads will be maintained at the Forest Roads Manual spur road (low use) standard, and will be considered for closure or vacation at the completion harvest operations.

Approximately 6.7 miles of existing collector roads will be improved. These roads provide access to harvest units proposed in this plan and future units as well. Improvement will consist of improving drainage and adding surfacing as necessary to maintain their current status. These roads will be improved to the Forest Roads Manual collector standard (medium use), and will remain part of the active road system.

Approximately 4.0 miles of existing mainline roads will be improved
) . These roads provide access to harvest units proposed in this plan and future units as well. Improvement will consist of improving drainage and adding surfacing as necessary to maintain their current status. These roads will be improved to the Forest Roads Manual mainline standard (high use), and will remain part of the active road system.

Road Access Management

Restricting traffic on certain identified roads will reduce maintenance costs and sediment loads, as well as reduce the amount of garbage dumping, vandalism, target shooting and unauthorized off-road OHV use. For this plan, 1.0 miles of road have been identified as candidates for closure. These roads are generally spur roads from previous sales that are in the area adjacent to planned timber sales.

Actual roads to be closed will be selected after a District review identifies those that are no longer needed for short-term management activities. Closure will be accomplished through a combination of timber sale project work and State road maintenance equipment. Individual roads selected for access management will be treated in one of the three following ways:

Road closure – involves blocking the road to traffic, and is accomplished by placing a semi-permanent barricade at the start of the road. This barricade can be a gate, stumps and logs, or a trench. This strategy does not significantly alter the nature of the road, and the obligation to maintain the road remains. Road maintenance needs and sediment loads are reduced due to the elimination of traffic-related wear, but the road is available for future management activities with a relatively small amount of work.

Partial vacation – involves barricading the road and some minor drainage work, which might include the construction of waterbars or rolling drains. This strategy is best suited for a ridge top road, where drainage and sediment issues are negligible. The nature of the road is somewhat altered, and the obligation to maintain the road remains. Sediment loads are reduced due to the elimination of traffic-related wear, and road maintenance needs are greatly reduced. The road can be prepared for future management activities with a moderate amount of work.

Full vacation – involves removing all culverts, constructing waterbars or rolling drains, pulling back any side cast material, and barricading the road. The road is effectively “put to bed”. All vehicle access is prevented, and there is no maintenance obligation. The road can be used again, but will require a significant amount of work to reconstruct it to proper standards.

Road Maintenance

The goals for maintaining roads are to protect the State’s investment in the road system, to ensure continued access for all forms of use, and to minimize adverse impacts to water quality and wildlife habitat.

Road maintenance is accomplished by timber sale purchasers and State personnel. Timber sale purchasers are responsible for normal maintenance activities on the roads used to access the sales, and State crews maintain all other roads. On occasion, State crews are required to perform non-normal maintenance on timber sale access roads.

Road maintenance activities will be performed on approximately 294 miles of roads within the District, in all basins. Timber sale purchasers will be responsible for maintenance on approximately 124 miles of road, and State crews will maintain an additional 170 miles. Planned levels of activity are summarized in Table 4.

The basic road maintenance activities are summarized below:

Drainage maintenance – required to ensure that the drainage system is functioning properly. Involves cleaning ditches and culvert inlets, and may involve replacing aged or damaged culverts and installing additional culverts to enhance the drainage system. Approximately 75 to 100 miles of road will be treated for drainage maintenance.

Grading – required to maintain a smooth, stable running surface, and to retain the original surface drainage. Involves grading the road surface to eliminate chuckholes and crown the surface to facilitate drainage. Approximately 175 to 200 miles will be graded.

Rock replacement – required to restore the road surface to its original condition, usually to repair damaged or contaminated surfacing, or surfacing lost to normal wear and tear. Involves placing and processing of rock, usually at specific “spots” or on short segments. Approximately 2 to 3 miles of road will be rocked.

Vegetation Management – required to keep vegetation from encroaching into the road surface, to control the spread of noxious or non-native plants and to enhance visibility for drivers on the road. It is accomplished by mechanical brushing, manual brushing, or the application of herbicides. Approximately five to ten miles will be manually brushed and 60 to 70 miles will be treated with herbicide.

Land Surveying

Property surveys are required to establish property corners and mark the lines defining State ownership. Nine (9) miles of property line will be surveyed and marked for sales planned for FY08 and an additional one (1) mile of property line will be surveyed and marked for sales planned for FY09. Five (5) miles of property line marked in prior surveys will be retraced and refreshed, if required, for sales planned for FY09 and beyond. This work will be accomplished by either Service Contracts or State personnel.

Forty-five (45) existing corners will be maintained or established in order to preserve their position. This activity requires checking the condition of the monument and its accessories, and establishing new ones if necessary. This work will be accomplished by either Service Contracts or State personnel.

Young Stand Management

A full range of silvicultural tools will be employed to achieve the long-term goals of structure-based management and integrated resource management as outlined in the Forest Management Plan. The district's strategy is to use silvicultural tools to establish and maintain diverse stands of well-adapted natural species throughout the landscape to meet these goals. These tools include rehabilitation, site preparation, planting, vegetation management, tree protection, precommercial thinning, fertilization and pruning.

This section describes the types and anticipated amounts of reforestation and stand management activities that will occur in FY09. Also refer to the attached Young Stand Management Table (Appendix A, Table A-4) for further details. The location and amount (acres) of these activities are estimates based on plans, information and conditions as known at this point in time. The type, amount, and specific stand management prescriptions will be further adjusted based on when existing sold harvest units are completed and on updated assessments and surveys that will occur during and after the 2008 growing season.

Rehabilitation

No units are planned for rehabilitation during this year.

Site Preparation

These activities prepare the planting sites so new stands can be effectively established. Treatments include slash burning, mechanical site preparation, and chemical treatments.

- 1) Slash Burning: Pre harvest evaluations of harvest units expected to be completed in FY09 indicate that there will be no sales requiring broadcast burning. There are two FY08 sales for which burning is being considered. If either is harvested prior to its expiration date burning may be completed in FY09. On these units, slash burning is thought to be the most effective method of increasing the number of planting spots, reducing the level of vegetative competition, and meeting the goals of the FMP and the IP.

Post harvest assessments will determine the actual necessity to burn.

Basin	Acres	Unit Name – Burn Type
• Salmonberry	86	Salmon Derby - broadcast
• Rogers	106	C-Addle - broadcast
	<u>192</u>	

Special concerns: Air quality, soil damage, and escaped fire are concerns with the use of prescribed fire. Prescribed burning will only be used on these areas when environmental

conditions are such that there are no substantial impacts to air quality, soil productivity or risk of escape.

- 2) Mechanical Site Preparation: There are four units that are anticipated to need some amount of mechanical site preparation during the fiscal year. These sales have relatively gentle terrain that can be accessed by equipment to accomplish site preparation without causing significant soil compaction.

Mechanical site preparation may include slash manipulation or piling and reduction of competing vegetation. It is utilized where slopes are less than 35%, brush and/or harvesting debris prevent the planting and establishment of the desired number of trees per acre and burning is either more costly or impractical due to poor control boundaries or smoke management restrictions. Planting spots are created in a fairly even distribution. Areas anticipated to need some mechanical site preparation following harvest operations are located in the following basins:

Basin	Acres	Unit Name
• McGregor	60	Somonofu
• McGregor	40	Zeus's Boots
• Rogers	50	Upper Elliot
• Scoggins	20	Something Sain
	170	

Special concerns: Soil compaction can be a concern when heavy machinery is used on forest soils. Use of machinery for site preparation on these sites must be restricted to periods of time when soils are dry and not readily compacted.

- 3) Chemical Site Preparation: This method of site preparation is used when it is found to be the most cost effective method to control vegetation that would severely impact the survival and growth of newly planted seedlings. Three units may need treatment before planting, two of which are planned for conversion to alder to treat heavy root rot infection in the existing stands. Alder survival and performance is very dependent upon minimizing competing vegetation during the establishment phase of stand development. Herbicides will only be applied if necessary to insure satisfactory stand establishment and to meet the goals in the FMP and the IP.

Basin	Acres	Unit Name
• McGregor	149	Zeus's Boots (root rot-Alder)
• Rogers	100	Upper Elliot (root rot-Alder)
• Scoggins	80	Something Sain
	329	

Special concerns: None yet identified.

Tree Planting

Planting activities establish the desired species and stocking levels to meet the goals in the Forest Management Plan. Seedlings are planted in modified clearcuts, some heavy thinnings where complex structure is the desired future condition, areas that have had *Phellinus weirii* treatment, and stands where current stocking does not meet Forest Management Plan goals.

- 1) Initial Planting (Clearcut Units): There are an estimated four modified clear-cut units that will be planted during FY09. All of these sites will be planted to allow for the establishment of stands that can be managed to provide complex structure. Douglas-fir stock will compose 70%-85% of planting stock on these sites. Other native species will be selected and either mixed with the Douglas-fir or planted on micro sites for which they are best suited. These species include noble fir, grand fir, western hemlock, western redcedar, and western white pine. The objective of planting a variety of species is to create a healthy and diverse stand by placing tree species on sites for which they are well adapted and where they will experience a high rate of survival and growth. This approach should result in stands that have adequate levels of species diversity and distribution that can be managed for complex structure.

Basin	Acres	Unit Name
• McGregor	69	Somonofu
• Rogers	55	Upper Elliot
• Scoggins	150	Something Sain A1, A2
• Upper Salmonberry	114	Das Butte
	<u>388</u>	

- 2) Initial Planting (*Phellinus weirii* treatment areas): There are three sales projected to be ready for planting that have *Phellinus weirii* infections. These areas will be planted with native tree species suited to the site that are either resistant or immune to *Phellinus*. Resistant species include western redcedar, western white pine and western hemlock. Red alder is immune. *Phellinus* treatment can reduce the spread of *Phellinus weirii*, establish merchantable tree species in understocked areas and increase stand species diversity.

Basin	Acres	Unit Name
• McGregor	183	Somonofu, Zeus's Boots
• Rogers	86	Upper Elliot
	<u>269</u>	

- 3) Interplanting: Stands are interplanted when the existing stocking is insufficient to meet the goals in the Forest Management Plan. Surveys are conducted one and two years after initial planting to determine interplanting needs. Where necessary, interplanting is done the following winter. During the fall of 2007 and spring of 2008 surveys will be conducted to determine interplanting needs for the 2009 planting season. Based on the recent number of acres planted and historic trends, the current estimate is that about 50 acres will need to be interplanted.
- 4) Underplanting: Underplanting is done to develop a second cohort in stands where complex structures are planned and insufficient natural regeneration of shade tolerant conifers is expected. The additional canopy layers are a necessary component in structurally complex stands. No sales are planned to be underplanted in 2009.

Vegetation Management

Vegetation management is done to reduce light or moisture competition in a young stand of trees to improve survival and growth. Vegetation management may be required to meet Forest practices reforestation stocking requirements, the NW Oregon State Forests Management Plan and the Forest Grove District Implementation Plan.

Vegetation management can be categorized as manual cutting, aerial application of herbicides and ground-based application of herbicides. Each method is tailored to the location and vegetation control needs and all three are valuable tools used to manage vegetation in young stands. For noxious weed control, ground based application of herbicides will be the most effective and common treatment, although manual cutting is also used in some circumstances. It is not anticipated to use aerial applications for control of noxious weeds.

Greater emphasis has been put on site preparation in the last two years, resulting in better performance of trees in planted units and a reduced need for vegetation management after the trees are planted. Plantations will be evaluated during the spring and summer of 2008 to determine treatment needs for FY 2009. Below is a preliminary plan for FY 2009, however, it is very subject to change.

1) Manual Cutting

Basin	Acres	Unit Name
• Larch Mountain	25	Ground Hog A1 (alder)
• Rogers	10	Helibates (alder)
• Wilark	85	Xantippe, Rudy's Bend (alder)
	120	

2) Aerial Application

Basin	Acres	Unit Name
• McGregor	55	Pit Bull A3, E1/2
• Scoggins Creek	43	Scoggins Combo
	<hr/>	
	98	

3) Ground-based Application

Basin	Acres	Unit Name
• Larch Mountain	15	Hem Hog
• McGregor	40	Olson, Mac Attack, McGregor Road #2
• Rogers	101	Helibates
• Wheeler	60	Five Peaks, CC Rider
• Gales Creek, Larch Mtn., McGregor, Sunday Creek, Upper Salmonberry, Wheeler, Wilark	50	2007 Salvage Areas
	<hr/>	
	266	

Vegetation management will also be done to prevent the spread of noxious weeds. Two species that currently receive treatment are Scotch broom and Japanese knotweed. Scotch broom spreads from uncontrolled roadside areas and recreational trails into forested stands. Japanese knotweed has been identified and treated annually along the Wilson River.

Noxious weed management will continue throughout the district. Much of this can be considered roadside treatment, however, effort will also be made to control the scotch broom where it is spreading from the roadside and recreational trails into forested stands. Treatments for knotweed will continue along the Wilson River and in any other areas where it is discovered.

Tree Protection

Deer and elk, as well as mountain beaver, do some level of damage to young stands that may require tree protection. Most commonly, various types of physical barriers are used to prevent damage from big game, with minor use of big game repellent. Mountain beaver damage is much less frequent, but heavy populations may be trapped, or their habitat made less desirable, prior to planting.

- 1) Physical barriers: Physical barriers are applied to prevent the browsing of seedlings by deer and elk. These barriers are man-made materials that are installed around newly planted trees. Cedar trees are a favored browse species and require constant protection for several years to prevent high levels of mortality and growth loss. Although this method is relatively expensive, the value of having cedar in the stand for economic and habitat reasons is sufficient to justify the additional cost.

Tree protection with barriers or maintenance work on previously installed barriers is planned on approximately 150 acres across all basins. This includes small pockets of cedar in most of the initial planting units and maintenance in 2, 3, and 4 year old units.

- 2) Big game repellent: This method provides very short-term reduction in browse damage to young seedlings from deer and elk in an attempt to allow small seedlings time to develop sufficient size to withstand further browse damage. A commercially produced mixture containing animal proteins is sprayed onto the foliage of seedlings using backpack sprayers.

At this time no treatments are planned.

- 2) Mountain Beaver Trapping/Habitat: It happens rarely in the Forest Grove District, but in some locations mountain beaver do extensive damage to seedlings, from one to four years old, by clipping the branches or the main stem resulting in growth loss and mortality. Trapping is still the most effective method of reducing damage, but some habitat manipulation can also be beneficial. Disturbance or destruction of the den systems through harvesting and avoidance of slash piles can reduce populations provide less suitable habitat for re-invasion. Retention of preferred forage, salal and sword fern, may also reduce seedling damage.

At this time no trapping is planned.

Precommercial Thinning (Density Management)

This activity is done to prevent young non-merchantable stands from experiencing growth reduction and competition mortality due to overstocking, to improve the stand quality by removing less desirable trees, and to prolong the time the stand provides forage and open habitat. Stands that have been thinned retain more understory vegetation for wildlife forage and develop more rapidly into stands containing large trees. There is no precommercial thinning planned for FY09 due to budget constraints.

Fertilization

Forest fertilization is done to stands to increase their growth rate and productivity. Target stands to fertilize are well stocked, disease free, moderate site index, 25 – 70 year old Douglas-fir stands. Available soil nitrogen is usually the limiting growth factor on these sites. The greatest growth increase per dollar invested is achieved by the aerial application of nitrogen as a pellet at 435 pounds per acre to selected stands. Growth rates are increased following fertilization for 8-10 years and produce an average of 1000 additional board feet per acre over that timeframe.

Fertilization of these stands provides the double benefit of producing more wood volume in less time and moving stands more quickly to the size required for complex stand types. In addition, nitrogen fertilizer increases vigor on many other types of vegetation. This increased vigor to vegetation can benefit a range of wildlife species by providing additional forage and shelter.

There are no fertilization projects planned for FY09 due to budget constraints.

Pruning

Pruning of stands can be done to improve wood quality, reduce tree mortality from bear damage or prevent fungal infection in western white pine.

A small but significant number of newly planted red alder commonly display multiple tops resulting from nursery practices, mechanical damage in transport and animal browse. Multiple tops in red alder have difficulty expressing dominance, necessitating a type of pruning called “single stemming”. This practice is done in the second or third year after planting to select a dominant stem that will result in a better formed and more valuable tree.

Current research indicates that standard pruning for wood quality is not economically viable, even though the value of Douglas-fir and red alder logs is increased when the lower stem is free of knots and provides clear wood. The strategy for both species is to control branch size by maintaining stand density at a high enough level to cause “self pruning” of trees.

It has been found that pruning young Douglas-fir reduces their desirability for feeding by black bears and results in less damage and mortality due to bark peeling. The Department of Forestry is a partner in an annual aerial survey of tree mortality to identify areas of concern. Recent surveys and trends have not identified significant losses that warrant treatment. However, if bear damage is found to be causing significant losses in future surveys stands may be identified for treatment.

Pruning is also done on western white pine to reduce infection by the blister rust fungus. Blister rust is inevitably fatal to younger trees if no preventative actions are taken. Multiple treatments are required as the trees grow until the lower 8 feet have been pruned. Planting and pruning of white pine allow this naturally occurring and ecologically valuable species to be retained in the landscape. It is also used in some areas for the treatment of *Phellinus weirii*, as it is immune to the disease.

Pruning in general has the additional benefit of reducing the forest canopy and allowing longer retention of understory vegetation. Pruning thereby reduces the time stands will spend in the “closed canopy” stage and increases the time the stand is in the “understory” stage. Understory stands are more useful for wildlife habitat than are closed canopy stands. Pruning is normally done in 2-3 “lifts” over multiple years as the tree growth allows. Following is a list of planned acres by type of pruning and species.

Type of Pruning	Acres	Unit Names
• Douglas-fir – value	0	
• Douglas-fir – bear damage prevention	0	
• White pine disease prevention	50	Multiple units
• Red Alder – single stemming	229	Xantippe, Hem Hog, D Deyoe, Ground Hog A-1
	279	

Recreation Management

Overview of Recreation Management

Recreation use on the Forest Grove District continues to grow. Camping, fishing, hunting, sight seeing and trail use are the more popular activities on the district. Developed facilities on the district include five campgrounds, two day use picnic areas and eleven trailheads that provide access to a growing network of trails. Mountain biking, hiking, horseback riding, and motorcycle, quad and four-wheel drive trail use take place year round. There are currently 60 miles of Off-Highway Vehicle (OHV) and 51 miles of non-motorized trails on the district. The majority of the trails are in the Rogers Basin.

The recreational management activities identified below cover the following four broad categories and identify how the network of developed facilities and trails will be maintained and expanded in FY09. (1) new development and improvement of recreational trails and facilities, (2) management of existing trails and facilities, (3) development of new programs, and (4) management of current programs and uses. These actions and activities are based on the goals, objectives, and action priorities established in the NW Oregon State Forests Management Plan and the Tillamook State Forest Recreation Action Plan Update (2000).

Maps for recreation management projects marked with a () are included in Appendix C.*

The recreation management activities planned for FY09 are based on the assumptions that fiscal budget levels will remain at current levels and that most facility development will be accomplished with contract, district and South Fork resources, volunteers, and with grant dollars.

Facilities Development and Upgrade Projects (Campgrounds, View Points, Trail Heads, Staging Areas, etc.)

Developed Facility Upgrades

Summit Trailhead

- Replace steps at the start of the Gales Creek Trail.
- Install barriers around vegetation islands

Four County Point Trailhead

- Improve Trail and Trailhead Signing

Facilities Operations (Campgrounds, View Points, Trail Heads, Staging Areas, etc.)

The Forest Grove District is responsible for operations and public use management at five fee campgrounds with day-use areas, seven developed and designated trailheads,

and one interpretive site/overlook. These developed facilities and the public use that occurs at them requires a high level of management and maintenance presence in order to meet operations standards.

Activities associated with facility operations include:

- Campground host recruitment and supervision.
- Coordination of daily maintenance activity by South Fork inmate and seasonal recreation crews.
- Well water testing.
- Scheduling of garbage and recycling service, vault toilet pumping, and well maintenance.
- Completion of weekly facility condition assessments and coordination of facility repairs.
- Vegetation management.
- Sign and information board management.
- Fee Collection.
- Public contact/use management.
- Public use monitoring.

Resource Specialist or Project Cooperators

- Tillamook County Sheriffs Office
- Private companies responsible for maintenance and repair services.
- Admin Unit/Office Manager
- District Engineer
- Public/user group clubs and organizations

Undeveloped Facility Operations and Dispersed Site Management

The district has several undeveloped facilities and dozens of dispersed campsite areas that require a maintenance and operations presence. The dispersed sites are scattered throughout the forest. Most are used year round, with some of them receiving the heaviest use during hunting season.

Activities associated with undeveloped facility operations and dispersed site management include:

- Coordination of maintenance activity by South Fork inmate and seasonal recreation crews. South Fork crews complete site cleanup at each of the undeveloped sites on a weekly basis. Dispersed sites are cleaned up at least twice a month during the high use season.
- Inventory and site condition assessments.
- Planning for restoration and improvement work
- Site closure and rehabilitation
- Resource enhancement

- Vegetation management.
- Regulatory sign and information board sign management.
- Public contact and monitoring.

Dispersed sites proposed for restoration and improvement

- Wilson River Corridor Site Restoration

Basin proposed for dispersed site inventory and assessment

- Sunday Creek Basin

Resource Specialist or Project Cooperators

- South Fork
- Tillamook County Sheriff's Office
- Unit Forester and District Engineer
- Public/user group clubs and organizations
- Volunteer Trail Patrol

Trail Development

New trail projects that will be active in various stages during FY09 include:

OHV Trails (Rogers Basin)

Construction Projects

- #12 Gummyworm Trail* - FY09 work will complete construction of 1.0 to 1.5 miles of trail. (Volunteer Involvement).
- #25 Elliott Creek Trail – FY09 work will replace the existing gate on the old Elliott Creek Road. Consult with ODOT
- #8 Julies Trail and #3 Crooked Bridge Trail* – FY09 work will significantly upgrade 4 miles of trail. Work will be done on contract and will involve upgrade of existing trail and construction of new segments of trail.

Non-motorized Trails

Location and Design Projects

- Step Creek Trail*, horse, hiker, mountain bike - (Wheeler Basin). FY09 work will complete location and design work for 1.0 to 1.5 miles of trail.
- Wilson River Trail segment C-2*, horse, hiker, mountain bike - (Larch Mountain Basin). FY09 work will complete the location and design of a 3 to 4 mile section of trail.

- Reehers Camp Loop Trail*, horse, hiker, mountain bike - (Wheeler Basin) FY09 work will complete location and design work for 1.0 to 1.5 miles of trail.

Construction Projects

- Reehers Camp Loop Trails*, horse, hiker, mountain bike - (Wheeler Basin) The Reehers Camp Trails project is being located and constructed in segments and phases. FY09 work will construct 1.0 to 1.5 miles of trail that was located and designed in FY07.
- Wilson River Trail segment C-1*, horse, hiker, mountain bike - (Larch Mountain Basin). FY09 work will include construction of the 3.5 mile trail project that was located and designed in FY2008. This project is being carried over from FY2008
- Wilson River Trail segment C-2*, horse, hiker, mountain bike - (Larch Mountain Basin). FY09 work will include construction of a 1 mile section of the 4 mile trail project.

Considerations

Water quality, slope stability, wildlife, and timber sale and road plan issues will need to be identified and addressed during the planning, location and design, and construction phases of each of the projects.

Resource Specialist or Project Cooperators

- South Fork Camp
- Management, Engineering and Reforestation units for integration with other planned management activities.
- Area Geotech
- ODF&W
- Public/user group clubs and organizations

Trail Assessments and Upgrades

In FY09 ODF Equipment Operators and Volunteers will complete trail upgrade work, including grading, drainage, surface hardening and new trail segment construction on the following trails:

• #21 Chute Trail*	2.5 mi
• #19 Tomans Knob Trail*	1.5 mi
• #20 Hoodraiser Trail*	1.7 mi
• #16d Airplane Trail*	1.0 mi
• #17 7-Up Trail*	0.5 mi
• #3a Marks Trail*	1.0 mi
Total Mileage	8.2 miles

Trail Maintenance

Trail use has been steadily increasing on both the OHV trail system and the Non-motorized trail system. The increased use is affecting trail condition and increasing the need for a consistent high level of maintenance in order to minimize impact to the trail resource and impacts to water quality.

Trail maintenance activity includes the completion of trail condition assessments on a regular basis (quarterly), development of maintenance strategies, and completion of maintenance work. Trail maintenance work typically involves cleaning waterbars, cleaning out culverts, basic trail tread work, repairing trailbridges, clearing downed trees, brushing, and sign replacement. Trail maintenance work will be accomplished using volunteers, South Fork crews, youth corps crews, and district staff and equipment.

The table below summarizes the assessment and basic maintenance work planned for FY2009.

PROJECT WORK	QUANTITY	COMMENTS
Trail Condition Assessments	- 51 miles of non-motorized trail - 60 miles of OHV trail	Non-motorized trail assessments completed once a year. OHV trail maintenance assessments are ongoing. Utilize volunteers for trail condition assessments
Trail Maintenance	- 35 to 40 miles of non-motorized trail. - 10 to 15 miles of OHV trail	Utilize South Fork crews, youth corps, crews, volunteer crews, contract crews and district staff and equipment to complete work

Considerations

Trail assessments and the resulting maintenance plans will focus on drainage, water quality and safety issues.

Resource Specialist or Project Cooperators

- South Fork
- Integration with other Units
- ODF&W
- Public/user group clubs and organizations

Volunteer Program

The recruitment and use of volunteers is critical to the overall success of the recreation program. The district currently manages a Volunteer Program that includes the following recreation oriented sub-programs.

Camp Host
Trail System Planning
Adopt a Trail
Forest Clean-up

Trail Maintenance and Construction
Trail Patrol
OHV Trail Equipment Volunteer Operator

Activities associated with the volunteer program will include the recruitment, hiring, and management of campground hosts; planning and management of trail maintenance, trail development, and special volunteer projects; management of the OHV Trail Equipment volunteer operator program; facilitation and management of trail planning efforts; implementation of the Adopt a Trail program; and management of the Tillamook State Forest Volunteer Trail Patrol program. The Recreation Unit anticipates facilitating over 6000 hours of volunteer contribution in FY2009.

Specialist needs/Cooperators

Integration with other Units

Public/user group clubs and organizations

Administrative Unit support

Event Management

The Forest Grove district permits organized trail club sponsored trail use events. Both motorized and non-motorized trail events are held on the district. The events consist of poker runs (fun runs), competitive timed motorcycle races, trials motorcycle competitions, four-wheel drive rallies, and Rally car races. Other events, such as equestrian poker rides, mountain bike races, running races, and archery events are scheduled less frequently. In FY 2009 the district expects to review, permit and administer 4 to 6 trail use events.

Land Management Classification

As required under OAR 629-035-0050, Forest Land Management Classifications (FLMCS), and for the purposes of implementing the FMP's forest resource management strategies, all forest lands have been classified within the planning area to describe the types of management that a District will apply to particular areas of the land base, the appropriate range of management activities for these areas and the forest resource or resources the classifications are intended to address. The system identifies when a particular forest resource may need a more focused approach, or possibly an exclusive priority, in management. State Forest Lands are classified into one of three classifications: General Stewardship, Focused Stewardship, or Special Stewardship. Descriptions and methods of the classifications are found in the Forest Management Plan beginning on page 2-56.

Focused and Special Stewardship classifications are further classified into subclasses based upon the existence of forest resources that require some level of supplemental planning and/or modified management practices to help achieve identified goals. Several subclasses may be assigned to a parcel of land. Where this occurs, the resource requiring the highest level of protection will determine the management approach. A complete list and specific definitions of the subclasses can be found in OAR 629-035-0055.

Total acreage for each classification and subclass can be found in the Forest Grove District IP on page 14.

The acreage and boundary lines shown on maps for forest land management classifications are approximate. The information will be updated through watershed assessments, planning for site-specific management activities or site-specific field visits conducted over time. Management activities will be conducted based upon exact areas and locations as determined on the site and will depend upon the conditions that there.

Land Exchange

There are no active land exchange projects for this AOP.

Other Integrated Forest Management Operations

The district administers an active public woodcutting program issuing between 400 and 600 permits annually, generating \$4,000 to \$6,000 in gross revenue. Approximately 200 miscellaneous forest products permits are sold each year, mostly for salal and mushrooms, generating approximately \$20,000 in revenue. In addition, the District sells a small number of negotiated timber sales. These sales may be necessary for recovery of windthrown trees, fire killed trees, or when an adjacent landowner needs to purchase right-of-way timber from the state in the event they have been granted permission to

construct an access road across state ownership. These special sales usually generate revenues between \$40,000 and \$80,000 annually.

PLANNING (AND INFORMATION SERVICES)

Below are the significant district-level planning projects currently scheduled for commencement, completion, or both in FY09.

Stand Level Inventory and Other Vegetation Inventories

Stand Level Inventory (SLI) will be completed on approximately 88 stands in the Forest Grove District during FY09. The total acreage of these stands is approximately 7,848 acres (7% of the district). FY09 clearcuts and FY10 proposed timber sale areas will be a top priority, and this work will be completed under the statewide SLI contract. Currently, 68% of the district has updated SLI data. The stand level inventory will be used for prescription development, AOP implementation, monitoring, and other planning purposes.

The district will also be conducting stocking and survival surveys in young stands and plantations. The surveys are used to determine stocking levels, needs for tree planting, release, or pre-commercial thinning.

Fish and Wildlife Surveys

Northern Spotted Owl Surveys

For FY09 sales, Forest Grove District will continue its northern spotted owl survey program, in order to effectively comply with federal and state Endangered Species Acts and to contribute to Forest Management Plan (FMP) goals. Survey requirements for each sale are determined in accordance with November, 2002 ODF Policy Guidance: *Northern Spotted Owl Surveying on State Forest Lands*. The survey methodology utilized by ODF is the *Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls*. This protocol, originally dated March 1991 and revised March 1992, is endorsed by the USFWS.

Twelve of the 16 sales in the FY09 sale plan (including alternate sales) are being surveyed for northern spotted owls, due to the presence of potentially suitable spotted owl habitat within and adjacent to the sale areas. A two-year survey (minimum of three visits per year) will be completed for each of these sales. The first year of survey was conducted in 2007 for 10 of the 12 sales that were identified as potentially suitable spotted owl habitat. The second year of survey will be completed for these sales in 2008. Two of the 12 sales that were identified as potentially suitable habitat were surveyed in 2006 and 2007. A third-year survey will be conducted for these sales in 2008. Spotted owl surveys are not required for 4 of the 16 sales in the FY09 sale plan, due to: 1.) the absence of potentially suitable habitat within or adjacent to the sale area (determination made by the ODF wildlife biologist for the NW Oregon Area), **and/or** 2.)

the sale area is within the Tillamook Burn (see November, 2002 ODF Policy Guidance: *Northern Spotted Owl Surveying on State Forest Lands*). Survey requirements for each of the FY09 sales are summarized in the table below. In addition to the spotted owl survey program associated with planned timber sales, monitoring surveys of known spotted owl sites will continue in FY09, in order to determine site occupancy and the pair, nesting, and reproductive status of resident owls.

Marbled Murrelet Surveys

For FY09 sales, Forest Grove District will also continue its marbled murrelet survey program, in order to comply with federal and state Endangered Species Acts and to contribute to Forest Management Plan (FMP) goals. Survey requirements for each sale are determined in accordance with January, 2005 ODF Policy Guidance: *Marbled Murrelet Operational Policies* and the associated procedures and guidance documents. The survey methodology and standards utilized by ODF are based on the protocol developed by the Pacific Seabird Group (2003 revision).

Three of the 16 sales in the FY09 sale plan (including alternate sales) will be surveyed for marbled murrelets, due to the presence of potentially suitable murrelet habitat within or adjacent to the sale areas. Each of the three sales will be surveyed for two years, with a minimum of five visits per year. The first year of survey was conducted in 2007 for the three sales that were identified as potentially suitable marbled murrelet habitat. The second year of survey will be completed for these sales in 2008. Marbled murrelet surveys are not required for 13 of the 16 sales in the FY09 sale plan, due to the absence of potentially suitable habitat within or adjacent to the sale areas. The District T&E Coordinator made the determination that these sale areas are not suitable habitat for marbled murrelets. The ODF wildlife biologist for the NW Oregon Area reviewed and approved these determinations. Survey requirements for each of the FY09 sales are summarized in the table below. The presence of marbled murrelets has not been confirmed on the Forest Grove District during the past 14 years of survey. Therefore, there are no known occupied murrelet sites and no monitoring surveys will be conducted.

Table 5. Summary of status of T&E surveys.

Operation	Species NSO/MM*	Status
Big Bell**	NSO	The first year of survey was conducted in 2007, and the second year of survey will be completed in 2008.
Blind Faith	NSO	The first year of survey was conducted in 2006, the second year of survey was conducted in 2007, and the third year of survey will be completed in 2008.
Chicken Combo	NSO/MM	The first year of spotted owl and marbled murrelet surveys were conducted in 2006, and the second year of surveys will be completed in 2007.
Cochran the Third**	NSO	The first year of survey was conducted in 2007, and the second year of survey will be completed in 2008.
Grindstone Cowboy	NSO	Spotted owl surveys are not required, due to: 1.) The absence of potentially suitable habitat within or adjacent to the sale area (determination made by Clint Smith, ODF wildlife biologist for the NW Oregon Area) and/or 2.) The sale area is within the Tillamook Burn (see November, 2002 ODF Policy Guidance: Northern Spotted Owl Surveying on State Forest Lands).
Holey Oak	NSO/MM	The first year of survey was conducted in 2007, and the second year of survey will be completed in 2008.
Month O' Sundays	NSO	Spotted owl surveys are not required, due to: 1.) The absence of potentially suitable habitat within or adjacent to the sale area (determination made by Clint Smith, ODF wildlife biologist for the NW Oregon Area) and/or 2.) The sale area is within the Tillamook Burn (see November, 2002 ODF Policy Guidance: Northern Spotted Owl Surveying on State Forest Lands).
Moose and Squirrel**	NSO	The first year of survey was conducted in 2006, the second year of survey was conducted in 2007, and the third year of survey will be completed in 2008.
Polecat	NSO	The first year of spotted owl and marbled murrelet surveys were conducted in 2006, and the second year of surveys will be completed in 2007.
Rolling Rocks**	NSO	The first year of survey was conducted in 2007, and the second year of survey will be completed in 2008.
South Gale	NSO	This sale has been surveyed for spotted owls since 2005. A fourth year of survey will be conducted in 2008.
Steelhead Falls	NSO/MM	The first year of survey was conducted in 2007, and the second year of survey will be completed in 2008.
Still Copinig	----	Spotted owl surveys are not required, due to: 1.) The absence of potentially suitable habitat within or adjacent to the sale area (determination made by Clint Smith, ODF wildlife biologist for the NW Oregon Area) and/or 2.) The sale area is within the Tillamook Burn (see November, 2002 ODF Policy Guidance: Northern Spotted Owl Surveying on State Forest Lands).
Sunday Addition	NSO	The first year of survey was conducted in 2006, and the second year of survey will be completed in 2007.
Van Salmon	NSO/MM	The first year of survey was conducted in 2007, and the second year of survey will be completed in 2008.
Wood Row Wilson	NSO	Spotted owl surveys are not required, due to: 1.) The absence of potentially suitable habitat within or adjacent to the sale area (determination made by Clint Smith, ODF wildlife biologist for

		the NW Oregon Area) and/or 2.) The sale area is within the Tillamook Burn (see November, 2002 ODF Policy Guidance: Northern Spotted Owl Surveying on State Forest Lands).
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* If marbled murrelets (“MM”) are not listed under the species column, then murrelet surveys are not required due to the absence of potentially suitable habitat within or adjacent to the sale area.

** Alternate sales

Plants

ODF protects listed plant species in accordance with the state and federal Endangered Species Acts (ESA), Oregon Revised Statutes (ORS), and Oregon Administrative Rules (OAR). The overall policy context and procedures for ODF’s management of plants is described in the August 1, 1995 document *Procedures for Complying with Federal and State ESA’s for Plants*. This policy framework is supplemented by specific strategies for plants in the Forest Management Plan.

The proposed harvest activities in the FY09 sale plan were reviewed to identify potential conflicts with listed plant species. The sales in the FY09 sale plan do not conflict with any known protected plant locations.

Fish Presence Surveys

In order to determine the proper stream classification and extent of fish use in selected streams, fish presence surveys will be conducted by Oregon Department of Fish and Wildlife (ODFW) for six FY09 sales: Chicken Combo, Grindstone Cowboy, Van Salmon, Steelhead Falls, Polecat, and Holey Oak.

Watershed Assessments

ODF is committed to perform watershed analysis on key watersheds on State Forest Lands. Watershed analysis will be used to gain insights into the interaction between ecological resources and forest management. This, in turn, will provide information for future Implementation Plans and Annual Operation Plans. Watershed assessments have been completed for the Trask, Upper Nehalem, and Wilson River watersheds in Forest Grove District. There are no watershed assessment projects scheduled within Forest Grove District in FY09.

Research and Monitoring

The Forest Grove District will assist in a variety of research and monitoring projects in FY09. Examples include:

- ◆ Red alder research areas.
- ◆ White Pine Blister Rust resistance studies.
- ◆ OSU research areas (commercial thinning and wildlife studies).
- ◆ Commercial thinning and *Phellinus weirii* research areas.

- ◆ Commercial thinning and Swiss Needle Cast study areas.
- ◆ Riparian zone functions study areas.
- ◆ Green tree retention and seedling growth demonstration areas.

Other Planning Operations

Other planning activities will include completion of comprehensive trail plans, grant project proposals, road inventory updates, and road closure opportunity plans.

PUBLIC INFORMATION AND EDUCATION

Public Information and Involvement

Public information and involvement activities will include review and input regarding the FY09 Annual Operations Plan. In addition, public involvement activities concerning the Recreation program will include planning and facilitating monthly OHV trail planning meetings, quarterly Non-motorized trail planning meetings, quarterly Tillamook Recreation Advisory Committee (TRAC) meetings, Volunteer Trail Patrol meetings, user group club meetings, and involving individuals or clubs in various district projects.

Public Education

The district is involved in a variety of projects focused on informing and educating the public and interpreting the natural and cultural history of the Tillamook State Forest. Activities will include:

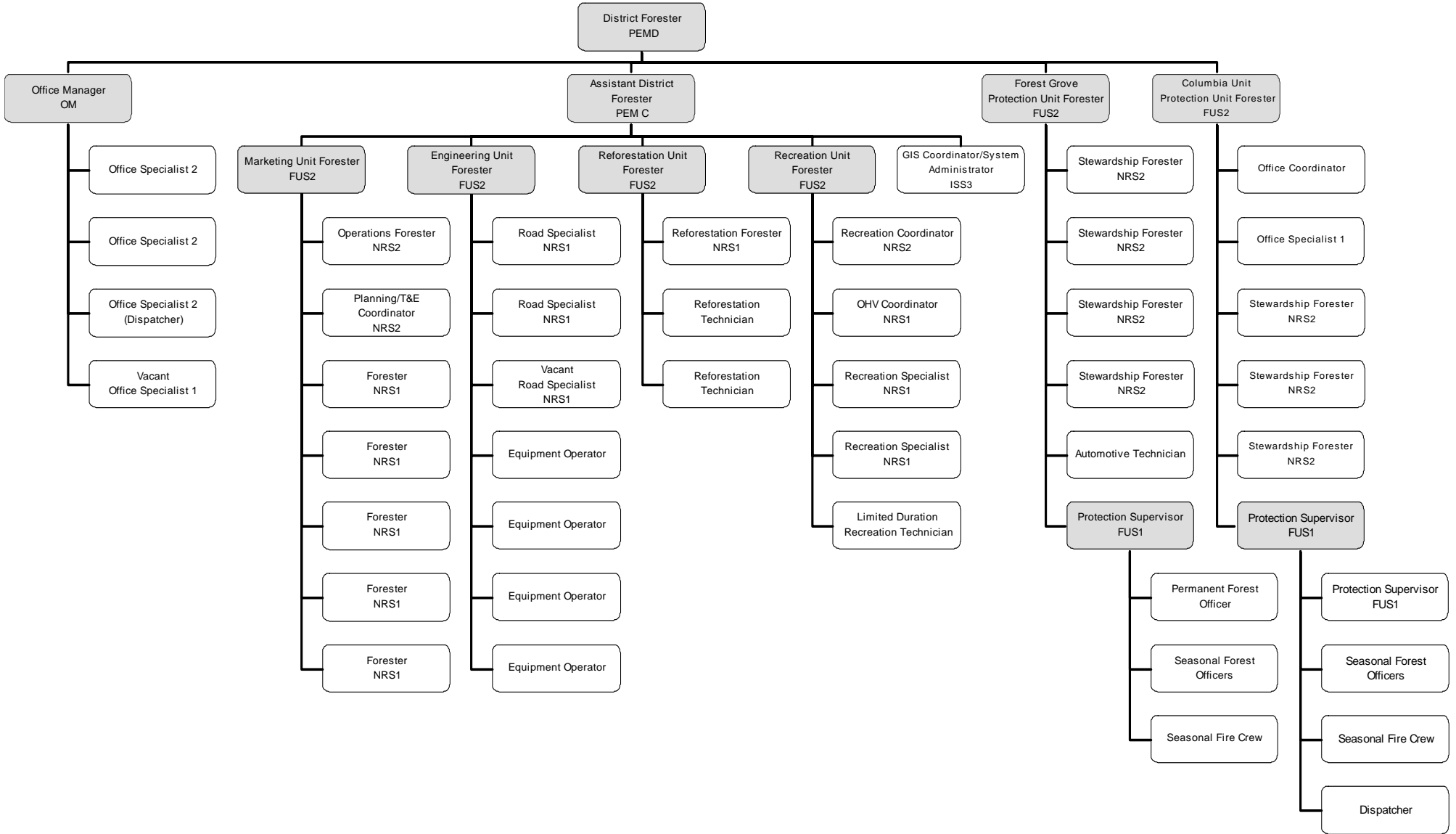
- ◆ Maintenance of the Tillamook State Forest web page and recreation information phone line.
- ◆ Development of information board messages.
- ◆ Modifications to and reprints of the OHV and Non-motorized trail guides.
- ◆ Writing articles for user group newsletters and the Tillamook Times newsletter.
- ◆ Further development of traveling field displays used to inform and educate OHV users about responsible use and to recruit volunteers for specific projects and programs.
- ◆ Support for local OHV user group education programs.
- ◆ Support and participation in NWOA Forestry education and interpretive programs.

ADMINISTRATION

The State Forest Program in Forest Grove District is organized into five separate functional work units. The five work units include:

- ◆ **Administration** includes the District Forester, Assistant District Forester, Office Manager and clerical staff. The administrative function provides policy and planning direction, budgeting, coordination between units and programs, oversight to the field units, public contact and clerical support. The office staff is also responsible for assisting with special forest products permits and firewood permits.
- ◆ The **Engineering Unit** is responsible for the planning and maintenance of the district State forest road network, the design and administration of all timber sale road development and the establishment and maintenance of State forest property lines.
- ◆ The **Forest Management / Marketing Unit** is responsible for the planning, preparation and administration of all State forest timber sales on the district, planning and administering threatened and endangered (T&E) species surveys, developing and maintaining GIS data and map products related to these functions.
- ◆ The **Recreation Unit** is responsible for the planning and development of new trails and facilities, management of existing trails and facilities (campgrounds, day-use sites trailheads, staging areas), development and management of volunteer programs, public contact and information, and monitoring and assessment of overall recreational use patterns.
- ◆ The **Reforestation / Young Stand Management Unit** is responsible for all the planning, prescription determination and administration of all reforestation and young stand management activities on State forest land, including all the associated monitoring and record keeping.

FOREST GROVE DISTRICT ORGANIZATION CHART June, 2008



APPENDICES

- A. Summary Tables
- B. Vicinity Map/Pre-Operations Reports
- C. Recreation Exhibits
- D. Public Comments

TIMBER HARVEST OPERATIONS - FINANCIAL SUMMARY

District: Forest Grove

Fiscal Year: 2009

Date:

June-08

Operation	Payment Type	Fund %		County	Sale Quarter	Net Acres		Volume (MMBF)			Value		
		BOF	CSL			Partial Cut	Clear-cut	Con-ifer	Hard-woods	Total	Gross	Projects	Net
Blind Faith	R	100%	0%	Wash.	3		113	4.0		4.0	\$1,400,000	\$70,000	\$1,330,000
Chicken Combo	R	100%	0%	Till.	4	222	69	6.0		6.0	\$1,950,000	\$67,000	\$1,883,000
Grindstone Cowboy	R	100%	0%	Wash.	4	273	148	8.7		8.7	\$2,610,000	\$210,000	\$2,400,000
Holey Oak	R	100%	0%	Col.	3	116	53	4.5		4.5	\$1,575,000	\$66,000	\$1,509,000
Month O' Sundays	R	100%	0%	Wash.	2	266		4.0		4.0	\$1,200,000	\$219,000	\$981,000
Polecat	R	100%	0%	Wash.	3	312		6.2		6.2	\$2,480,000	\$165,000	\$2,315,000
South Gale	R	100%	0%	Wash.	2	63	107	4.7	0.3	5.0	\$1,780,000	\$52,000	\$1,728,000
Steelhead Falls	R	100%	0%	Till.	4	287		3.4		3.4	\$1,080,000	\$160,000	\$920,000
Still Coping	R	100%	0%	Till.	4	302		3.6		3.6	\$1,080,000	\$200,000	\$880,000
Sunday Addition	R	100%	0%	Wash.	1	496		6.0		6.0	\$1,650,000	\$303,000	\$1,347,000
Van Salmon	R	100%	0%	Till.	3		179	7.2		7.2	\$2,376,000	\$91,000	\$2,285,000
Wood Row Wilson	R	100%	0%	Till.	2		112	3.9		3.9	\$1,365,000	\$112,000	\$1,253,000
Total:						2337	781	62.2	0.3	62.5	20,546,000	1,715,000	18,831,000

Alternate Operations

Rolling Rocks	R	100%	0%	Till.		91	105	5.5		5.5	\$1,650,000	\$164,000	\$1,486,000
Cochran The Third	R	100%	0%	Till.		218		2.2		2.2	\$770,000	\$10,000	\$760,000
Moose & Squirrel	R	100%	0%	Col.		10	106	4		4	\$1,400,000	\$177,000	\$1,223,000
Big Bell	R	100%	0%	Wash.		250		3.5		3.5	\$1,225,000	\$48,000	\$1,177,000

TABLE A-2: COMMERCIAL FOREST MANAGEMENT OPERATIONS INTEGRATED FOREST MANAGEMENT STRATEGIES
 District: Forest Grove Fiscal Year: 2008 Date: June-08

Operation <i>(by basin north to south)</i>	Area	Net Acres			Stand Structure Development Pathway			Green Trees	Comments
		Regen cut	Partial Cut	Total	Current	Post-Harvest	Desired		
Wilark Basin									
Holey Oak	1	53		53	CSC	REG	GEN	7/ac	
	2		65	65	CSC	UDS	LYR		
	3		51	51	UDS	UDS	OFS		
Upper Salmonberry Basin									
Steelhead Falls	1		124	124	UDS	UDS	LYR		
	2		63	63	UDS	UDS	LYR		
	3		100	100	UDS	UDS	LYR 94%, OFS 6%		
Van Salmon									
	1	97		97	UDS	REG	GEN	7/ac	
	2	82		82	CSC	REG	GEN	7/ac	
Gales Creek Basin									
Polecat	1		242	242	CSC 4%, UDS 96%	UDS	OFS		
	2		70	70	UDS	UDS	OFS		
Rogers Basin									
Chicken Combo	1	69		69	CSC 90%, UDS 10%	REG	GEN 90%, LYR 10%	7/ac	
	2		159	159	CSC 94%, UDS 6%	UDS	LYR 30%, OFS 70%		
	3		63	63	CSC 29%, UDS 71%	UDS	OFS		
South Gale									
	1	107		107	UDS	REG	GEN	7/ac	
	2		63	63	UDS	UDS	GEN 29%, LYR 71%		
Still Coping									
	1		302	302					
Wood Row Wilson									
	1	112		112	CSC	REG	GEN	7/ac	
Sunday Cr. Basin									
Blind Faith	1	113		113	UDS	REG	GEN 92%, OFS 8%	7/ac	
Grindstone Cowboy									
	1		186	186	CSC 29%, UDS 71%	UDS	GEN 88%, OFS 12%		
	2	80		80	UDS	REG	GEN	7/ac	
	3	68		68	UDS	REG	GEN	7/ac	
	4		87	87	CSC 10%, UDS 90%	UDS	GEN		
Month O' Sundays									
	1		266	266	CSC 15%, UDS 85%	UDS	LYR 93%, OFS 7%		
Sunday Addition									
	1		496	496	CSC 50%, UDS 50%	UDS	GEN 12%, LYR 64%, OFS 24%		
	Total	781	2337	3118					
	Annual Range	338 - 1,100	2,365 - 3,547	2,703 - 4,053					

Alternate Operations									
Operation	Area	Net Acres			Stand Structure Development Pathway			Green Trees	Comments
		Regen cut	Partial Cut	Total	Current	Post-Harvest	Desired		
McGregor Basin									
Moose and Squirrel	1	17		17	UDS	REG	GEN	7/ac	
	2	89		89	UDS	REG	GEN	7/ac	
	3		10	10	UDS	UDS	GEN		
Upper Salmonberry Basin									
Cochran the Third	1		179	179	CSC	UDS	LYR 45%, OFS 55%		
	2		39		UDS	UDS	GEN		
Gales Creek Basin									
Big Bell	1		250		CSC 92%, UDS 8%	UDS	GEN 23%, LYR 22%, OFS 55%		

FOREST ROADS SUMMARY

District: Forest Grove

Fiscal Year:

2009

Date: June-08

Operation	Construction		Improvement		Other Projects	Total Project Costs	Gross Value of Operation	Total Cost as a percent of Gross Value	Comments
	Miles	Cost	Miles	Cost					
Blind Faith	1.0	\$70,000	0.0	\$0	\$0	\$70,000	\$1,400,000	5.0%	
Chicken Combo	1.6	\$64,000	0.0	\$0	\$3,000	\$67,000	\$1,950,000	3.4%	
Grindstone Cowboy	1.2	\$84,000	3.1	\$126,000	\$0	\$210,000	\$2,610,000	8.0%	
Holey Oak	1.1	\$66,000	0.0	\$0	\$0	\$66,000	\$1,575,000	4.2%	
Month O' Sundays	1.8	\$126,000	1.5	\$90,000	\$3,000	\$219,000	\$1,200,000	18.3%	
Polecat	1.5	\$105,000	1.2	\$60,000	\$0	\$165,000	\$2,480,000	6.7%	
Wood Row Wilson	0.0	\$0	2.25	\$112,000	\$0	\$112,000	\$1,365,000	8.2%	
South Gale	1.3	\$52,000	0.0	\$0	\$0	\$52,000	\$1,780,000	2.9%	
Steelhead Falls	0.9	\$60,000	2.0	\$100,000	\$0	\$160,000	\$1,080,000	14.8%	
Still Coping	0.0	\$0	4.0	\$100,000	\$100,000	\$200,000	\$1,080,000	18.5%	
Sunday Addition	3.4	\$253,000	0.0	\$0	\$50,000	\$303,000	\$1,650,000	18.4%	
Van Salmon	1.3	\$91,000	0.0	\$0	\$0	\$91,000	\$2,376,000	3.8%	

Total:	15.1	\$971,000	14.1	\$588,000	\$156,000	\$1,715,000	\$20,546,000	8.3%	
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Alternate Operations

Cochran The Third	0.0	\$0	0.7	\$7,000	\$3,000	\$10,000	\$770,000	1.3%	
Moose & Squirrel	0.1	\$6,000	0.25	\$45,000	\$126,000	\$177,000	\$1,400,000	12.6%	
Big Bell	0.8	\$48,000	0.0	\$0	\$0	\$48,000	\$1,225,000	3.9%	
Rolling Rocks	1.7	\$119,000	0.9	\$45,000	\$0	\$164,000	\$1,650,000	9.9%	

Road Projects Not Associated with Commercial Forest Management Operations

						\$0			
						\$0			
						\$0			

Reforestation and Young Stand Management Report

District: Forest Grove

Fiscal Year: 2009

Date: June-08

Management Activity	Board of Forestry			Common School Forest Lands			District	
	Acres Planned	Average Cost*/Acre	BOF Cost	Acres Planned	Average Cost*/Acre	CSL Cost	Total Acres	Total Cost
Initial Planting	657	\$275.00	\$180,675.00			\$0.00	657	\$180,675.00
Interplanting	50	\$150.00	\$7,500.00			\$0.00	50	\$7,500.00
Underplanting			\$0.00			\$0.00	0	\$0.00
Tree Protection-Barriers	210	\$400.00	\$84,000.00			\$0.00	210	\$84,000.00
Tree Protection-Direct Control			\$0.00			\$0.00	0	\$0.00
Site Prep-Chemical- Aerial	329	\$100.00	\$32,900.00			\$0.00	329	\$32,900.00
Site Prep-Chemical- Hand			\$0.00			\$0.00	0	\$0.00
Site Prep -Slash Burning	192	\$175.00	\$33,600.00			\$0.00	192	\$33,600.00
Site Prep -Mechanical	170	\$155.00	\$26,350.00			\$0.00	170	\$26,350.00
Fertilization			\$0.00			\$0.00	0	\$0.00
Noxious weeds	200	\$125.00	\$25,000.00			\$0.00	200	\$25,000.00
Release-Chemical- Aerial	98	\$100.00	\$9,800.00			\$0.00	98	\$9,800.00
Release,-Chemical-Hand	246	\$60.00	\$14,760.00	20	\$60.00	\$1,200.00	266	\$15,960.00
Release-Mechanical-Hand	120	\$125.00	\$15,000.00			\$0.00	120	\$15,000.00
Precommercial Thinning			\$0.00			\$0.00	0	\$0.00
Pruning	279	\$60.00	\$16,740.00			\$0.00	279	\$16,740.00
Other			\$0.00			\$0.00	0	\$0.00
Totals	2,551	--	\$446,325.00	20	--	\$1,200.00	2,571	\$447,525.00

*Planting costs include all costs including seedlings

RECREATION MANAGEMENT SUMMARY

District:

Fiscal Year:

2009

Date: June-08

Operation	Unit of Measure	Current	Construction Projects	Construction Cost (Funding)		Improvement Projects	Improvement Cost (Funding)		Total Cost	Comments
				ODF	Other		ODF	Other		
Facilities										
Campsites	Sites	95	0						\$0	
Day Use Areas		2	0							
Trailheads		11	0						\$0	
Interpretive Sites		1	0						\$0	
(Other)	Sites					2	2500		\$2,500	WRDispsiterehab
Trails										
Non-Motorized	Miles	51.0	4.0				95000.0		\$95,000	WRT Seg. C-1
Motorized	Miles	58.0	1.0	3000.0		12.2	136000.0		\$139,000	Contract/Vol/ODF

Total: \$236,500

SALMON ANCHOR HABITAT HARVEST SUMMARY

District: Forest Grove

Fiscal Year: 2009

Date: June-08

SAH Basin Name	Total Acres in Basin ¹	Total Harvest (Partial Cut & Regeneration)				Regeneration			
		Allowable Precent ²	Allowable Acres ¹	Acres in AOP 09	Acres to Date ³	Allowable Precent	Allowable Acres ¹	Acres in AOP 09	Acres to Date ³
Ben Smith Creek	2,410	15%	362	0	242	10%	241	0	0
Devil's Lake Fork Wilson River	6,129	20%	1,226	1	1,187	5%	307	1	200
Elkhorn Creek ⁴	1,048	15%	157	0	183	10%	105	0	42
Lousignont Creek/Upper Nehalem River	12,343	20%	2,469	0	2,332	5%	617	0	554
South Fork Salmonberry River	5,663	15%	849	6	654	10%	566	0	58
Upper Rock Creek	3,291	7% regen (230 acres) -no pc limit		0	80	7%	230	0	80

¹ These columns refer to Forest Grove District's portion of the SAH Basins (ODF acres only). Ben Smith Creek and Elkhorn Creek Basins are shared with Tillamook District. The Upper Rock Creek Basin is shared with Astoria District.

² These columns list the regeneration and partial cut limits identified in the Salmon Anchor Habitat Strategy; not all basins have limits identified for partial cuts.

³ These columns summarize the operations planned and conducted during the period beginning July 1, 2001.

⁴ Allowable acres from Tillamook District's portion of the SAH have been utilized. Managed acres and % are over the Forest Grove allowable acres and %, but the total allowable acres for the basin has not been exceeded.