

SOUTHWEST OREGON DISTRICT 2016 ANNUAL OPERATIONS PLAN



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SOUTHWEST OREGON DISTRICT

2016 ANNUAL OPERATIONS PLAN

Summary of Operations

- **Harvesting:** Two timber sales will produce 2.85 MMBF of timber from 281 acres (1.7% of the land-base). Trappers Cabin, a CSL sale in Douglas County, will raise approximately \$474,652 net revenue on 130 acres of selective thinning and 41 acres of clearcut. Tunnel West, a BOF sale in Douglas County, will raise \$225,600 on 101 acres thinning 9 acres clearcut. No alternate units are planned.
- **Projects:** 1 mile of new road will be constructed at a cost of \$14,000 and 1 mile of road improvement will be done at a cost of \$2,000. The Trappers Cabin sale will have road use fees of approximately \$7,000. Project costs are projected to be 3.2% of revenues.
- **Planting:** Will be partially funded through a grant from Arbor Day if the grant is once again rewarded. The state has planned to plant 78 acres of burned and/or harvested stands (initial plant) and 70 acres to restock previously planted ground (interplanting).
- **Vegetation Control:** Release will be planned for the area that burned in 2013. Perkins was reforested and now must be released from competition from sprouting hardwoods. Direct tree injection (Hack-n-squirt) to prepare the site for planting, will be done on 50 acres. There is 100 acres of backpack hand spray to directly control sprouting hardwoods and release conifer in the 2013 burned area of the Perkins parcels.
- **Big Game Repellent:** Game repellent (BGR) is planned for 32 acres to prevent seedlings from being browsed by deer and elk.
- **Reforestation Costs:** The total reforestation costs of planting and vegetation control as outlined in Appendix Table A5 is \$64,514 with reimburseable grants of \$7,340.
- **Recreation:** Dispersed recreation such as hunting, camping, hiking is the norm on the forest with some designated trails at Onion Mountain, Kerby Peak, and Wolf Peak. One recreation site in Windy Creek is maintained as a parking and day-use area.
- **Planning and Management:** Southwest Oregon District will be working with other districts in the State as they transition from Structure-Based Management to production and conservation zones of management. SWO will use a similar approach though designed for the unique habitat features occurring in Douglas, Josephine, and Jackson Counties.
- **Events:** ODF will work with students and volunteers in Glendale on a tree plant and on education field days. Other opportunities to work with the public to promote forest stewardship will be explored such as a forest clean-up days.

INTRODUCTION

This Annual Operations Plan (AOP) describes activities and projects designed to achieve the goals and objectives of the Southwest Oregon State Forest Management Plan (FMP) – April 2010, and the Southwest Oregon District Implementation Plan (IP) – March 2003 (modified in 2007). In addition, this plan is designed to comply with State Forest Policies governing Threatened and Endangered (T&E) Plants and Animals. The Southwest Oregon District manages approximately 16,760 acres of State Forest land in Douglas, Josephine, Jackson, and Curry counties. For more information regarding the strategies used to manage State Forests in Southwest Oregon, refer to the Southwest Oregon State Forest Management Plan – April 2010. For more information on the resources and characteristics specific to the Southwest Oregon District, refer to the Southwest Oregon District Implementation Plan – March 2003.

The Southwest Oregon District 2016 Annual Operations Plan is organized to include the following:

1. Annual Operations Plan Summary document which includes sections on timber harvest operations, forest roads, young stand management operations, and recreation.
2. Annual Operations Plan Summary tables
3. Pre-Operation Reports with unit maps (available upon request)
4. Preliminary Biological Assessments of the planned harvest operations (available upon request)
5. Public Involvement Summary (this section will be added prior to the approval of the AOP)
6. Consultation with Other Agencies (posted after comments are received).

Table 1 below documents the Southwest Oregon District Implementation Plan – March 2003 activities and the range of acreages that could be reasonably anticipated in a given year, as well as the acres proposed through this AOP. Further refinement of the acreage will occur during the field preparation of the planned commercial forest operation.

Table 1. Annual Operations Plan objectives compared to annual objectives identified in the Southwest Oregon District Implementation Plan. All values are in net acres.

Silvicultural Activity	IP Annual Objective		2016 AOP Objective
	Low	High	
Partial Cut Harvest	150	270	231
Regeneration Harvest	0	50	50
Reforestation	0	270	148
Pre-commercial Thinning	0	500	0
Fertilization	0	250	0
Pruning	0	50	0

The management activities planned for FY 2016 are based on the range of objectives established in the Southwest Oregon District Implementation Plan (Table 1), as well as the assumption that budget allotments will be similar to fiscal 2015. The Southwest Oregon District Implementation Plan, which was approved in 2003 and was intended to be in effect until June 30, 2011, will remain in effect until revisions to the plan are completed and approved by the State Forester. The extension of the 2003 Implementation Plan is documented in a February 15, 2011 memorandum from the State Forester.

The accomplishments of forest management activities that occurred under previous AOPs can be found in several reports, including the “State Forester’s Annual Report for the Association of Oregon Counties, the “Common School Forest Lands Annual Report”, and the individual district annual reports (these reports also cover the accomplishments of the Fire Protection and Private Forests Programs). These reports are available through the local district office or through the internet.

Updates to the Forest Land Management Classification will be accomplished this year. The FLMCS is a method of describing the management emphasis of an area of state forestland. The FLMCS describes areas of Special, Focused, or General Stewardship. The maps generated from this project will help forest managers make better decisions on the extent of management activities that can occur in a given area.

INTEGRATED FOREST MANAGEMENT OPERATIONS

Timber Harvest Operations

Overview of Timber Harvest Operations

Harvest Levels: In accordance with the guidance on the 2016 harvest levels, the district has included 281 acres of timber harvest (231 net acres partial cut and 50 acres clear-cut) in this AOP (Table A-1). This harvest level is consistent with the district’s intensive review of the outputs from the Department’s Harvest and Habitat Model Project. The district is implementing the mix of clearcut and thinning acres identified in its review of the model outputs and addressed in the IP modification (April 2007).

For 2016 we are submitting two main sales and no alternates. Though four areas were surveyed, two of them have issues that will take a couple years to resolve before they are to be submitted in a plan. The Tunnel Thin sale was submitted in the 2015 AOP and used as the alternate in the sale plan. It is estimated that Tunnel West will raise \$225,600 for Douglas County and the Forest Development Fund. Trappers Cabin will raise an estimated \$474,652 for the Common School Fund. The harvest expected to be 2.4 MMBF conifer and 0.5 MMBF hardwood. The 2016 harvest would cover approximately 1.8% of the State Forest land in the Southwest Oregon District.

All units were selected on the basis of stand management needs in light of the current stand structures and the desired future condition objectives. In all of the harvest units, stand complexity will progress toward the desired future condition through the retention of all "legacy" forest structure components (such as snags, down wood, old-growth trees etc.), the retention of the majority of the overstory, the utilization of a variety of residual densities and small open patches, site preparation, and underplanting of a variety of forest tree species. In addition, the structural components of snags and downed wood will be created where deficiencies exist.

The revenue projections on these sales use a stumpage value between \$203 and \$340 based on past stumpage prices and professional judgment. This value fluctuates based on market conditions. The sale volume is also an estimate based on the available inventory data and the final sale layout design.

All of the harvest operations and many of the other forest management activities have been reviewed by ODF's wildlife biologists, aquatic specialist, geotechnical engineers, road engineer, and operations coordinator. Information on operations that occur within the provincial circle of a northern spotted owl have been provided to the US Fish and Wildlife Service. Occasionally, operations may contain a resource or activity where review with another state agency, such as the Oregon Department of Fish and Wildlife or the Department of State Lands, is warranted. Written comments from the external resource specialists and the resolution of those comments can be found in Appendix C.

Some additional small operations such as salvage logging and commercial firewood will produce timber volume during the 2016 fiscal year. These small operations are not included as part of the AOP because they affect a very small area, produce little volume or revenue, and do not require significant effort to develop and execute. These sales will be less than \$100,000 in value and comply with all policies and plans.

Structural Habitat Components

Structural habitat components such as green trees, snags and down woody debris (DWD) are described in Chapter 4 of the SW FMP and may be considered for all harvest prescriptions; however, the emphasis will be placed on regeneration harvest.

Green Tree Retention- The green tree retention target for regeneration harvest units is five trees per acre. Green tree arrangements in SWO take the form of scattered individual trees, clumps of trees, and trees concentrated in and adjacent to riparian management areas. Scattered trees provide an immediate seed source and added structure within the unit. Trees that naturally blow over provide down wood in uplands or into streams. On

south slopes in SWO scattered leave trees provide some shelter for seedlings over long hot summers.

Snags- The FMP strategy for hard snags is to manage for at least two per acre on average across the landscape. The need for snag creation for regeneration sales is evaluated on a sale by sale basis. Across the landscape, snags may be overabundant in some areas and deficient in others. In SWO, the presence of bark beetles causes additional snags in the Windy Creek area, grand fir tend to die in dry years when drought stress and beetle infestations combine. These snags are softer than Incense Cedar and Douglas-fir, and do not stand as long after they are dead. In the south in Josephine and Jackson County, Ponderosa Pine are susceptible to drought and beetles as well, though we do not see the widescale die off as in eastern Oregon. In Curry County, there are an abundance of snags across the landscape as a result of the Biscuit Fire.

Down Wood- The FMP strategy for Down Woody Debris is to retain and supplement the supply of down wood during regeneration harvest and to manage for old growth forests in the future that contain an average of 250 to 300 cubic feet of hard conifer logs (class 1 & 2) across the landscape or 1,200 – 1,800 cubic feet total in all decay classes.

Stand Level Inventory data indicates that there is approximately 100 cubic feet of Class 1 & 2 DWD per acre over the district and 1,689 cubic feet in all size classes. These numbers do not include additions from recent fires, wind events or all of the snags & DWD created with recent timber sale contracts.

Landscape Design

The landscape design is a long term vision of the Desired Future Condition (DFC) for an array of stand structures across the district which will be achieved through a variety of silvicultural prescriptions across diverse stand types.

The District's vision for future development of complex and general stands on the landscape is described and mapped in the Southwest Oregon District Implementation Plan. The Implementation Plan range of complex structure is 20-50%. The Landscape Design is composed of Complex Structure stands occupying 48 percent of the district managed for the Desired Future Condition (DFC) either Layered (LYR) or Older Forest Structure (OFS). The "Harvest Operations – Stand Structure Summary" table in Appendix B provides an overview of the current condition of the Primary Harvest Operations and their anticipated stand structure five to ten years after harvesting has been completed. In addition, this table provides a summary of the Desired Future Condition of the Primary Harvest Operations.

The district will implement silvicultural prescriptions that are consistent with the mapped DFC, which take into account stand health and the ability of the present stand to achieve the DFC designation. These silvicultural prescriptions will generally be a partial cut designed to increase the structural complexity of the existing stand.

In a few cases, the existing stand does not have the characteristics for developing complex structure either naturally or through management (e.g. red alder stands). These stands may undergo some form of regeneration harvest or very heavy thinning and the

establishment of a new stand on that site with the intent of developing complex structure.

The development of the landscape design during implementation planning was generally conducted at the stand level or higher using the best available information at the time, with the recognition that some minor changes will be necessary during operational planning.

Table 2. Minor Landscape Design Modifications

Operation/Unit	Modification	Acres Added	Acres Removed
Trappers Cabin No. 7 Area 2	Change LYR to GEN		41

Summary of Timber Harvest Operations by Basin

The Rogue and Umpqua basins are the two main watersheds that encompass the SWO district land base. These basins are rather large compared to the total land of the district. The Umpqua Watershed encompasses most of Douglas County and is approximately 2.7 million acres. ODF managed lands in the Umpqua Watershed cover 8,136 acres of the basin. The Rogue Basin covers 3.25 million acres- 8,624 of which is managed by ODF.

Table 3. Summary of Timber Harvest Operations in each basin. All values are in net acres.

Basin	2015 AOP	
	Partial Cut	Clearcut
Rogue	130	41
Umpqua	101	9

Rogue Basin

The ridge at the top of Trappers Cabin splits the Rogue and Umpqua Basins. The Trappers Cabin timber sale is at the upper edge of the basin draining into the Rogue River through tributaries of Kelsey Creek and the East Fork Kelsey Creek. The Common School Fund ownership in section 36 is on the edge of a large continuous Bureau of Land Management ownership tract that covers 5 townships. To the north and east a checkerboard of land owned by private interests and BLM covers ground on the edge of the Dads Creek fire, an area with salvage harvesting- to the north in the Umpqua Basin. The area of this timber sale in the Rogue Basin is not being harvested to any great extent by the BLM.

The 640 acre ODF managed parcel “Trappers Cabin” has had harvests on portions of the area starting in 1960 until the most recent sale in 1982. The current sale, “Trappers Cabin No. 7 is divided into four areas: Area 1 is thick Douglas-fir with less than 10% in minor species. Area 2 is medium density Douglas-fir and scattered hardwoods. Area 3 has had some thinning in 1982 with an overstory that includes some snags and large trees. Area 4 has two large patches of hardwoods and some dominant trees scattered. The stands range

in age from 77 to 101 in the overstory, with younger hardwoods and a cohort of younger Douglas-fir planted since 1960.

Relative to the landscape, the harvests from Trappers Cabin No. 7 will have very minimal impacts to this basin area. It is expected that 41 acres of layered forest structure will go to regeneration and all other structures remain UDS.

Umpqua Basin

Tunnel West is in a portion of the Umpqua Basin that flows into Cow Creek and eventually the Umpqua River. In this area, the ridges are occupied by timber and the valleys are primarily sheep farms and cattle ranches. The ownership is mixed between BLM and private landowners. This is a large basin with scattered ODF ownership that has a very small footprint on the landscape.

Tunnel West is a thinning sale of 110 acres and clearcut of 9 acres. The forest is 58-63 years old. Some of the stand exhibits qualities of layering with residual large trees and hardwoods. In the Umpqua Basin, the Tunnel Thin sale, 110 acres of Closed Single Canopy would go to Understory Development and 9 acres of CSC would go to Regen. At this scale, the sale will have little impact on the Umpqua watershed.

Forest Roads Management

Overview

Southwest Oregon District will continue the development and maintenance of a low impact transportation system for the management of SWO State Forests. The typical transportation pattern for access to State Forest land is one primary haul route crossing a variety of landowners to one or more access spurs once within State Forest property. The primary roads needed to access State Forest property will be maintained at a level consistent with the access agreement developed by the District and the appropriate landowner.

Access spurs within State Forest properties are developed to maintain the appropriate management presence that is anticipated for a given tract. For tracts requiring an extended management presence, surface rock and drainage structures will be incorporated into the road design. For tracts requiring limited management presence, naturally surfaced, seasonal roads with temporary drainage structures will be utilized. Upon completion of the operation, all access spurs will be assessed for closure.

The level of new road construction and improvement is kept to a minimum in harvest planning to reduce costs where possible. Road building costs will be kept to a minimum, but not at the expense of best management practices aimed at controlling erosion.

Roads will be improved or constructed to meet the minimum design standards necessary to prevent impact to streams. Various prescriptions for road renovation will be required including but not limited to: resurfacing with rock, replacing undersized culverts, adding new culverts as needed for proper drainage, grading and ditching, and roadside brushing. Also, any potential hazards such as slides, sidecast material, and other drainage issues will be identified and corrected.

The primary objective is to minimize the effect forest roads have on water quality and slope stability and at the same time provide a safe and efficient transportation system. Some of the naturally surfaced roads will have the drainage reestablished, be grass seeded, and blocked upon completion of the operation to minimize erosion and sedimentation. In addition, Level III planning, in accordance with the State Forests Forest Roads Manual, is conducted for each operation. See the attached Pre-Operations Reports for more detailed information concerning road activities within each operation area.

During active timber harvest, the purchaser of the sale will maintain these roads. Upon completion of the sale, road maintenance responsibility on private and Federal land will be returned to the landowner.

Prior to any major forest activity such as logging, an inventory of noxious weeds will be conducted along the travel route. ODF will work with the BLM and other neighboring landowners to remove and control noxious weeds before they are spread by forest use activities.

See Table A-3 in the Appendix for summary information concerning road activities.

Road Construction

Road construction will primarily focus on the development of low use spurs necessary for operation access. Most of these spurs will remain naturally surfaced during the operation and generally have natural drainage reestablished, be grass seeded, and blocked upon completion of the operation to minimize erosion and sedimentation. For this sale plan, approximately 1 mile of road will be constructed at a cost of \$14,000 (Table A-4).

Road Improvement

Road improvement will focus on low use spurs on Department of Forestry managed lands. These roads may be open or closed to vehicular travel but will need to be improved for commercial activity. Upon completion of the operation, drainage will be reestablished, and natural surfaced roads will be grass seeded, and blocked to minimize erosion and sedimentation. Approximately 1 mile of road will be improved in the 2015 sale plan at a cost of about \$2,000.

Road Access Management

The typical transportation pattern for access to State Forest land is to use one primary road crossing a variety of landowners and several access spurs once within State Forest ownership. This makes road access management difficult. When feasible, road systems currently in place will be utilized for State Forest access. This will require coordination and permission with adjacent landowners. At times, road maintenance on other forest landowner road systems will be required as a condition of use.

Once on State ownership, the road system will be maintained in a condition which best reflects use intensity, duration, and season. Roads receiving medium to high use, frequent use, or all season use, will be surfaced with rock to prevent damage to the road and the

aquatic system. These roads will be ditched including cross drainage, and will have sufficient drainage to pass a 50 year flood event. Roads receiving medium to low use, infrequent use, or seasonal use will remain unsurfaced during the operation, outsloped with waterbars, and will generally have natural drainage reestablished, be grass seeded, and blocked upon completion of the operation to minimize erosion and sedimentation. Therefore, medium to high use roads will generally be maintained in an active use condition while medium to low use roads will be maintained in a closed to vacated condition.

Road Maintenance

Road maintenance is typically conducted with harvest operations as a means to conduct the operation as well as to maintain or improve the condition of the transportation system. Road maintenance conducted apart from harvest operations is accomplished as needed by the district. As a means of reducing road induced sedimentation, the District actively grass seeds areas susceptible to erosion. Grass seed is obtained through the Oregon Department of Fish and Wildlife. The district typically grades high use rocky roads on a regular rotation, once per year if necessary. Maintenance rock is added as needed.

Water Quality- In order to protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods include (but are not limited to) maintaining culverts and other road drainage structures, using sediment control devices in road ditches when necessary, and seasonal restrictions on logging and hauling operations. Culvert installment and replacement in live streams will be conducted during in-water work periods when possible. Riparian management areas result in leave trees adjacent to the stream which protect stream temperature, provide nutrients, protect stream banks, and eventually provide wood to improve fish habitat.

Land Surveying

The Southwest Oregon District uses the Salem Roads Engineer for surveying needs when necessary. Both Tunnel West and Trappers Cabin have shared borders with BLM and Private landowners. It may be necessary to touch-up blazed lines or reestablish property line boundaries. Recon work has been done to assess the extent of property line blazing that remains at these two parcels. This has been partially completed. The west and south lines of Trappers Cabin will need recon work to determine the extent of survey work needed. Tunnel thin appears to have little if any blazing on the west and south lines. The north line is lightly blazed. Survey work at some level will need to be done at Tunnel.

Young Stand Management

Young Stand Management is related to activities that develop young stands into healthy vigorous growing trees; site preparation, reforestation, tree protection, and pre-commercial thinning. Under the Southwest Oregon State Forest Management Plan (FMP) and the Southwest Oregon District Implementation Plan, the objectives for the SWO District are to maintain the high level of biodiversity exhibited throughout the landscape as well as provide for economic and social sustainability in the future. This will be accomplished while functioning at the appropriate budget matrix level using the management activities below. See table A-5 in the appendix for the detailed reforestation plan.

Site Preparation

Site preparation is used to create planting space and reduce competing vegetation. In addition, site preparation is an excellent means to reduce the fuel loading following a commercial operation. Without slash management methods, one can expect to see higher rates of mortality, a higher risk of catastrophic loss from fire, and losses in growth, vigor, and overall health due to competition from surrounding vegetation. The goal of site preparation is to create excellent micro-sites that are free of competing vegetation which minimizes seedling mortality and creates an area relatively safe from loss due to wildland fire. Mechanical site preparation combined with slash piling, slash burning and/or slash removal creates planting spaces. Slash removal may come in the form of yarding unmerchantable tree tops to landing areas combined with public or commercial wood cutting permits.

One of the most cost effective methods of site preparation involves hack and squirt of hardwoods prior to clearcutting. This prevents the stumps from sprouting after the harvest. In 2015 the district will look to do this in Trappers Cabin and Tunnel West regeneration units. The district also looks for opportunities to broadcast burn units where possible. In recent years it is getting difficult to find a weather window to do the burning. There are candidates for burning in the sale plan and we will look for opportunities to burn. The district does not typically do a pre-emergent spray, rather tries to plant as soon as possible to get ahead of the brush.

Planting

Planting helps to reestablish forest stands, or to create layering and diversity of canopies. Initial planting serves to reforest an area following a clearcut, patch cut, or severe wildfire. Interplanting helps to improve reforestation success when significant mortality results due to wildland fire, animal browse, drought, freeze, or other event usually targeting only a portion of the stand. Underplanting creates multiple forest canopy layers while maintaining or improving overall stand health and diversity. In addition, each of these planting strategies has a target stocking level for the planted species. Initial planting and interplanting attempt to achieve 250 to 300 viable trees per acre by age 15, while underplanting may only need 50 to 100 viable trees per acre. Most stands are initially planted to 435 trees per acre and may need interplanting in following years.

There are 78 acres planned for initial planting in the 2015 fiscal: The initial plant will be in Middle Windy Bear, Perkins Area III, and Rock 'n Windy.

Stocking surveys have been completed on burned units in the Perkins parcels. It will be necessary to interplant Perkins on 70 acres in 2015. These particular seedlings (and only the cost of the seedlings) will qualify for a reimburseable grant.

We are sowing extra seedlings (180 acres) for the burn that will be ready in the 2016 fiscal year. We will also be purchasing surplus seedlings where they are available. If we find seedlings on the open market, we may need to plant an additional 0-50 acres.

Table A5 in the appendix details all of the reforestation costs of these planned activities.

Vegetation Management

Vegetation management may be accomplished through foliar spray or manual release (chainsaws). Hack and squirt prior to harvesting a unit is a cost effective means of reducing future vegetation and minimizing vegetation management at a later date. Stump treatments may give greater flexibility and safety during harvest where the tree is cut and the cambium layer is treated on the stump immediately. Still another method is to treat suckers when they are about 1 inch thick by basal spray or hack and squirt. All of these methods are aimed at reducing competition from madrone, chinkapin, tanoak and other aggressive hardwoods allowing reestablishment of conifer stands.

Vegetation Management occurs on the district in a number of ways. Some of the techniques used in site preparation would be considered vegetation management for example. This year the vegetation management will come through the site prep mentioned above. About 50 acres will be hack and squirted (see site prep).

We have successfully treated grasses and young shrubs (early foliar) by spraying by hand around seedlings in the past.

ODF grants Pass will need to control vegetation from the wildfire burns of 2013. The Perkins parcel was reforested after the fire with conifer. There is aggressive stump sprouting from the hardwoods in this area that threatened to compete with the conifer. The district is planning to hand spray the basal sprouts of the hardwoods on 100 acres in this burn area in the 2015 fiscal year. This will cost approximately \$25,000 dollars.

Tree Protection

Deer and elk have proven to browse aggressively on newly planted seedlings in this District. They often damage the terminal bud of young trees stunting tree growth and/or causing seedling mortality by browsing on the new growth. The damage done by deer and elk can have a significant effect on the stocking level. To avoid re-entry and future interplanting, an application of Big Game Repellant (BGR) has shown to be extremely successful in deterring animal browse.

In fiscal year 2015, the district may apply BGR on 32 acres.

Pre-commercial Thinning

This treatment is used on stands that have over 250 trees or woody stems per acre. If these stands are not thinned it can significantly increase the number of growing years before the stand is merchantable as well as reducing the stand's health, vigor, and resistance to insects and disease. If the stand is not thinned, density-dependent mortality can take place along with inter-specific competition for limited resources such as water and light. Stands will be thinned to a 14 foot spacing of approximately 222 trees per acre so that the next entry can be a commercial thin at 40-50 years of age. Pine stands may be thinned to a lower density of approximately 170 trees per acre to meet wildlife, structure, and silvicultural objectives.

The district has been able to accomplish pre-commercial thinning through fuels management over the previous several years through grants that have funded 1,500 acres of fuels

reduction. The majority of this was understory thinning and a smaller portion was in the younger age classes (PCT). There are no PCT acres planned for the 2015 fiscal year.

Fertilization

Fertilization has mixed results for success. On some poor sites, it may be useful to fertilize. In this upcoming fiscal 2015, there are no plans to fertilize any stands.

Recreation Management

Overview of Recreation Management

There are currently four forest recreation sites located on State Forest land in the Southwest Oregon District. These include Windy Park, London Peak Trailhead, Onion Mountain Trail, and the Kerby Peak Trail. In addition, a fitness/interpretive arboretum is located at the Grants Pass headquarters and a historic Civilian Conservation Corps building is located at the Central Point headquarters. Recreational use of the forest is currently low and primarily consists of horseback riding, ATV use, hunting, and sightseeing. The district is open to working with volunteers and user groups on recreation needs.

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

There are three trailheads located at Kerby Peak, Onion Mountain and London Peak.

Trails

There are no planned improvements of trails or trail heads in 2015.

Management Activities

Local hikers use and or maintain the London Peak, Onion Mountain trail and the Kerby Peak trail. These trails are partially on BLM lands and are a part of the BLM or Forest Service recreation plans. A primitive trailhead exists at Onion Mountain on Forest Service land where a trail follows the ridge to the Onion Mountain parcel. Additional opportunities for public volunteer work to improve or maintain trails and facilities are encouraged by the State Forest staff on district.

Land Exchange/Land Sales

The district will not be doing any land exchange planning in fiscal year 2015. The DSL is not planning on selling any of the ODF managed lands in 2015.

Other Integrated Forest Management Operations

Noxious Weeds

The district conducts a noxious weed program to control invasive weed species. The program involves identification, eradication and prevention of noxious weeds and their spread. The district inventories and maps noxious weeds, coordinates with the Douglas County Soil and Conservation District and Bureau of Land Management to identify and treat weed species.

Firewood Cutting Program

The Southwest Oregon District will continue to issue personal firewood cutting permits in the coming year for areas where it is available.

The public will be notified of firewood cutting permits through the district's telephone recording and posting at the district office. Permits will be issued for 3 week periods, during the months outside the fire season.

A limited number of personal firewood cutting permits will be issued, on a first come-first served basis, with a limit of 5 permits per individual or household within a 12 month period. A permit fee of \$20 for 2 cords of firewood is collected for each personal firewood permit. Oregon Department of Forestry (ODF) does not guarantee the quality or availability of wood when issuing firewood cutting permits.

Designated firewood cutting areas will be marked on the permit map, which excludes active and sold timber sales, recreation sites, and planned operations. Active timber sales will be posted with no firewood cutting signs.

Planning (and Information Systems)

The Oregon Department of Forestry uses comprehensive planning and accompanying information and monitoring systems. A long term forest management plan guides the ten year implementation plan. This document explains one year's activity in the implementation plan. The annual operation plan requires two years of preplanning endangered species surveys, starting with NSO surveys and inventory to determine stand structure and timber volumes. Some of the planning operations and tracking systems are described below.

Stand Level Inventory and Other Vegetation Inventories

The stand level inventory monitoring has restarted with a modest number of stands. Our district will have 11 stands measured in 2015. Approximately 77% of the forest has been inventoried to SLI protocol from 2002-2008. Inventory data on the forest goes back to the 1990's.

Fish and Wildlife Surveys

Northern Spotted Owl: NSO surveys are conducted and a biological assessment is written in order to assess the impacts to owls from harvest operations.

Table 4. Summary of Surveys for Threatened and Endangered Species

Operation	Species ¹ (NSO/MM)	Survey Years ²	BA ³ Required	Special Considerations
Buck Ridge	NSO	2013-15	No	Spot Checks in 2015
Lawson	NSO	2014-15	Yes	
Rock 'n Windy	NSO	2013-15	Yes	Spot Checks in 2015
Rockpit 2015	NSO	2011-15	Yes	Spot Checks in 2015
Tunnel West	NSO	2013-15	No	
Trapper's Cabin	NSO	2014-15	Yes	
Little Mac	NSO	2015	Yes	
Kerby Peak	NSO	2015	Yes	
Althouse	NSO	2015	Yes	
Surveys for 2017 sales	NSO	2015	Yes	

¹ Surveys are conducted according to accepted protocols when habitat for the specific species is determined to be present. NSO – northern spotted owl, MM – marbled murrelet.

² Years that surveys have been completed or are planned.

³ A Biologic Assessment is required for this operation due to the presence of NSO or MM in the vicinity of the operation.

Marbled Murrelet: Most of the lands managed by ODF on the SWO District are outside the range of murrelets. There are no sales within Marbled Murrelet habitat in 2015, so no surveys are required.

Threatened and Endangered Fish: There are no fish surveys planned for fiscal year 2015. All perennial streams with unknown fish use are treated as fish bearing streams unless they are rendered unsuitable due to the presence of a natural barrier (i.e. high waterfall) or steep gradient (greater than 20%).

Research and Monitoring

Research and monitoring takes many forms on the district. The largest statewide effort is to inventory our stands of timber. SLI data is used to monitor the results of timber sales after harvesting and in conjunction with the more detailed timber cruise prior to harvest. The SLI surveys provide data on snags, down wood, vegetation, and structural attributes that the traditional timber cruise does not measure. The district will continue to monitor the forest through the existing stand level inventory; however, new inventory plots are on hold due to current budget constraints.

A number of other monitoring processes take place in Southwest Oregon:

- Streams are monitored for fish presence and seasonal flows.
- Northern Spotted Owl monitoring surveys are conducted in and around ODF lands.
- An ongoing genetic study is located in the northeast of Windy Creek.
- A snag monitoring project is located at the completed Crossroads Combo timber sale.
- A crown closure study is looking at different levels of crown closure at different thinning densities.
- The southwest also has a pilot NSO project to monitor development of a new NSO policy.

Data for these studies is kept in Salem and the Grants Pass office.

Other Planning Operations

The Southwest Oregon Forest Management Plan was revised in 2010. For this AOP, the Implementation plan harvest levels are being used from the March 2003 plan, modified in 2007. This plan will be redone in the future; the analysis of the outputs from the State Forests harvest model will be conducted to set the harvest objectives for the new IP. In addition, the landscape design and Forest Land Classification maps will be revised and updated.

Public Information and Education

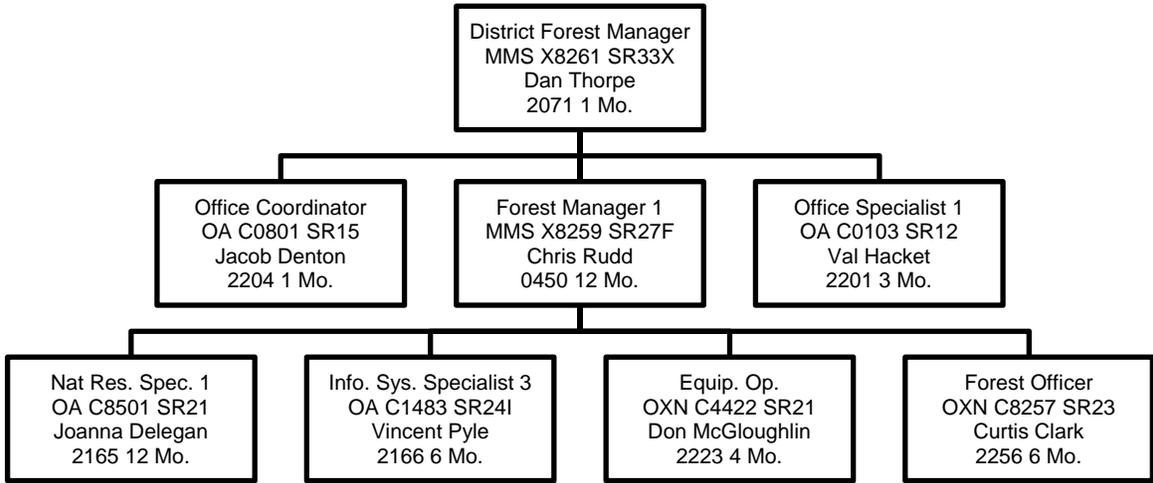
The State Forests Program is committed to the review of AOP and responding to comments from the public. It is the intent of the Southwest Oregon District to continue to serve the public by addressing their questions and concerns regarding the management of the State's natural resources.

The district has started an outdoor education program with Glendale High School and Oregon State University. This program will feature a curriculum designed by the local teachers about forestry and biological sciences. BOF lands are within 5 miles of the school, which is a convenient place for outdoor labs.

ODF has also started an annual tree plant with kids from the Glendale school district to replant trees in the burned areas from the Douglas Complex in the summer of 2013.

Administration

The Southwest Oregon District State Forests Unit is staffed by two employees year-round and three employees that share time and funding with the Protection program. The Forest Manager 1 (FM1) and NRS1 Forester are fully funded by State Forests. The Information Systems Specialist (ISS3) has district-wide responsibilities and is split-funded by the State Forests and the Protection Program. A Forest Officer is split funded through Protection and State Forests Programs; his winter duties for SF include reforestation and timber sale preparation. Under this organizational structure the district is able to accomplish the goals and objectives of the Southwest Oregon District Implementation Plan – March 2003, and the Southwest Oregon District 2010 Annual Operations Plan, while remaining within budgetary means.



APPENDIXES

A. Summary Tables

A-1 Timber Harvest Operations – Financial Summary

A-2 Primary Harvest Operations- Forest Resource Summary

A-3 Timber Harvest Operations – Forest Structure Summary

A-4 Forest Roads Summary

A-5 Reforestation and Young Stand Management Summary

A-6 Recreation Summary

- a. No recreation projects are planned for FY 2015: table not included

B. Maps

Vicinity Map of Timber Sales.

C. Consultation with Other Agencies

Written Comments from US FWS and ODOT addressed in comments.

D. Public Involvement

Public Process 2015 AOP.

E. Pre-Operations Reports

Available upon Request

Table A2

PRIMARY HARVEST OPERATIONS - FOREST RESOURCE SUMMARY

District: Southwest

Fiscal Year 2016

Date: 01/06/2015

This table lists Forest Resources and other issues addressed within Pre-Operations Report due to their presence within or near harvest operations

Primary Harvest Operations	Unit (Optional)	Forest Health Issues ¹	Invasive Species	LYR/OFS Structures ²	LYR/OFS Landscape Design ³	Install/Replace Culverts on Fish Bearing / Perennial Streams	Harvesting within 100' of Fish Bearing Stream	Domestic Water Source	Potential Stream Habitat Improvement ⁴	Within Aquatic Anchor	Within Terrestrial Anchor	Operating within a NSO Provincial Circle	Within 1/4 mile of MMTA T&E Fish Adjacent to Harvest Unit / Haul Route ⁵	T&E Plants	Geotechnical Issues Needing Field Review	Recreation Sites	Cultural Resources	Scenic Resources	Other Resources or Issues
Trappers Cabin No. 7	I,II,III, IV				x							x							Area I, CC listed as future LYR
Tunnel West	I,II,III				x														

¹ A 'x' (in any column) indicates yes the resource or other issue occurs within or near the harvest operation and is addressed by the Pre-Operations Report
² A 'x' indicates the harvest operation contains stands that are currently in a Layered or Older Forest Stand Structure
³ A 'x' indicate that the operation contains areas that have been designated for the development of complex forest stands
⁴ The final decision on these projects will occur during sale preparation and in consultation with ODFW.
⁵ This table lists harvest operations (units or log haul routes) that are adjacent to streams that are known to contain T&E fish. The Pre-Operation Report identifies whether T&E fish are present in the basin.

Table A3

TIMBER HARVEST OPERATIONS - FOREST STRUCTURE SUMMARY

District: Southwest
Gross Acres

Fiscal Year 2015

Date: 01/06/2015

Current Structure	
	Total
REG	
CSC	156
UDS	111
LYR	42
OFS	
Total	309

Post Harvest Structure				
REG	CSC	UDS	LYR	OFS
9		37	110	
		111		
42				
51	0	148	110	0

Desired Future Condition		
GEN	LYR	OFS
75	81	
111		
	42	
186	123	0

Table A4

FOREST ROADS SUMMARY

District: Southwest Oregon

Fiscal Year: 2016

Date: 01/06/2015

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					
Trappers Cabin 7	0.30	\$8,000			\$7,000	\$15,000	\$489,652	3.1%	Road Fees
Tunnel West	0.71	\$6,000	1	\$2,000		\$8,000	\$233,600	3.4%	
Total	1.0	\$14,000	1.0	\$2,000	\$7,000	\$23,000	\$723,252	3.2%	

Table A5

REFORESTATION AND YOUNG STAND MANAGEMENT SUMMARY

District: Southwest

Fiscal Year: 2016

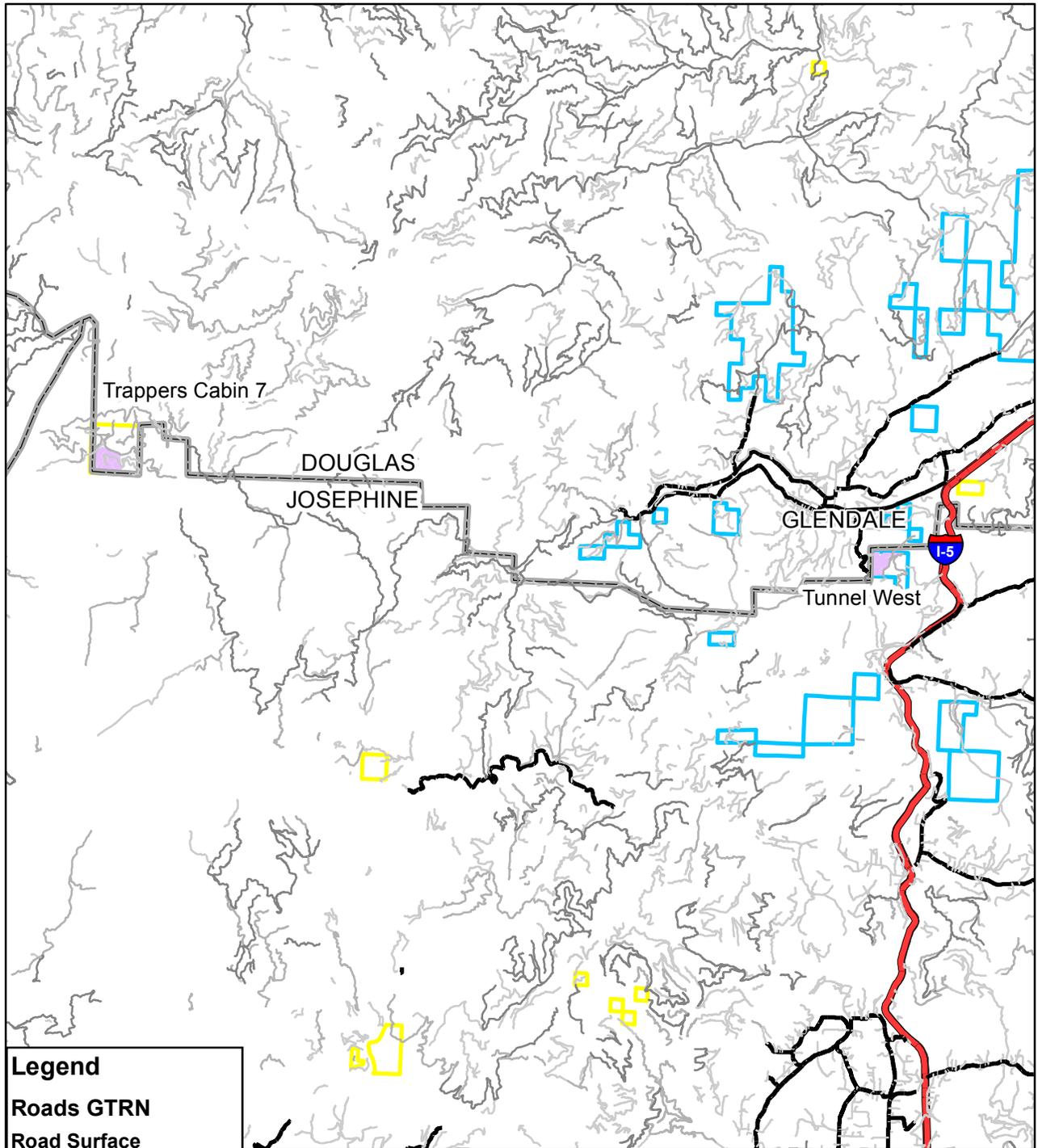
Date: 03/12/2015

ODF Funded Activities 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 (MWB, Perk III, RnW)	74	260	\$19,240.00	4	\$260.00	\$1,040.00	78	\$20,280.00
Interplanting (Perkins) 100tpa	70	190	\$13,300.00			\$0.00	70	\$13,300.00
Underplanting			\$0.00			\$0.00	0	\$0.00
Tree Protection-Barriers			\$0.00			\$0.00	0	\$0.00
Tree Protection-Direct Control (BGR)	32	10	\$320.00			\$0.00	32	\$320.00
Site Prep-Chemical- Aerial			\$0.00			\$0.00	0	\$0.00
Site Prep-Chemical- Hand**	50	90	\$4,500.00			\$0.00	50	\$4,500.00
Site Prep -Slash Burning			\$0.00			\$0.00	0	\$0.00
Site Prep -Mechanical			\$0.00			\$0.00	0	\$0.00
Fertilization			\$0.00			\$0.00	0	\$0.00
Noxious weeds	10	100	\$1,000.00			\$0.00	10	\$1,000.00
Release-Chemical- Aerial			\$0.00			\$0.00	0	\$0.00
Release,-Chemical-Hand (Perkins)	100	250	\$25,000.00			\$0.00	100	\$25,000.00
Release-Mechanical-Hand			\$0.00			\$0.00	0	\$0.00
Precommercial Thinning	0	0	\$0.00			\$0.00	0	\$0.00
Sowing (Trappers, Tunnel)	50	2.29	\$114.50			\$0.00	50	\$114.50
Other-			\$0.00			\$0.00	0	\$0.00
Totals	386	--	\$63,474.50	4	--	\$1,040.00	390	\$64,514.50

*Planting costs include all costs including seedlings

**H/S Tunnel Thin

Grant Funded Activities Management Activity	Board of Forestry			Common School Forest Lands			District	
	Acres Planned	Average Cost*/Acre	Cost	Acres Planned	Average Cost*/Acre	Cost	Total Acres	Total Cost
Arbor Day Grant (Burned Acres Perkins)	80	\$91.75	\$7,340.00			\$0.00	80	\$7,340.00
Perk III 10ac*435t/a*0.40\$			\$0.00			\$0.00	0	\$0.00
Perkins interplant 70ac*200t/a*0.4\$			\$0.00			\$0.00	0	\$0.00
18,350 Trees for Burn			\$0.00			\$0.00	0	\$0.00



Legend

Roads GTRN

Road Surface

- Rocked
- Paved
- Natural Unimproved
- Other

▭ County Line

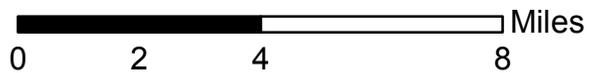
▭ Trappers Cabin

▭ Tunnel West

Ownership

- ▭ Board of Forestry
- ▭ Common School Fund

Vicinity Map
 2016 AOP Sales
 Southwest Oregon District



Appendix C

Consultations with Other State Agencies

This appendix summarizes the results of consultations with the Oregon Department Of Fish and Wildlife and the Oregon Department of Transportation.

- No written comments from ODFW have yet been received.
- Archaeologists from the Oregon Department of Transportation (ODOT) have reviewed the proposed timber harvests, road construction and recreation projects to review potential impacts to cultural resources. No known historical or archaeological sites were found during this review.

Appendix D

PUBLIC COMMENT PROCESS FOR THE 2016 ANNUAL OPERATIONS PLAN

This section will be updated upon completion of the AOP public Comment Period.