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WESTERN LANE DISTRICT

2006 ANNUAL OPERATIONS PLAN

INTRODUCTION

This operations plan covers all state-owned forest land managed by the Oregon Department of Forestry in Lane County.

The *NW Oregon State Forests Management Plan* calls for active forest management to produce a desired array of stand structure types across the landscape. In Lane County, long-range desired future condition targets are to produce and maintain approximately 40 percent of the forest in complex layered and older forest structure stands that include large trees, a multi-layered canopy, diverse understory vegetation, snags, down wood, and other key habitat features.

The activities and projects described will be designed to achieve the goals, strategies, and objectives of the *NW Oregon State Forests Management Plan* and the *Western Lane District Implementation Plan*. This Annual Operations Plan is divided into five major categories: Integrated Forest Management, Planning Activities, Information Systems, Public Information and Education, Administration, and Appendices. A summary of the results of the public involvement process will be added to the final plan.

The management activities planned for FY 06 are based on the range of objectives established in the *Western Lane District Implementation Plan* (Table 1), as well as the assumption that budget allotments will be similar to 2005. Sale planning continues to be heavily affected by northern spotted owl habitat protection.

The timber sales listed will be auctioned any time between the fall of 2005 and late fall 2006. Harvest may not be completed until 2008 or 2009. The other activities listed in the AOP are planned to be accomplished in FY 2006.

Table 1. Annual Operations Plan (AOP) objectives compared to annual objectives identified in the 2001 Western Lane District Implementation Plan (IP) Table A-1. IP objectives are gross acres and AOP objectives are net acres.

Silvicultural Activity	IP Annual Objective		2006 AOP Objective
	Low	High	
Conifer Partial Cut	0	500	115
Conifer Clearcut	0	280	252
Hardwood Partial Cut	0	0	
Hardwood Clearcut	0	0	
Rehabilitation	0	0	
Reforestation (Initial Planting within Clearcuts)	0	350	155
Precommercial Thinning	0	300	300
Fertilization	0	2000	0
Pruning	0	0	0

INTEGRATED FOREST MANAGEMENT OPERATIONS

Timber Harvest Operations

Overview of Timber Harvest Operations

The following planned commercial forest management activities meet the requirements of the *Western Lane District Implementation Plan*. Tabular summaries and detailed pre-sale reports for each planned timber sale are attached.

The FY 2002 thru FY 2011 target harvests in the Implementation Plan are 35% clearcut and 65% partial cut. The 2002 thru 2005 district harvest has been 25% clearcut and 75% partial cut. The 2006 plan increases clearcut harvest to bring the percentages in line with the desired 10 year average.

At the current rate of harvest, about 14% of the State forest in the district will have had harvest activity of any sort during the July 2001 thru June 2010 ten year Implementation Plan period.

Be aware that only limited reconnaissance has been conducted on the proposed FY 2006 sales and that boundaries, volumes, and prescriptions may be modified somewhat as field work progresses.

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 in net acres.

Stand Structure	REG	CSC	UDS	LYR	OFS	GEN[1]
Current	**0**	**0**	**367**	**0**	**0**	
Post Harvest[2]	**252**	**0**	**115**	**0**	**0**	
Desired Future				**172**	**0**	**195**

Regeneration (REG) Closed Single Canopy (CSC) Understory (UDS) Layered (LYR)
Older Forest Structure (OFS) General (GEN)

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.

All of the stands being harvested are currently Understory (UDS) structure. 47% of these stands have a long term goal of Layered (LYR) structure and the remainder are to be General (GEN). The 2006 AOP brings the acreage of activity in areas slated for LYR development up to 679 acres – about 37% of the acres operated on 2002-2006. No areas targeted for future Older Forest Structure (OFS) have had harvest activity.

Summary of Operations by Basin

Table 3. Summary of Timber Harvest Operations in each basin. All values are in net acres. Values do not include R/W cut within partial cuts or outside harvest units.

Basin	2006 AOP		Cumulative Operations[1] (FY 02—06)	
	Partial Cut	Clearcut	Partial Cut	Clearcut
Lane County	115	252	1225	619

1. The 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.

The harvest in the future LYR structure areas is as follows:

- Almaise: All of this sale is to be future LYR. Of the 128 acres, 115 acres are to be thinned to low density to encourage understory development, and a 13 acre stand of mostly hardwoods is to be clearcut. The goal of the clearcut is to increase the percentage of conifer in the new, multi-species stand to allow a high quality layered structure to eventually develop.
- Green Reach: Of the total 127 net acres, 44 acres are in an area slated for LYR. These 44 acres will be clearcut using a method we call retention harvest. 20 large confier per acre of mostly Douglas-fir - but with some hemlock, cedar, and bigleaf maple - will be left, along with whatever understory is currently present. The area will be wide spaced planted to cedar (18'x18'), knowing that some Douglas-fir and much

hemlock will rapidly seed in. This area is about 1600 feet in elevation and 24 miles from the coast, so it is a much moister site than much of the District.

The harvest in the future GEN areas is as follows:

- Green Reach: Modified clearcut of two units of 70 year old Douglas-fir and hemlock totaling 83 net acres. These units are separated by a no-cut riparian zone approximately 260 feet wide.
- Big Cut Aerial: Modified clearcut of 112 acres separated into two units. The 73 acre unit is 106 -115 years old with very little understory development or complex structure. Most of this unit probably will be helicopter logged. The 39 acre unit is about half 106 –115 years old and half 65 -70 years old. This unit has more structure than the large unit. It will be cable logged. Leave trees and snags will be concentrated in the 39 acre unit and 6 acres of leave areas because of operational concerns in the helicopter unit - and because of greater opportunities to develop complex structure in the next 40 years in the 39 acre unit due to currently existing understory.
- Nelson Junction (alternate sale): 67 acres of medium density thinning in 65 to 70 year old Douglas-fir and 46 acres of modified clearcut in the same age class.

Forest Roads Management

Overview

The *Forest Roads Manual 2000* describes the vision, guiding principles and practices for road construction and maintenance on ODF managed forest land. This AOP describes four categories of road management activities: Construction, improvement, closure/vacation, and maintenance.

Construction for this period will add 3 miles of road to the district road network. Access to more than 60% of this road is controlled by private and federal gates.

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

	Mainline (**High Use**)		Collector **(Medium Use)**		**Spur (Low Use)**	
	AOP	**IP[1]**	**AOP**	**IP[1]**	**AOP**	**IP[1]**
Road Construction	0	0	1.2	0.5-1.2	4.0	1.5-2.5
Road Improvement	0	0	3.8	0.8-1.0	1.0	0.2-0.8
Road Closure/Vacation	0	0	2.8	0-0.2	1.1	0.2-0.4
Road Maintenance – District[2]	0	NA	25	NA	10	NA
Road Maintenance – Active Operations[3]	12.6	NA	13.3	NA	2.4	NA

1. These are annual estimates derived from Table 7-6 (Road Activities for the Western Lane District from FY 2002 through FY 2011) of the 2001 District Implementation Plan. The values above were derived by dividing the values in Table 7-6 by 10.
2. The road maintenance estimates include only the work to be completed during Fiscal Year 2006 by district personnel (vegetation management only) and service contract (heavy equipment contracts). However, the exact amount can not be predicted at this time. 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.

Road Construction

The road construction discussed below is discussed in greater detail in the attached Pre-Operations Reports. Refer to these reports for maps showing cost estimates and proposed road locations. Only limited reconnaissance has been conducted on the proposed FY 2006 sales. Locations and costs may change somewhat as field work progresses.

Rebuilding old, impassible, overgrown roads is classed as new construction.

The District has begun to pre-road for four reasons:

- At this time we can obtain access across BLM for new construction
- Gives access for T&E surveying
- Allows shorten timber sale contracts to reduce conflicts with T&E survey expiration dates.
- Allows the roads to “set up” before hauling, reducing maintenance rocking needs.

Approximately 5.2 miles of road will be constructed.

- Almaise: 1.1 miles of spurs and 1.2 miles of collector.
- Big Cut Aerial: 0.2 miles of rocked spur construction
- Green Reach: 2.4 miles of rocked spur construction and 0.3 miles of dirt spur construction.
- Nelson Junction (alternate sale): 1.8 miles of rocked spur construction and 0.8 miles of dirt spur construction. Dirt spurs will be waterbarred and blocked after use.

Pre-roading:
- Almaise: The reconstructed collector on the west side of the sale will be extended about 900 feet past the sale and through a corner of federal land for future sales.
- Green Reach: 1.6 miles of spur will be constructed that crosses federal land to assure access to future sales.
- Nelson Junction: 0.7 miles of road would be constructed to prepare for a large 2009 or 2010 hardwood sale. Portions of these roads are across private for which access must be obtained.

Road Improvement

Approximately 3.8 miles of collector and 1.0 miles of spur will be improved by upgrading drainage and adding rock.
- Almaise: 1.6 miles
- Big Cut Aerial: 1.0 miles
- Green Reach: 2.2 miles
- Nelson Junction (alternate sale): 0.4 miles

Road Access Management

Dirt spurs are being waterbarred and closed after use to help prevent tracking mud and channeling water onto rocked roads. Occasionally waterbarring and blocking is necessary because of potential sediment delivery to live streams.

Rocked roads are not normally blocked since we want to keep these roads open for forest management purposes and public recreation. Most ODF-controlled roads are ridgetop with little potential for sediment to enter streams.

Access to Big Cut Aerial and Green Reach is controlled by private and federal gates which may be opened during hunting season. ODF controlled roads are usually kept open for public use. However, we retain the option of gating if vandalism, neighbor concerns, or excessive road damage from public use becomes a problem in particular areas. The adjacent landowner has requested that the Almasie road system be gated..

Road Maintenance

Road maintenance is accomplished by timber sale purchasers, through R/W agreements, and by contracting road maintenance. In addition, roadside herbicide application is often done by District personnel. The District does not own heavy equipment such as graders, dozers, or backhoes.

On roads not being actively used for timber hauling, the District practices a low level of maintenance by maintaining drainage and keeping encroaching vegetation in check. No attempt is made to maintain smooth running surfaces. In some instances, rather than incurring the expense of continuously pulling ditches, drive-thru waterbars are combined with outsloping to minimize surface erosion caused by water running down wheel tracks caused by public use.

During periodic road inspections and in the course of normal forestry work we look for areas with potential sidecast failures. If found, fixing these areas will be done as part of timber sale contracts or more immediately as separate road maintenance contracts, depending upon the recommendation of the Area geotech.

Land Surveying

Land surveying contracts have been awarded for establishing property lines for Almasie and Green Reach.

Young Stand Management

Rehabilitation

None planned this AOP.

Site Preparation

Site preparation is the activity to create planting spots and/or reduce brush cover to allow planted seedlings and natural seedlings to become established. Sit e preparation may be slash burning, slash and brush piling, or herbicide treatment. Salmonberry and vine maple are the primary competing species in most areas.

Approximately 40 acres of newly harvested areas will be treated with herbicide to reduce vine maple competition with seedlings to be planted the winter of 2005/06. Treatment may be hand or aerial. However, after logging is completed on sales this year, additional areas may be identified that need site prep the fall of 2005 or the spring of 2006.

Planting

The district reforestation program depends on tree planting supplemented by residual natural seedlings and saplings, hardwood stump sprouting, and natural seeding (which

may continue to establish seedlings about 10 years after harvest). All clear cut units are planted with a mix of conifer with Douglas-fir the primary species. Usually 200 to 300 trees per acre are planted (14x14 to12x12 spacing).

155 acres of initial planting in clearcuts is anticipated. A mixture of conifer species will be used.

72 acres of underplanting (18x18 spacing) within a heavy thinning is planned. This 72 acres is not identified as future LYR, but the District is continuing to attempt to create structure in a 500 acre block in the Nelson Creek drainage that ties into the several hundred foot wide Nelson Creek hardwood riparian area. Heavy thinning followed by wide spaced underplanting of hemlock and cedar began in 1998 and is showing some promise. Additional overstory removal will be required in 10 or 15 years to release the understory. None of this 500 acres or the adjacent wide riparian area is mapped with a desired future condition of LYR, but may be needed if other areas fail to develop as planned.

Vegetation Management

In some cases, a few years after plantation establishment, competing vegetation threatens the survival of future crop trees. Competing vegetation is usually salmonberry and vine maple. Excess red alder and/or bigleaf maple may also need to be controlled.

27 acres of new plantation will be hand treated with herbicide to reduce the amount of re-sprouting bigleaf maple and vine maple.

Tree Protection

Planted conifer is sometimes clipped off by mountain beavers. In other areas deer or elk may bite off the tips. Occasionally the District may encase seedlings in plastic mesh tubes for protection. The district does not trap mountain beavers.

No tree protection is planned. However, examination this spring may show that protection of cedar seedlings is necessary in some areas.

Precommercial Thinning (density management)

Thinning stands at age 15 to 18 is a common forestry practice designed to concentrate growth on future crop trees, just like gardeners thinning young carrots. Our current tree planting density – 200 to 300 mixed conifer per acre – may allow us to forgo precommercial thinning unless considerable natural seeding occurs.
However, stands now over 10 years old were planted to pure Douglas-fir at 400 to 500 trees per acre. Precommercial thinning may be desirable in many of these stands.

Approximately 300 acres of precommercial thinning is planned.

Fertilization

Foresters generally believe that nitrogen fertilization of Douglas-fir stands that are on a short rotation clearcut cycle is a good investment. However, there is disagreement over the economics of fertilization of long rotation, mixed species stands.

The District has no plans for fertilization in FY 2006.

Pruning

Pruning is the practice of cutting off the lower limbs of young trees to produce knot free lumber in the distant future. The economics of this practice is very much disputed.

The District has no plans for pruning now or in the future.

Recreation Management

Overview of Recreation Management

ODF-managed land in Lane County is scattered and not adjacent to areas of high recreational interest. However, State land has a low level of hunting, mushroom picking, and backroad driving. Our timber sale activities increase forage for big game and grouse, and our road building improves recreational access.

Facilities (Campgrounds, View Points, Trail Heads, etc.)

No campgrounds, viewpoints, or recognized trails exist on ODF managed land in Lane County.

Trails

See above.

Land Exchange

None planned

Other Integrated Forest Management Operations

None planned

Planning (and Information Systems)

Below are the significant district-level planning projects currently scheduled for FY 2006.

Stand Level Inventory and Other Vegetation Inventories

Stand level inventory contracts are administered by the Salem staff. These contracts will continue in 2006 with the goal of completed the entire district in a few years.

Fish and Wildlife Surveys

Western Lane District has a very active spotted owl and marbled murrelet survey program.

We typically survey 10 to 15 current and potential sale areas each year for spotted owls under ODF contracts or in cooperation with federal agencies. In addition, owl occupancy on all activity centers that affect State land is monitored.

Marbled murrelet surveys are conducted annually on about 10 potential sale areas.

The District has no plans to conduct fish presence surveys in FY 2006. Forest Practices data is used for sale planning.

Table 5. Summary of status of T&E surveys <u>for 2006 AOP sales.</u>

Operation	Species (NSO/MM)	Status
Almasie	NSO	Two years of surveys completed. Surveys planned for 2006. McVey and Upper McVey circles.
Almasie	MM	Two years of surveys completed. Surveys planned for 2006.
Big Cut	NSO	One year of surveys completed. Surveys planned for 2006. Wet Gulch circle.
Green Reach	NSO	One year of surveys completed. Surveys planned for 2006. Upper Greenleaf circle.
Green Reach	MM	One year of surveys completed. Surveys planned for 2006.
Nelson Junction (alternate sale)	NSO	One year of surveys completed. Surveys planned for 2006. Not within an owl circle

Watershed Assessments

None planned for FY 2006.

Research and Monitoring

Stream and riparian monitoring is being conducted jointly with the State Forests and Private and Community Forests programs on a tributary of Nelson Creek and on the main

stem of Knapp Creek. OSU is conducting an amphibian monitoring project on a tributary of Knapp Creek.

Other Planning Operations

None anticipated

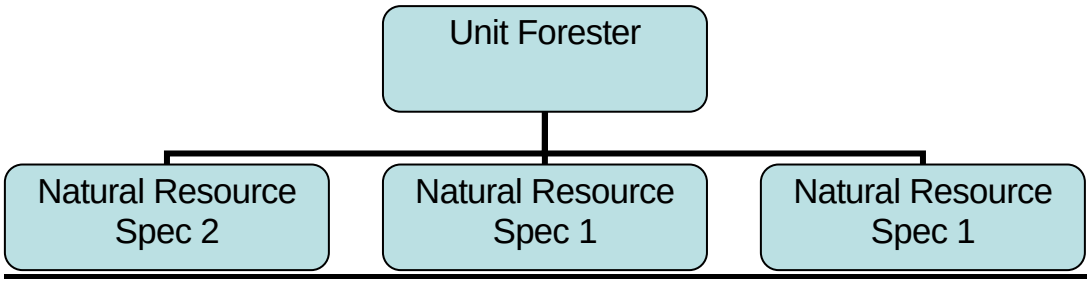
Public Information and Education

Public information and involvement will include public review and comments on the 2006 AOP. In addition, informal public review and comment on all district State Forests management activities on an ongoing basis is expected and welcomed.

Administration

There are currently four full time foresters (Management Unit Forester, Natural Resources Specialist 2, and two Natural Resource Specialist 1's) in the Western Lane District State Forests program. The NRS 2 also acts as the computer systems and GIS specialist for all district programs. The four foresters perform all the tasks normally handled by engineering, marketing, reforestation/young stand management, GIS, T&E, and planning specialists in the larger districts.

The State Forests budget also partially funds the District Forester, Office Manager, and Receptionist/Dispatcher. Since there is no Assistant District Forester, the Management Unit Forester performs the State Forests portion of that position.



APPENDICES

A. Summary Tables

B. Pre-Operations Reports

C. Public Involvement

D. Additional Maps