



# Oregon

Kate Brown, Governor

## Department of Forestry

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To: Dave Larson, District Forester, Southwest Oregon District

From: Chris Rudd, Management Unit Forester

CC: Dave Lorenz, Southern Oregon Area Director,  
Liz Dent, Chief, State Forests Program  
Ron Zilli, Operations Coordinator, State Forests Program

Date: June 28, 2016

Re: Final Annual Operations Plan for 2017

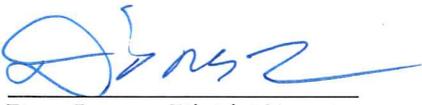
The 2017 State Forests Annual Operations Plan for the Southwest Oregon District is attached for your approval. This plan is consistent with the Southwest Oregon State Forests Management Plan, the current District Implementation Plan, and the 2017 Annual Operations Planning Standards and Guidance memorandum.

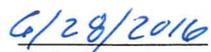
This year's AOP features two sales and one alternate. The Little Mac Sale is in the McCullough Creek basin, the first time we have harvested in this unit in 10 years. Little Mac has six units, a total of 141 acres of thinning and 38 acres of clearcuts. This sale is expected to bring in approximately \$379,272. The Southwest Kerby sale is on Common school lands and is expected to raise \$139,760 on 34 acres of clearcut. Both of these sales will need further field review to determine the final sale boundaries and exact road locations. Both sales will need a field review by our geotech to determine soil stability. The AOP also describes our reforestation operations for fiscal 2017 which will cost \$43,450 to replant or interplant 125 acres and treat 62 acres for foliar release.

This annual operations plan covers proposed forest management activities for fiscal year 2017. This plan was reviewed by technical specialists from within the department and biologists from the Oregon Department of Fish and Wildlife and USFWS. Their comments were received verbally and in writing (written comments are on file at the district office). The draft annual operations plan also underwent a 45-day public comment period. No district specific public comments were received.

Approval of this plan does not constitute final approval of individual project details. Individual timber sales are subject to additional review processes at the district and program staff level before approval for auction. The type of auction, stumpage or delivered log, will be decided during timber sale preparation and will be based on the timber sale cruise, market conditions and other factors affecting the outcome of the operation. The operations described in this plan may be modified during the final preparation and/or implementation. Modifications to these operations will conform to the process included in the draft Annual Operations Planning Directive.

The official copy of this Annual Operations Plan will be on file at the district office. Additional copies are available at the State Forests Program office in Salem.

APPROVED:   
Dave Larson, District Forester

  
Date

# **SOUTHWEST OREGON DISTRICT 2017 ANNUAL OPERATIONS PLAN**



View looking west from Southwest Kerby

# Southwest Oregon District

## 2017 Annual Operations Plan

### Overview

This plan describes the activities and outcomes that Oregonians can expect to see on the Southwest Oregon District for 2017. Your comments will be used considered for improvement of this plan within the scope of the Department's authority, in alignment with the longer term plans, budget and staff resources.

This plan supports a balance between, social, economic, and environmental benefits valued by Oregonians and detailed in the Southwest Oregon Forest Management Plan and OAR 629-035-0020. These benefits are sustainable over the long run.

The Annual Operations Plan incorporates Structure Based Management which over the landscape provides a mix of forest structures such as young and old stands. We accomplish these structures on the district through active management and natural processes that develop these stands. Layering of stands is often through mixes of conifer and hardwood stands. It is a challenge to manage the layered structure without creating ladders for fire to grow to the canopy. We try to achieve a balance between habitat and fuels management.

Habitat for spotted owls is a major consideration in harvest planning. The Department uses a policy regarding this species which is addressed in our biological assessments of each unit that evaluates available habitat.

Hunting, dispersed camping, education, hiking and off road vehicles make up the majority of our social and recreational opportunities on the forest. We are a part of the greater BLM and private ownership mix, but not the principle player or destination for recreation on our lands.

Finally, we achieve a harvest on this landbase consistent with sound harvest planning and environmental and social needs that are appropriate for a small landbase of scattered parcels throughout the BLM and Private landowners of the area.

We welcome your comments on our plan.

### **A short summary of activities planned for the coming year:**

- **Harvesting:** Two timber sales will produce 1.83 MMBF of timber from 213 acres (1.2% of the land-base). Little Mac, a BOF sale in Douglas County, will raise approximately \$379,272 net revenue on 141 acres of selective thinning and 72 acres of clearcut. Southwest Kerby, a CSL sale in Josephine County, will raise \$139,760 on 34 acres of clearcut. There is one alternate sale, Third Rock, planned in Windy Creek if acres are needed to replace these sales. Third Rock is 125 acres of partial cut.
- **Projects:** Southwest Kerby has 0.3 mile of new road construction that is estimated to cost \$22,000. All the roads are in for the Little Mac sale; \$6,000 is the estimated road improvement expense.
- **Planting:** We expect to plant 25 acres and interplant 25 acres in CSL for \$14,150. On BOF lands, we are expected to plant 40 acres and interplant 25 acres at a cost of \$21,225.
- **Pre-commercial Thinning:** Pre-commercial Thinning (PCT) is not currently needed due to fuels treatment work done in recent years.
- **Vegetation Control:** Direct tree injection (Hack-n-squirt) to prepare the site for planting, will be done on 38 acres.
- **Big Game Repellent:** Big Game Repellent (BGR) will be a priority and funds allow.
- **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.
- **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.

# TABLE OF CONTENTS

<b>Overview</b> .....	2
<b>INTRODUCTION</b> .....	6
<b>INTEGRATED FOREST MANAGEMENT OPERATIONS</b> .....	7
<b>Timber Harvest Operations</b> .....	7
Overview of Timber Harvest Operations.....	7
Minor Landscape Design Modifications .....	7
Summary of Timber Harvest Operations by Basin .....	9
<b>Forest Roads Management</b> .....	10
Overview .....	10
Road Construction .....	11
Road Improvement.....	11
Road Access Management .....	11
Road Maintenance .....	11
Land Surveying .....	12
<b>Young Stand Management</b> .....	12
Site Preparation.....	12
Planting .....	13
Vegetation Management.....	13
Tree Protection .....	14
Pre-commercial Thinning.....	14
Fertilization.....	14
<b>Recreation Management</b> .....	14
Overview of Recreation Management .....	14
Facilities (Campgrounds, View Points, Trail Heads, etc.) .....	14
Trails.....	14

Management Activities.....	15
<b>Land Exchange.....</b>	<b>15</b>
<b>Other Integrated Forest Management Operations.....</b>	<b>15</b>
<b>Planning (and Information Systems).....</b>	<b>15</b>
Stand Level Inventory and Other Vegetation Inventories .....	16
Fish and Wildlife Surveys.....	16
Research and Monitoring.....	17
Other Planning Operations .....	17
<b>Public Information and Education .....</b>	<b>17</b>
<b>Administration .....</b>	<b>18</b>
<b>Appendixes.....</b>	<b>19</b>
<b>A. Summary Tables.....</b>	<b>20</b>
<b>B. Maps.....</b>	<b>25</b>
<b>C. Consultation with Other Agencies .....</b>	<b>27</b>
<b>D. Public Involvement.....</b>	<b>28</b>
<b>E. Pre Operations Reports- Available upon Request.....</b>	<b>29</b>
<b>F. Landscape Design Modifications.....</b>	<b>30</b>
<b>G. Minor Modifications to Harvest Range.....</b>	<b>31</b>

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# **SOUTHWEST OREGON DISTRICT**

## **2017 ANNUAL OPERATIONS PLAN**

### **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. This year a minor modification to the harvest acreage and to the landscape design were done to better accomplish our objective

The Southwest Oregon District 2017 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 <sup>1</sup>		2017 AOP Objective
	Low	High	
Partial Cut Harvest	140	220	141
Regeneration Harvest	50	80	72
Reforestation (Initial Planting)	0	270	75
Pre-commercial Thinning	0	500	0
Fertilization	0	250	0
Pruning	0	50	0

<sup>1</sup>The draft AOP harvest acreage is aligned with proposed IP modifications as shown in Appendix G and the modifications will be finalized and approved prior to the approval of the AOP.

The management activities planned for FY 2017 are based on the range of objectives established in the Southwest Oregon District Implementation Plan (Table 1), the proposed IP minor modification in Appendix G, as well as the assumption that budget allotments will be similar to fiscal 2016.

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.

## **INTEGRATED FOREST MANAGEMENT OPERATIONS**

### **Timber Harvest Operations**

#### **Overview of Timber Harvest Operations**

Harvest Levels: In accordance with the guidance on the 2017 harvest levels, the district has included 213 acres of timber harvest (141 net acres partial cut and 72 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 found in Appendix G.

For 2017 we are submitting two main sales and one alternate. Two timber sales will produce 1.83 MMBF of timber from 213 acres (1.2% of the land-base). Little Mac, a BOF sale in Douglas County, will raise approximately \$379,272 net revenue on 141 acres of selective thinning and 72 acres of clearcut. Southwest Kerby, a CSL sale in Josephine County, will raise \$139,760 on 34 acres of clearcut. There is one alternate sale, Third Rock, planned in

Windy Creek if acres are needed to replace these sales. Third Rock is 125 acres of partial cut.

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 \$300 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 engineer, 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 2017 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.

### 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 2. Summary of Timber Harvest Operations in each basin. All values are in net acres.

Basin	2017 AOP	
	Partial Cut	Clearcut
Rogue		34
Umpqua	141	38

#### Rogue Basin

Area 2 of Southwest Kerby is in the upper basin to a tributary that eventually flows into White Creek, which connects through a stream network flowing into the Illinois River. Timber in this sale is age 95, UDS or Layered stands. In this sale, Area 1 will go from UDS to Regen after the sale and Area 2 will go from Layered to Regen after the sale. At this scale, these sales will have very little impact on the watershed.

#### Umpqua Basin

Little Mac is a combination clearcut 38 Acres and Partial Cut 141 Acres in the Umpqua Basin, where Cow Creek is the main tributary to the Umpqua River. The forest is age 70 – 94. The stands are closed single canopy or UDS, and following the sale, they will either be UDS or Regen in the case of the 38 acre clearcut. In the Umpqua Basin, the Little Mac sale, 81 acres of CSC would go to UDS, and 98 Acres of UDS would go to Regen (38) and UDS (60). 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 Appendix A-4 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 0.3 mile of road will be constructed at a cost of \$22,000 to access Area 2 of Kerby Peak. (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 2017 sale plan at a cost of about \$6,000.

## **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. We expect to grade and spot rock 10 miles of road in Windy Creek this year with our road crew and 2 miles of road maintenance by our contractors on district sales.

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 installation 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. It is typical for our unit to assess the survey needs during sale preparation to determine whether to conduct a full cadastral survey or reestablish blazing. Areas 1, 5, and 6 of Little Mac have shared borders with private land. They will need to be assessed for survey needs. Southwest Kerby Area 1 has a shared border with BLM and the blazing will need to be touched up there.

## **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 2017 the district will treat up to 62 acres in units including Southwest Kerby and Little Mac (see Reforestation Summary Tables "Release").

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.

The 2017 planting will depend on the results of our stocking surveys and timber harvest. There are 75 acres planned for initial planting in the 2017 fiscal: from sales past, Rock 'n Windy, Trapper's Cabin, and Tunnel West. We are planning on 50 acres of interplanting in 2017 on units after stocking surveys reveal the locations. The cost of all seedlings and cost to plant them for initial plant and interplanting combined is estimated to be \$35,375 or \$283 per acre.

All of the acres from the 2013 fires have been planted as of the 2016 planting season. Of the 200 acres, some were interplanted a second time. Arbor Day will no longer be a source for funding the seedlings since the burn has been planted. The 2016 stocking surveys revealed poor reforestation at Quines Run number 2 (harvested in 2014). This will be one of the sales (25 acres) that will need to be replanted in 2017 on CSL lands.

## **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.

We have successfully treated grasses and young shrubs (early foliar) by spraying by hand around seedlings in the past. This treatment is not planned for 2017.

## **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 2017, the district may apply BGR on small areas as needed.

## **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 2017 fiscal year.

## **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. 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 2017.

## **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 2017. The DSL is not planning on selling any of the ODF managed lands in 2017.

## **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 began in 2001 to replace the older OSCUR inventory. A large effort was undertaken which sampled approximately 50% of our stands to the new SLI inventory standards. From 2008 to 2014 very few stands were measured, but the inventory started again in 2015. As of year-end 2014 there were 10,294 acres inventoried, another 889 measured in 2015, much of it 10 years ago. Our district will have 10 stands measured in summer 2016 (2017 fiscal) by contractors (599 Acres.), and a number of stands measured by district folks.

### 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 <sup>1</sup> (NSO/MM)	Survey Years <sup>2</sup>	BA <sup>3</sup> Required	Special Considerations
Bear Madrone	NSO	2013-16	No	Clip outside JBL 1.3
Buck Ridge	NSO	2013-15	No	Spot Checks in 2016
Lawson	NSO	2014-17	Yes	
Little Mac	NSO	2015-16	Yes	Spot Checks in 2017
Red Quartz	NSO	2014-15	Yes	
Rock 'n Windy	NSO	2013-15	Yes	Spot Checks in 2016
Rockpit 2015	NSO	2013-15	Yes	Spot Checks in 2016
Sleppy Coal Thin	NSO	2015-16	Yes	
Southwest Kerby	NSO	2015-16	Yes	
Tunnel West	NSO	2013-16	No	
Trapper's Cabin No. 7	NSO	2014-15	Yes	
Surveys for 2017 sales	NSO	2016	Yes	

<sup>1</sup> 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.

<sup>2</sup> Years that surveys have been completed or are planned.

<sup>3</sup> 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 2017, so no surveys are required.

Threatened and Endangered Fish: There are no fish surveys planned for fiscal year 2017. 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.

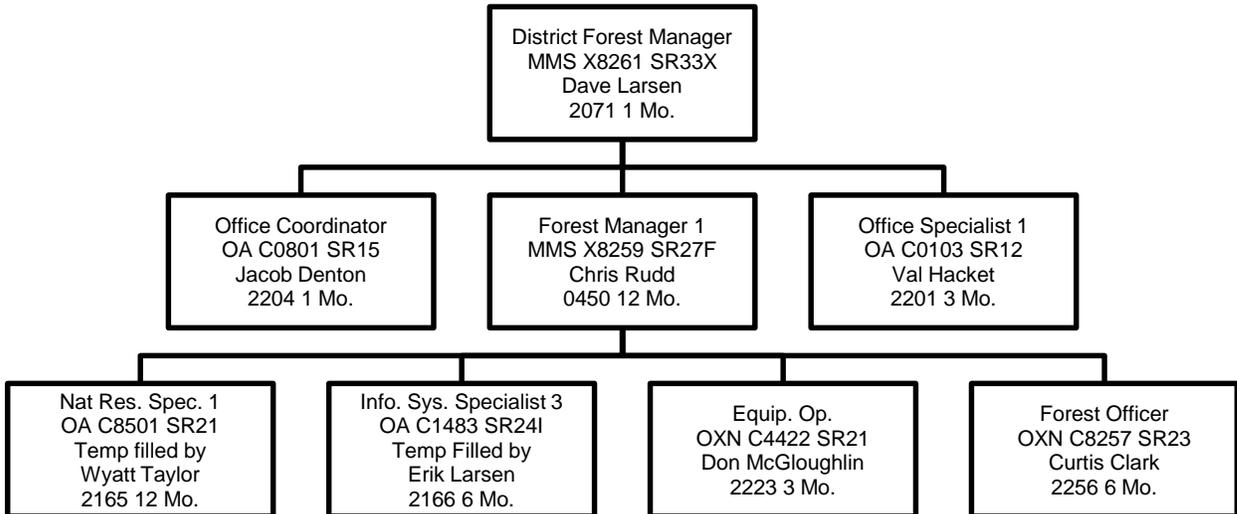
The district has its outdoor education program with Glendale School District and Oregon State University. This program features a curriculum designed by the local teachers about forestry and biological sciences. BOF lands are within 5 miles of the school, which is a convenient place for outdoor labs.

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 fires 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 (Figure 1). 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. We have an Equipment Operator that works in State Lands for a portion of the winter months. His duties include road maintenance, road development and quarry developmet. A Forest Technician (not shown below) is utilized “on the shoulders” of fire season when funds allow. 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.

**Figure 1. Southwest Oregon State Forests Organizational Chart.**



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# **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

No recreation projects are planned for FY 2017: table not included

## **B. Maps**

Vicinity Map of Timber Sales.

## **C. Consultation with Other Agencies**

Written Comments from US FWS will be addressed in comments.

## **D. Public Involvement**

Public Process 2017 AOP.

## **E. Pre-Operations Reports**

Available upon Request

## **F. Landscape Design Modification**

## **G. Harvest Acre Range Modification**

**Table A-1: TIMBER HARVEST OPERATIONS - FINANCIAL SUMMARY**

District: SW Oregon

Fiscal Year: 2017

Date: 02/25/2016

Primary Operation	Fund %		County	Sale Quarter	Net Acres		Volume (MMBF)			Value		
	BOF	CSL			Partial Cut	Clear-cut	Con-ifer	Hard-woods	Total	Gross	Projects	Net
Little Mac	100%		Douglas	2	141	38	1284.0		1284.0	\$385,272	\$6,000	\$379,272
Southwest Kerby		100%	Josephine	4		34	540.6		540.6	\$161,760	\$22,000	\$139,760
									0.0			\$0
									0.0			\$0
									0.0			\$0
									0.0			\$0
<b>Total:</b>					<b>141</b>	<b>72</b>	<b>1,825</b>	<b>0</b>	<b>1,825</b>	<b>547,032</b>	<b>28,000</b>	<b>519,032</b>

**Alternate Operations**

Third Rock	100%		Douglas		125		637.5		637.5	\$204,000	0	\$204,000
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**Table A-2: PRIMARY HARVEST OPERATIONS - FOREST RESOURCE SUMMARY**

District: Southwest Oregon

Fiscal Year 2017

Date: 02/25/2017

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 <sup>1</sup>	Invasive Species	LYR/OFS Structures <sup>2</sup>	Landcape Design LYR/OFS <sup>3</sup>	Install/Replace Culverts on Fish Bearing / Perennial Streams	Harvesting within 100' of Fish Bearing Stream	Domestic Water Source	Potential Stream Habitat Improvement <sup>4</sup>	Within Aquatic Anchor	Within Terrestrial Anchor	Operating within a NSO Provincial Circle	Within 1/4 mile of MMMA T&E Fish Adjacent to	Harvest Unit / Haul Route <sup>5</sup>	T&E Plants	Geotechnical Issues Needing Field Review	Recreation Sites	Cultural Resources	Scenic Resources	Other Resources or Issues
Little Mac			x		x		x					x		x						
Southwest Kerby			x									x								

**ALTERNATE HARVEST OPERATIONS - FOREST RESOURCE SUMMARY**

Third Rock			x									x								

<sup>1</sup> 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

<sup>2</sup> A 'x' indicates the harvest operation contains stands that are currently in a Layered or Older Forest Stand Structure

<sup>3</sup> A 'x' indicate that the operation contains areas that have been designated for the development of complex forest stands

<sup>4</sup> The final decision on these projects will occur during sale preparation and inconsultation with ODFW.

<sup>5</sup> 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 A-3: TIMBER HARVEST OPERATIONS - FOREST STRUCTURE SUMMARY**

District: Southwest Oregon

Fiscal Year 2017

Date: 03/15/2016

Current Structure	
	Total
REG	
CSC	81
UDS	110
LYR	21
OFS	
<b>Total</b>	<b>212</b>

Post Harvest Structure				
REG	CSC	UDS	LYR	OFS
		81		
50		60		
21				
<b>71</b>	<b>0</b>	<b>141</b>	<b>0</b>	<b>0</b>

Desired Future Condition		
GEN	LYR	OFS
22	52	7
110		
	21	
<b>132</b>	<b>73</b>	<b>7</b>

**Table A-4: FOREST ROADS SUMMARY**

District: Southwest Oregon

Fiscal Year: 2017

Date: 03/15/2016

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					
Little Mac			1	\$6,000		\$6,000	\$385,272	1.6%	
Southwest Kerby	0.3	\$20,000				\$22,000	\$161,760	13.6%	Rocky Rd (blasting)
						\$0	\$1	0.0%	
						\$0	\$1	0.0%	
<b>Total</b>	<b>0.3</b>	<b>\$20,000</b>	<b>1.0</b>	<b>\$6,000</b>	<b>\$0</b>	<b>\$28,000</b>	<b>\$547,034</b>	<b>5.1%</b>	

**Alternate Operations**

Third Rock						\$0	\$204,000	0.0%	
						\$0	1	0.0%	
						\$0	1	0.0%	

**Road Projects Not Funded by Harvest Operations**

Operation	Construction		Improvement		Other Projects	Total Project	Funding	Comments
	Miles	Cost	Miles	Cost				
						\$0		
						\$0		
						\$0		
						\$0		
						\$0		
						\$0		

**Table A-5: REFORESTATION AND YOUNG STAND MANAGEMENT SUMMARY**

District: Southwest Oregon

Fiscal Year: 2017

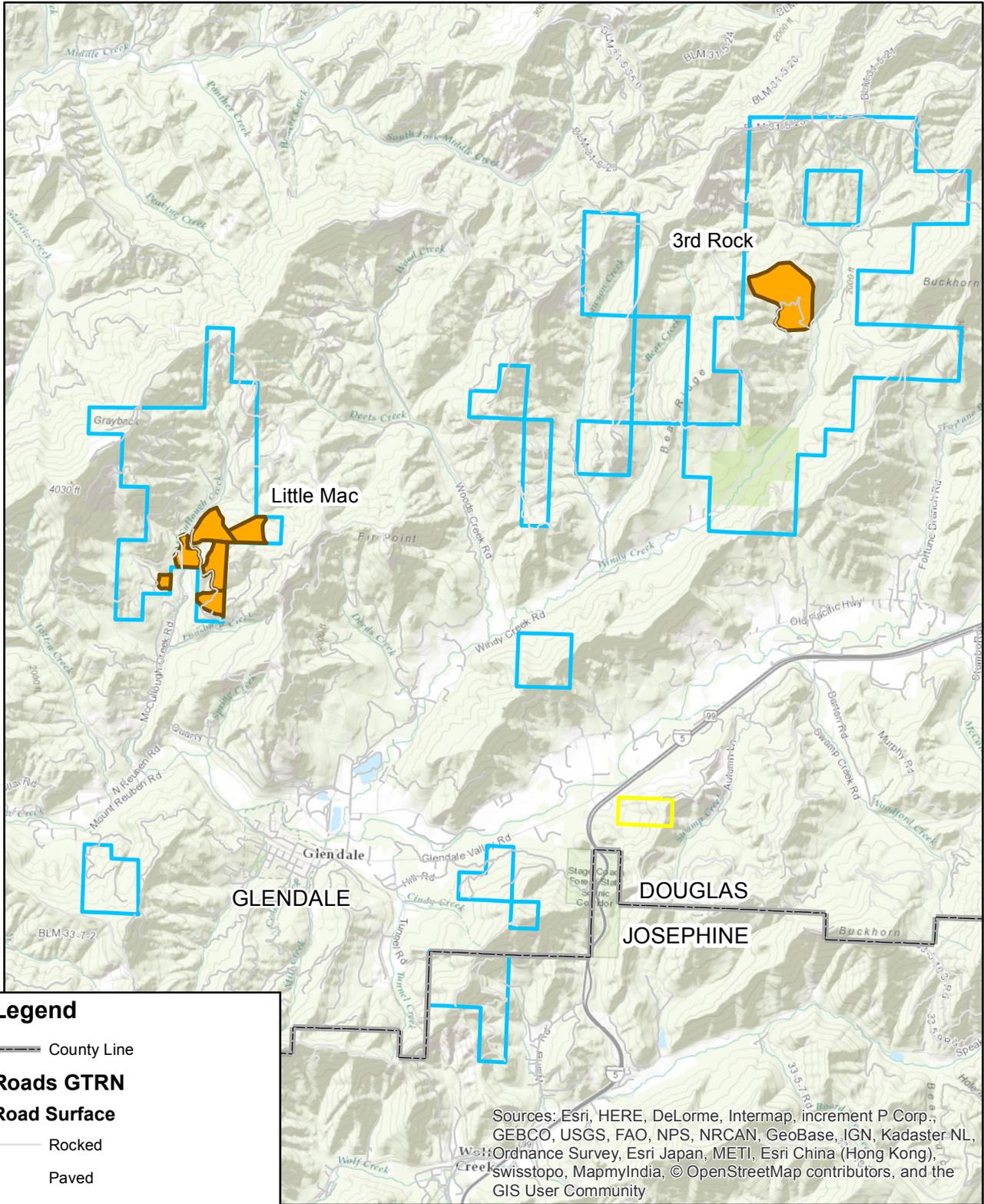
Date: 03/15/2016

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	50	\$283.00	\$14,150.00	25	\$283.00	\$7,075.00	75	\$21,225.00
Interplanting	25	\$283.00	\$7,075.00	25	\$283.00	\$7,075.00	50	\$14,150.00
Underplanting			\$0.00			\$0.00	0	\$0.00
Tree Protection-Barriers			\$0.00			\$0.00	0	\$0.00
Tree Protection-Direct Control			\$0.00			\$0.00	0	\$0.00
Site Prep-Chemical- Aerial			\$0.00			\$0.00	0	\$0.00
Site Prep-Chemical- Hand			\$0.00			\$0.00	0	\$0.00
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			\$0.00			\$0.00	0	\$0.00
Release-Chemical- Aerial			\$0.00			\$0.00	0	\$0.00
Release,-Chemical-Hand	37	\$100.00	\$3,700.00	25	\$175.00	\$4,375.00	62	\$8,075.00
Release-Mechanical-Hand			\$0.00			\$0.00	0	\$0.00
Precommercial Thinning			\$0.00			\$0.00	0	\$0.00
Pruning			\$0.00			\$0.00	0	\$0.00
Other			\$0.00			\$0.00	0	\$0.00
<b>Totals</b>	<b>112</b>	<b>--</b>	<b>\$24,925.00</b>	<b>75</b>	<b>--</b>	<b>\$18,525.00</b>	<b>187</b>	<b>\$43,450.00</b>

\*Planting costs include all costs including seedlings (Planting \$105 and seedlings \$178)

Grant Funded Activities Management Activity	Board of Forestry			Common School Forest Lands			District		Funding
	Acres Planned	Average Cost*/Acre	Cost	Acres Planned	Average Cost*/Acre	Cost	Total Acres	Total Cost	
			\$0.00			\$0.00	0	\$0.00	
			\$0.00			\$0.00	0	\$0.00	
			\$0.00			\$0.00	0	\$0.00	
			\$0.00			\$0.00	0	\$0.00	

# Appendix B



## Legend

— County Line

### Roads GTRN

#### Road Surface

Rocked

Paved

Natural Unimproved

Other

AOP\_2017\_Unit\_Boundaries v2

### Ownership

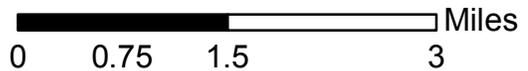
Board of Forestry

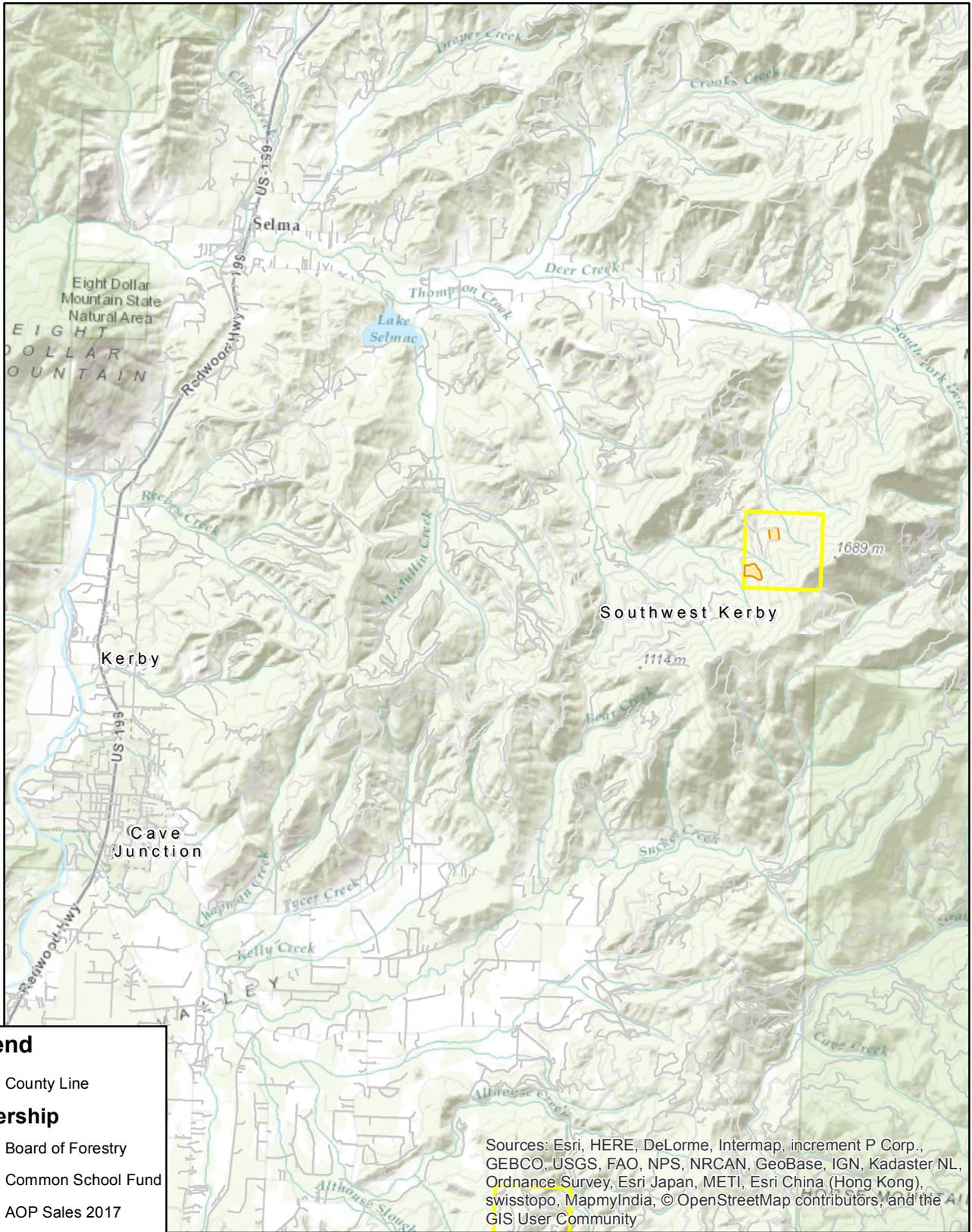
Common School Fund

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Vicinity Map  
2017 AOP Sales  
Southwest Oregon District

1:86,890





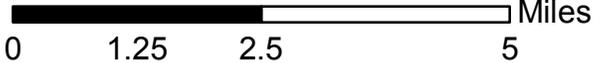
**Legend**

- County Line
- Ownership**
- Board of Forestry
- Common School Fund
- AOP Sales 2017
- Roads GTRN**
- Road Surface**
- Rocked
- Paved
- Natural Unimproved
- Other

Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Vicinity Map  
 2017 AOP Sales  
 Southwest Oregon District

1:121,964



# Appendix C

## **Consultations with Other State Agencies**

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

- Proposed harvests within the Provincial Circle of northern spotted owls have been sent to US Fish and Wildlife Service for review.
- 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.
- No written comments from ODFW have been received to date.

# Appendix D

## Public Comment Process for the 2017 AOP

The Oregon Department of Forestry held a formal 45 day public comment period for the 2017 Annual Operations Plans from April 4 through May 20, 2016.

The purpose of the Public Comment Period was to provide an opportunity for the public to review the AOPs, ask questions, make recommendations and offer comments. As a public agency, ODF strives to operate in the best interest of Oregonians. We provide opportunities for public participation to assist us in securing the greatest permanent value from state forests for all Oregonians.

Public comments and the Program's responses are available upon request.

# Appendix E

Pre-Operations reports available upon request

# Appendix F

## **Implementation Plan – Minor Modification of 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 A-3 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 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. The forest is over-classified in the complex structures at 48% of the forest. During the interim prior to a new implementation plan, it is necessary to assess individual units to determine where surpluses exist.

In a few cases, the existing stand does not have the characteristics for developing complex structure either naturally or through management (e.g. madrone 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. This particular stand currently shows as a layered Stand, but it is actually an open grown conifer stand with shrubs and hardwoods in the understory. This stand is a good candidate to reclassify to general in order to meet the harvest objective and balance constraints.

Table 2. Minor Landscape Design Modifications

Operation/Unit	Modification	Acres Added	Acres Removed
Southwest Kerby	Change LYR to GEN		21

# Appendix G

## Implementation Plan – Minor Modification of Partial Cut Acreage Range

The Southwest Oregon District Implementation Plan (IP) under the Southwest Oregon State Forests Management Plan was completed in 2003. The plan provides for minor modifications as approved by the District Forester. Minor modifications are any modification that does not meet the definition of major modification included in the IP document. (Major modifications are those revisions that result in changes to the annual harvest level ranges of more than 25% based on the combined acreage of regeneration and partial cut harvests.)

### **Background:**

The district plans a minor modification to the range of clearcut and partial cut acres based on several considerations.

- Periodically, there is a need to reevaluate forest-wide landscape management. This is an effort to create a more flexible mix of harvest outputs that better accommodate operations, age classes, and constraints to harvest planning.
- Stand conversion on hardwood stands are low value, but nevertheless need to be converted to increase productivity of the land base.
- During the implementation of the FMP the district has partial cut many acres to create stand complexity and structure. The opportunity and need to continue partial cuts at the same rate has decreased.

As a result, the district has prepared a minor modification to the acres ranges in Table 1, Annual Operations Plan Objectives, Annual Harvest Objective, Volume and Acres in the District IP.

### **Southwest Oregon District Minor IP Modification:**

The Southwest Oregon District Partial Cut range in the Southwest Oregon Implementation Plan is 150 – 270 acres of partial cut and 0 acres of clearcut. It was adjusted in a minor modification in a Memorandum dated April 27, 2007 as shown in Table 1 and in Table 8-7 of the 2003 IP. The proposed change is considered a minor modification and will change the clearcut harvest to 50-80 acres and the partial cut to 140 - 220 acres to provide flexibility and the ability to apply appropriate silviculture prescriptions on the landscape. This change in acres totals 22% from the 2003 IP, under the 25% allowed for a minor modification. These changes will go into effect in the 2017 AOP.

Table 11. Annual Harvest Objective, Volume and Acres

Volume (MMBF)	Clearcut (Regeneration Harvest) Acres	Partial Cut Harvest Acres
(2007 I.P.)	0 - 50	150 - 270
(2016 Modification)	50 - 80	140 - 220