

WEST OREGON DISTRICT 2018 ANNUAL OPERATIONS PLAN

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OVERVIEW

This plan describes the activities and outcomes that Oregonians can expect to see on State Forests in the West Oregon District for Fiscal Year 2018 (July 2017 - June 2018).

Forests on the West Oregon District are actively managed, and are valued by many Oregonians for their mixture of environmental, economic, and social benefits. This plan supports this mixture and provides a balance of these benefits as required by Oregon Administrative Rule (OAR 629-035-0020). We strive to manage the forest sustainably, so that the benefits from the forest can be delivered into perpetuity. The forest harvesting is planned at a sustainable level; a level that our computer models suggest can be harvested year after year without reduction.

Forest habitat is expected to develop so the forest has a mixture of habitat types for all of Oregon's native wildlife. Recreational opportunities are diverse and of high quality, allowing for off-highway vehicle usage, bicycling, hiking, hunting, horseback riding, and more, striving to minimize user and environmental conflicts in the context of a working forest.

Managing a large public forest has its challenges. In addition to the challenges of providing the opportunities described above, the forest is expected to be financially self-supporting. About two-thirds of the revenues from Board of Forestry (Forest Development Fund (FDF)) timber sales go to local counties and other taxing districts, including schools. The revenue on "Common School Fund" Lands (CSL), owned by the State Land Board, goes directly to the Common School Fund which is managed by the Department of State Lands. ODF uses the remaining third of the FDF revenue to manage the forests and keep them healthy, through activities including fire protection, tree planting, thinning, research and monitoring, recreation services, road maintenance and stream improvement. These activities on CSL are funded by billing the State Land Board. Financial constraints and a reduction in state forests staffing is currently limiting the ability to conduct many activities and you will see this theme throughout the year's plan.

Every year on the West Oregon District, we learn new things and find new challenges and opportunities. In preparing this plan, we have consulted with geotechnical specialists, wildlife biologists, fish biologists, aquatic specialists and engineers; and will be seeking input from local tribes, adjacent landowners, and a variety of interest groups.

ODF requested review and comments on our plan from others, including the Forest Trust Land Advisory Committee (representing the counties that deeded land to ODF), the State Forests Advisory Committee (SFAC - composed of Oregonians representing many interests), Oregon Department of Fish and Wildlife, the US Fish and Wildlife Service, motorized and non-motorized recreation users, hunters, fishermen, and wildlife advocates, as well as Oregonians in general. The public comment period ran from March 20 – May 4, 2017.



A short summary of activities planned for the coming year:

- Planting 170,000 trees on 400 acres and conducting vegetation and animal damage management activities on approximately 1500 acres to ensure the survival and growth of these plantations.
- Maintaining a 313 mile road network that provides access to timber harvest, other forest management activities, as well as various recreational opportunities. Improve and maintain roads to ensure ditch water is dispersed and filtered, keeping runoff from entering streams.
- Conducting surveys for northern spotted owls and marbled murrelets to protect their habitat and comply with federal laws. Surveying numerous streams for the presence of fish.
- Protecting streams and water resources through a series of buffers and seasonal restrictions activities.
- Continuing to address ice damaged stands from the November 2014 Ice Storm. Many of the timber sales in this plan contain timber damaged during this event.
- Providing large wood for a stream enhancement project in partnership with the Oregon Dept. of Fish & Wildlife. This cooperative project will occur on Long Prairie Creek in Lincoln County and will also include site preparation and tree planting along the stream buffer by the district's dedicated Mill Creek inmate crew.
- Habitat development projects such as retaining green trees in clearcut areas, and leaving down wood, all for wildlife benefits in harvest areas and future forests.
- Reviewing District roads to develop plans to block or vacate roads to help manage trash dumping, off-road use and irresponsible target shooting.
- Beginning the planning cycle to harvest approximately 11.8 million board feet of timber volume, through timber harvest operations, generating revenue of an estimated \$3.6 Million. This harvest level is in alignment with longer term plans and modeling to ensure it is sustainable and promotes the development of a mixture of habitat types across the landscape.
- Providing a safe and clean environment for the myriad of dispersed activities that occur across the forest – hunting, camping, angling, sight-seeing, target shooting, mushroom picking, etc.
- Maintaining and managing the existing motorized and non-motorized trail networks through adopt-a-trail agreements, striving to protect the trail investments, provide for user safety, and protect water quality.
- Supporting the pre-planned organized motorized and non-motorized events. Evaluating new recreational proposals for fit with forest goals.
- Providing a firewood cutting program and miscellaneous forest products permits (salal, mushrooms, etc.) as done in FY 2017.
- Supporting ongoing research and educational opportunities (i.e. Oregon State University's College of Forestry Capstone Class) on the district, in partnership with research cooperatives and universities.

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WEST OREGON DISTRICT

2018 ANNUAL OPERATIONS PLAN

INTRODUCTION

This annual operations plan (AOP) is written in alignment to the district's 2012 Implementation Plan. The AOP covers the State Forest lands managed by the West Oregon District for Fiscal Year (FY) 2018, which begins July 1, 2017 and ends June 30, 2018. It describes how the activities and projects undertaken by the district will achieve the goals and objectives of the 2012 West Oregon District Implementation Plan (IP) and the Northwest Oregon State Forest Management Plan (FMP). Refer to the district IP for more specific information on history, physical characteristics, and other resource information on the district.

The management activities planned for FY 2018 are based on the range of objectives established in the *2012 West Oregon District Implementation Plan* (Table 1 below), which are described in the 2015 IP Minor Modification addressed below, as well as the assumption that budget allotments will be similar to FY 2017.

This AOP proposes a minor modification of the Landscape Design. The modification will be finalized and approved prior to the approval of the AOP. Appendix F outlines the proposed IP landscape design modification. The summary document of the AOP is divided into five categories: Integrated Forest Management, Planning, Public Information and Education, Administration, and Appendices.

The proposed harvest operations are planned to be laid out, contracts completed, and auctioned or submitted to Salem for processing during the FY 2018 time period. The actual on-the-ground operations will likely not occur during FY2018 due to the time lag associated with contract duration, which could be one to three years after auction. In contrast, reforestation, young stand management, recreation management, and planning activities will be carried out during the FY 2018 time period. Proposed harvest operations will generate income for Benton, Lincoln and Polk Counties and their taxing districts and for the Common School Fund. Harvest income will also contribute to the financial viability of the State Forests Division. The Oregon Forest Resources Institute's (OFRI) 2017 Forest Facts publication sites an economic estimate that every 1 million board feet of timber harvested creates or retains about 11 forest sector jobs.

A 45-day public comment period ran from March 20, 2017 through May 4, 2017. The District Forester considered the comments received during this period and made changes or modifications that were determined necessary, prior to approving the AOP.

At the close of the public comment period, the District Forester forwarded these changes with any public comments to the Area Director and State Forester for review and approval. Appendix D describes the results of the public involvement process of this AOP.

The accomplishment 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 Oregon Department of Forestry website at <http://www.oregon.gov/odf/Pages/reports.aspx>.

INTEGRATED FOREST MANAGEMENT **OPERATIONS**

Timber Harvest Operations

Overview of Timber Harvest Operations

Planned timber harvest operations are within the total acreage range objective in the District Implementation Plan (IP). Activities in the AOP will contribute revenue to the counties and Common School Fund with the overall objective of harvesting 11.8 MMBF.

The FY2018 harvest operations are projected to generate gross revenues of approximately \$3,852,150. With an approximate total project work cost of \$280,100 anticipated, the net revenue produced is expected to be about \$3,572,050. Of this net revenue, approximately \$3,357,030 will be generated from Board of Forestry lands and the remaining \$215,017 will come from Common School lands. Refer to the Appendix A, “Timber Harvest Operations - Financial Summary” table for more detail on volumes and values.

In addition to revenue from timber sales, the district is anticipating selling approximately 70 minor forest products permits resulting in an additional \$7,000 of revenue.

Table 1 compares the proposed acres by harvest type¹ and the resulting volume in this AOP to the harvest acre ranges and volume specified in the 2015 IP Minor Modification. There are seven primary sales with a total planned harvest acreage of 795 net acres (approximately 2.2% of the district’s total acreage). Volume is 11.8 MMBF (11.2 MMBF conifer and 0.6 MMBF hardwood) which is slightly below the annual volume objective. The anticipated

¹ The definitions of the harvest types used to describe timber harvesting on State Forests can be found on the [State Forests website](#) under Forest Management and Planning. Briefly, a Modified Clearcut is the most common of three type of Regeneration Harvest (or clearcut) that may occur on State Forests. The defining characteristics of Modified Clearcuts are that they meet the structural component standards of the FMP (green tree, snag, and down wood).

harvest acres, volume, and revenue for each proposed operation in this AOP are listed in the “Harvest Operations – Financial Summary” table in Appendix A, while a vicinity map of these harvest operations can be found in Appendix B.

Table 1. Annual Operations Plan objectives compared to annual objectives identified in the 2012 West Oregon District Implementation Plan (modified in 2015). Harvest values are in net acres.

Annual Harvest Objectives	Modified IP Annual Objective		2018 AOP Objective
	Low	High	
Volume (MMBF)	12.0		11.8
Partial Cut Harvest	0	1,200	505
Regeneration Harvest	255	400	290

The net acres listed in Table 1 and in the individual Pre-Operation Reports (Appendix C) excludes the acreage contained in roads, stream buffers and no-harvest areas within the operation areas. The net acres reflect the amount of ground that will actually be harvested.

The district has included 4 alternate operations in this AOP. These alternate operations may be used to replace primary operations that cannot be completed as planned.

All of the primary and alternate harvest operations and many of the other forest management activities have been review by ODF’s wildlife biologists, aquatic specialist, geotechnical engineer, staff engineer, and operations coordinator, as well as fish and wildlife biologists from the Oregon Department of Fish and Wildlife. Information on operations that will occur within non-habitat buffers of Marbled Murrelet Management Areas has 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 Department of Agriculture 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 smaller additional operations targeting infrastructure maintenance may also produce timber volume during the 2018 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.

During FY 2018, regeneration harvests on the District will all be modified clearcuts. Partial cut harvests will include both light and moderate thinning.

Regeneration Harvest - The IP states that regeneration harvesting will occur primarily in areas designated as DFC GEN. Most of these harvests will be in Understory (UDS) stands and some will be in Closed Single Canopy (CSC) stands. The 290 acres of modified clearcut harvest (Primary Operations) in this plan consists of four timber sales and a portion of a fifth sale. Stands range in age from 25 - 95 years old. In these units, 223 acres are located in areas designated as DFC GEN and 67 acres are located in areas designated as DFC Complex. The DFC of these 67 acres will be changed in a minor modification to the IP

(see Appendix F). The current condition of these stands by acreage is 92% UDS, 8% CSC and <1% LYR. Approximately 75% of these acres have light to severe ice damage.

Partial Cut Harvest – The majority of operation areas included in this AOP will employ standard thinning prescriptions on stands designated as DFC GEN. In the FY 2018 operations plan, 505 acres of the partial cutting (Primary Operations) are planned in two timber sales and in a portion of a third sale. These stands range in age from 27 - 50 years old. All stands are designated as DFC GEN. All stands designated for thinning consist primarily of Douglas-fir with some western hemlock, red alder, and Bigleaf maple and are currently classified mostly as CSC or UDS stand types. See Appendix A, Forest Structure Summary.

Table 2 illustrates the planned versus sold volume history over the life of the current District IP. The planned harvest volume for FY 2018 is slightly below the annual IP harvest objective. The reason for this is that the district is still targeting ice damaged stands for clearcut harvest. Many of these stands are younger and have lower volume than the typical stand that would be targeted for final harvest. With seven primary sales planned, it is not feasible from a staffing/workload standpoint to add additional sales.

Table 2. Accomplishment of AOP Harvest Volume Compared to IP Annual Objective (MMBF)

Fiscal Year	IP Annual Objective	AOP Planned Volume	AOP Sold Volume	Cumulative Difference from Objective ¹
2013	10.0	10.0	7.8	-2.2
2014	12.0	12.0	11.3	-2.9
2015	12.0	13.2	9.6	-5.3
2016	12.0	13.4	12.8	-4.5
2017 (Current AOP) ²	12.0	12.8	13.1	-3.4
2018 (Draft AOP)	12.0	11.8		

1. IP Harvest Objective versus Sold Volume

2. Estimated Volume based on completion (prepared and sold volume) of 65% of the planned volume from the current AOP.

Structural Habitat Components

Structural habitat components such as green trees, snags and Down Woody Debris (DWD) are described in Chapter 4 of the NW FMP and may be considered for all harvest prescriptions.

The green tree retention target for regeneration harvest units is five trees per acre. Green tree arrangements for this AOP include; scattered individual trees, clumps of trees, and trees concentrated in and adjacent to riparian management areas.

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.

The FMP strategy for Down Woody Debris is to retain an average of 600 to 900 cubic feet of hard conifer logs per acre (class 1 & 2) during regeneration harvest. Stand Level Inventory data indicates that there is approximately 185 cubic feet of Class 1 & 2 conifer DWD per acre over the district. These numbers do not include additions from recent wind events or all of the snags & DWD created with recent timber sale contracts.

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

Within a given annual operations plan, snags and DWD may be retained at higher levels in some units and at lower levels in other units, with the intent of achieving the landscape targets outlined in the Forest Management Plan strategies. Post-harvest DWD results can be attributed to natural recruitment from green tree retention, residual logging slash, and tree topping.

Snag and Down Wood Inputs - In all five of the proposed primary sale modified clearcuts, five trees per acre will be left standing in the units which should provide future legacy trees. In time through natural processes, some of them will become down wood and snags. There are abundant snags and down wood in three of the seven primary sales due to ice damage which occurred in November 2014. An attempt will be made to leave some of the snags were they do not pose a safety risk. No effort will be made to add more.

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. Areas designated to become complex forest are indicated as either Layered (LYR) or Older Forest Structure (OFS). Stands not planned for LYR or OFS are designated as General (GEN) and include Regeneration (REG) stands, Closed Single Canopy (CSC) stands and Understory (UDS) stands. Areas that are not forested (such as meadows or rock outcroppings) are termed Non Forested (NF). A stand with a DFC of GEN may develop into any of the five stand structures defined in the Northwest Forest Management Plan.

The District's vision for future development of complex and general stands on the landscape is described and mapped in the 2012 District Implementation Plan. The Landscape Design has a goal of at least 31 percent of the district stands to be DFC – Complex structure, either Layered (LYR) or Older Forest Structure (OFS). The "Timber Harvest Operations – Forest Structure Summary" table in Appendix A 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.

The development of the landscape design during implementation planning is 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. This year the district is proposing a Minor Modification to the Landscape Design of approximately 67 acres. This minor modification is detailed in Appendix F.

Harvest Operations within Terrestrial Anchors and Aquatic Anchors

The IP implemented the State Forests' Species of Concern Strategies that specifically identifies fish and wildlife species of concern on the West Oregon District. Two of these strategies are Terrestrial Anchor Sites (TAS) and Aquatic Anchor (AA) sites.

Terrestrial Anchor Sites (TAS) are intended to benefit terrestrial wildlife species of concern, especially those associated with older forest or interior habitat conditions, those sensitive to forest fragmentation, or those that do not readily disperse across younger forest conditions. Management within a TAS is intended to be limited. When it does occur, it should emulate natural small-scale disturbance patterns, and should minimize short-term negative impacts to habitat. All areas that were designated as TAS were designated for the development of complex structure in the Landscape Design.

Aquatic Anchor (AA) sites are watersheds where salmon and aquatic amphibian conservation is of concern. Riparian management strategies beyond those described in the FMP will be applied within AAs. In addition, areas designated for the development of complex structure in the Landscape Design are clustered around streams important to fish in the AAs.

The Species of Concern Strategies provide long term goals for TAS and AA, with the management activities within those areas designed to achieve those goals. These strategies have not identified specific limits to the total area that can be harvested within these areas; however, the district and resource specialist will be tracking the harvest trends within these areas to ensure the harvest prescriptions and rate is consistent with the goals of these strategies.

Since the adoption of the TAS in 2012, the district has not planned an operation in these areas. In the future, great care will be given in selecting stands for harvest and developing prescriptions in these areas to ensure that these harvest activities achieve the goals of the TAS. Table 3 summarizes harvest operations within the TAS proposed in the 2018 AOP

and the cumulative operations planned in TAS since the strategy was adopted (AOPs 2013 through 2018).

Table 3. Summary of Harvest Operations within TAS (Net Acres and Percent)

Terrestrial Anchor Site (TAS)	Current AOP (FY 2018) Planned Harvest		Cumulative Sold/Planned Harvest (AOP 2013 to Present)	
	Clearcut	Partial Cut	Clearcut	Partial Cut
Entire District	290	505	1,818	2,228
Total – 36,633 ac % of Acres	< 1%	1.4%	5%	6%
Green Mountain	0	0	0	0
Total – 1,625 ac % of Acres	0.0%	0.0%	0.0%	0.0%
Wolf Creek	0	0	0	0
Total – 1,001 ac % of Acres	0.0%	0.0%	0.0%	0.0%
All TAS	0	0	0	0
Total – 2,626 ac % of Acres	0.0%	0.0%	0.0%	0.0%

Table 4 summarizes harvest operations within the AAs proposed in the 2018 AOP and the cumulative operations in AAs since the strategy was adopted (AOPs 2013 through 2018).

Table 4. Summary of Harvest Operations within AA (Net Acres and Percent on ODF)

Aquatic Anchors (AA)	Current AOP (FY 2018) Planned Harvest		Cumulative Sold/Planned Harvest (AOP 2013 to Present)	
	Clearcut	Partial Cut	Clearcut	Partial Cut
Entire District	290	505	1,818	2,228
Total – 36,633 ac. % of Acres	<1%	1.5%	5%	6%
Rock Creek	44	102	150	150
Total – 4,768 ac % of Acres	< 1%	3%	2%	3%
Upper Yaquina – Amphibian Emphasis	0	0	65	0
Total – 3,493 ac % of Acres	0%	0%	2%	0%
Wolf Creek	0	0	150	185
Total – 3,194 ac % of Acres	0	0%	4.5%	5.5%
All Aquatic Anchors	44	102	365	335
Total – 11,455 ac % of Acres	<1%	<1%	3%	3%

Summary of Timber Harvest Operations by Basin

In the following section, the commercial forest management operations planned for FY18 will be summarized in the context of the five management basins on the West Oregon District. This section is a summary of the operations by basin and is not meant to completely describe the planned operation. Individual pre-operation reports include information regarding riparian protection and structural components such as snags, down wood, and green tree retention (see Appendix E).

Table 5. Summary of Timber Harvest Operations (Primary Sales) in each basin. All values are in net acres.

Basin	2018 AOP	
	Partial Cut	Clearcut
Big Elk Creek	256	49
Luckiamute River	0	0
Marys River	66	101
Siletz River	183	46
Upper Yaquina River	0	94

Big Elk Creek Basin

Primary Sales

Black Ice – A 22 acre portion of this sale is in this management basin. The largest portion of the sale is located in the Mary’s River basin. See description under Marys River Basin.

Camp Adeer – This proposed sale consists of 27 net acres of modified clearcut. The timber types range from 25 - 72 year-old DF stands with scattered hardwoods. The current condition is UDS and the DFC is GEN.

Powerline Thin – This proposed sale consists of two partial cut areas totaling 256 net acres. These areas consist of 30 year old Douglas-fir plantations. The current condition of these areas is CSC and the DFC is GEN. One of the Mt. Baber ATV Club’s trails runs through a portion of Area 1.

Alternate Sales

Little Elk Thin – A small portion of Area 2 is located in this management basin. Most of this sale is in the Upper Yaquina River Basin. See description under Upper Yaquina River Basin.

Cold Boulder – A 4 acre portion of this sale is in this management basin. The largest portion of the sale is located in the Upper Yaquina River Basin, see description there.

Luckiamute River Basin

Primary Sales

There are no primary operations planned in this basin for FY 2018.

Alternate Sales

There are no alternate operations planned in this basin for FY 2018.

Marys River Basin

Primary Sales

Frosty Paw – This sale consists of two modified clearcut areas totaling 69 acres and one partial cut area of 66 acres. All areas are Douglas-fir plantations with a current condition of CSC or UDS and a DFC of GEN. All areas were damaged in the 2014 ice storm, the two areas earmarked for clearcut harvest were especially hard hit.

Black Ice – The majority of this sale is in this management basin. This sale is a two area modified clearcut in 42 to 85 year old mixed Douglas-fir and alder stands. Most of these stands were commercially thinned previously. There is one acre at the bottom of Area 2, next to the stream buffer, that the inventory states is 156 years-old. This one-acre portion will likely be left as a Green-tree retention area. Both sale areas were heavily damaged in the 2014 ice storm. The current condition of the stands is mostly UDS, but there is 16 acres that inventory states is LYR. The DFC was GEN, LYR and OFS. A minor modification will be done in this AOP to change the DFC of the entire sale area to GEN (see Appendix F).

Alternate Sales

There are no alternate operations planned in this basin for FY 2018.

Siletz River Basin

Primary Sales

Rudder Road – This 44 net acre proposed modified clearcut is comprised of one area, the majority of which is 82 year-old Douglas-fir with scattered hardwood. The current condition is UDS and the DFC is GEN. This sale is within the Rock Creek Aquatic Anchor. Increased protection measures along small perennial Type N streams will be implemented. Most of this sale area was commercially thinned in 2002.

Thin Women – This proposed sale consists of five partial cut units totaling 183 net acres and one clearcut area of just two acres. The areas to be thinned consist of 31 - 50 year old Douglas-fir plantations, some of which have never had density management (i.e. no PCT). The current condition of these areas is CSC or UDS and the DFC is GEN. Area 6, the small clearcut, is approximately 81 years old and was commercially thinned in 2001, its current condition is UDS and the DFC is GEN. At least portions of all areas are within the Rock Creek Aquatic Anchor. No additional stream protection measures are required since this is a thinning operation (the clearcut area does not contain streams). In Area 1, 3, 4 and 5, thinning will occur within the non-habitat buffers of MMMAs. Seasonal restrictions and other protection measures will be required.

Alternate Sales

Lost Steere Combo – This proposed sale consists of two modified clear cuts totaling 49 net acres. Both areas are 55 year-old DF planted stands with scattered RA. Area 2 was commercially thinned in 2005. The current condition of these areas is UDS and the DFC is

GEN. All Areas are within the Rock Creek Aquatic Anchor. Increased protection measures along small perennial Type N streams will be implemented in Areas 1 and 2.

Little Thin on the Prairie – This proposed sale consists of three partial cut units totaling 129 net acres. These areas consist of 37 year old Douglas-fir plantations. The current condition of these Areas is UDS and the DFC is GEN. All areas are thinning in non-habitat buffer of the West Prairie MMMA. Seasonal restrictions and other protection measures will be required.

Upper Yaquina River Basin

Primary Sales

Black Ice – An 8 acre portion of this sale is in this management basin. The largest portion of the sale is located in the Mary's River basin. See description under Marys River Basin.

Ice Hole – This proposed modified clearcut sale consists of one area made up of 43 to 96 year-old Douglas-fir and alder stands. The younger stands are plantations which were commercially thinned between 1995 and 2002. The area was moderately impacted by the 2014 ice storm. The current condition of all stands is UDS, most of the DFC is GEN; however, the DFC for one stand is LYR. A minor modification will be done in this AOP to change the DFC, so that the entire sale area is DFC GEN (see Appendix F).

Alternate Sales

Cold Boulder – This 91-acre proposed sale is a modified clearcut in 36 to 46 year old Douglas-fir plantations that were commercially thinned between 1998 and 2007. The area was moderately impacted by the 2014 ice storm. The current condition of all stands is UDS and the DFC is GEN.

Little Elk Thin – This proposed sale consists of three partial cut units totaling 262 net acres. The sale areas consist of 29-32 year old Douglas-fir plantations. The current condition of these areas is UDS or CSC and the DFC is GEN, with the exception of a portion of Area 3 which is in the non-habitat buffer of Salmon Creek MMMA. The DFC for that portion of Area 3 is LYR. Seasonal restrictions and other protection measures will be required. A small portion of Area 2 is located in the Big Elk Creek Basin.

Forest Roads Management

The primary transportation focus is to protect and secure access for forest management activities. This involves constructing new roads where needed, vacating old roads that no longer meet current standards, and maintaining or upgrading existing roads. Other resource management activities and other users are also considered in the transportation

planning. The approximately 313 mile transportation system provides access for timber removal, recreation, fire control and removal of other forest products.

Visions, guiding principles, and techniques that are the framework of the District's road management program are discussed in detail in the IP and the Forest Roads Manual (2000), and govern the planning and implementation of the activities discussed in this section. Planning of these activities are Level III plans, as discussed in the Forest Road Manual.

As listed in Appendix A "Forest Roads Summary" table, it is estimated that 0.8 mile of new road construction and 41 miles of road improvements will be included with the FY 2018 operations plan. These roads will provide improved access for hauling forest products from the operation areas.

The District has conducted a detailed inventory of the District's road system, collecting information on road surfacing, condition, drainage, and stream crossings. This inventory was completed in conjunction with the Oregon Salmon Plan. No update to this inventory will occur this year unless the district is able to fill the vacant NRS 1 position. For the FY 2018 operations plan, existing roads and drainage systems on designated haul routes of timber sales have been evaluated to determine high priority road or drainage structure maintenance, abandonment, replacement, or improvement projects.

Road maintenance and improvement will be mostly confined to the haul routes and will be part of timber sale project work. Some roadside brushing and spraying may occur outside of the haul routes, but in the vicinity of a timber sale. There will be no road vacating. The District has planned for wet weather, limited wet weather, and dry weather hauling by using existing rocked roads, improving existing dirt roads to a surfaced condition and surfacing some new construction. Drainage structures that are in need of replacement, and are on the haul routes, will be replaced with the timber sale that will use that haul route.

Road maintenance will consist of re-shaping roads with a road grader, and applying spot rock where needed. Replacement of wear rock due to hauling will be applied post-harvest. Road improvement will consist of re-opening existing unsurfaced roads and applying a lift of rock for winter harvest operations, adding lifts of rock to existing surfaced roads, road widening, side-cast pull-back and drainage structure upgrades. Drainage structure maintenance will consist of cleaning culvert inlets and outlets.

Emergency road repairs will be covered through timber sale contract modifications or unbudgeted service contracts. Deferred maintenance and/or repairs may be necessary.

Road Construction

Activities under this Plan will add approximately 0.8 mile of roads to the District's active road system. Since the collector roads are already in place on the district, any new roads will be short, low use, single lane spur roads averaging 16 feet wide. Approximately 5% of the roads to be constructed will be rocked with base rock, providing an all season surface for harvest operations only. Natural surfacing will be the final condition for the remaining new

roads. The natural surface roads will be water barred, and blocked to restrict public vehicle access after harvest and/or prior to the beginning of the wet season. Restricting access to natural surface roads will control soil erosion and ensure that the drainage systems remain intact.

All roads to be constructed will be built on gentle, stable topography, to minimize slope stability concerns, soil erosion, and downstream water quality issues. However, if it is determined during timber sale layout that a new road must be constructed through steeper terrain, the staff engineer and area geo-technical specialist may be contacted and requested to conduct an onsite inspection and provide input related to mitigating any negative effects of road construction.

All road construction is classified as surfaced or unsurfaced spurs. All newly constructed roads will be built on side slopes less than 65% or on ridge tops. End-haul and full bench construction will be required on slopes exceeding 50%. All excavated material will be used in the constructed road prism or placed in stable waste areas. All road construction projects are directly associated with this year's sale plan.

Road Improvement

All road improvement projects are associated with commercial forest management operations and consist of upgrading the wet weather haul capacity of the road. All of the improvement activities will be performed on low use spur roads and will be accomplished using a dozer or road grader. There are no drainage structure issues associated with any spur improvement.

Road Access Management

All surfaced and newly constructed or improved unsurfaced roads are categorized as active use roads. The unsurfaced roads not located behind a locked gate, will be blocked and water barred in the wet season. After the wet season, these roads may be re-opened and harvest activities may resume. Once harvesting is completed, these roads will be blocked, water barred, and temporary culverts removed until the next harvest entry. Road surfaces may be grass seeded to reduce erosion and protect water quality.

All haul routes which access the FY2018 timber sales are surfaced, all weather roads and are generally accessible to the public. There are exceptions where these roads access private timber lands and are gated. Easements are already in place for all primary haul route roads accessing the FY2018 timber sales. There are no temporary access permits across private lands or approach permits to county roads required for the FY 2018 timber sales.

Road Maintenance

Maintenance required for timber sales will be mainly limited to haul routes, or in the immediate vicinity of a timber sale. Graded haul routes will have the ditches and culvert catch basins cleaned where needed. Where significant, slough material will be removed from ditch lines or road surfaces and placed in stable waste areas.

Road maintenance for roads being used for timber sale access becomes the responsibility of the timber sale purchaser once sale activity has begun.

If a storm event causes a need for road repair or maintenance in the vicinity of a timber sale, then an attempt will be made to modify the sale to include this repair. If emergency road repair can't be conducted through a timber sale modification, then it will be taken care of through a service contract. The district has a limited amount of money budgeted towards road repair projects.

Roadside Spraying

Roadside vegetation control is conducted along roads with encroaching vegetation. The objective is to reduce vegetation along "right-of-ways" for improved sight distance for safety, maintaining access, and protecting the investment in the transportation infrastructure. In the past, this work has been conducted by the district Roads Specialist. This position is currently unfilled and may remain empty during the FY 2018. If that is the case, then roadside spraying will be added to timber sale project work to be conducted on timber sale access routes and roads immediately surrounding the access. Any needed spraying outside of these areas will have to be deferred. Approximately \$2,000 has been added to the budget for purchase of herbicides. It is unknown at this time how many miles the district will be able to treat.

District activities to control roadside noxious weeds consists primarily of controlling Scotch broom, false brome and black berries. Most of these infestations start along roads and spread from there. Other species, which are occasionally targeted for control, include knotweeds, reed canary grass and meadow knapweed. Approximately 5 miles of roadside noxious weed control is planned during this fiscal year and will be accomplished using the Mill Creek inmate crew. This will be spot treatment, utilizing backpack sprayers.

Additionally, all logging equipment will be inspected for cleanliness and washed if necessary before entering and leaving STATE lands to control the spread of noxious weeds.

Management of Rock Supply

The district does not contain any rock pits, therefore rock must be purchased from an outside source and trucked to project work sites. Purchased rock (and rock hauling) is expensive and often constitutes a large portion of project work costs. By developing stockpiles at strategic

spots around the district and stocking them as part of high value timber sale's project work, the rock can be used and costs reduced on other timber sales which have less financial viability. There are 8 stockpiles on the district which are currently stocked with rock, with an average of about 300 cy per stockpile. The district will continue to maintain rock stockpile volumes in FY 2018 at about the same level as in previous years.

Land Surveying

Approximately 6.0 miles of property line previously surveyed will need to be reflagged. Approximately 1.5 miles of property line will need to be surveyed and established. There are 22 property corners which will need to be located and their associated bearing trees painted. The district has budgeted \$10,000 for hiring a qualified temporary employee to conduct this survey work. Other state forest employees will be needed to help with surveying activities.

Reforestation and Young Stand Management

The purpose of conducting reforestation and young stand management operations is to prepare for, establish, or maintain a new forest, or new forest layer, through operations such as site preparation, tree planting and protection, vegetation management, pre-commercial thinning, and pruning. Another operation often associated with, but not limited to, young stand management is invasive species control. Through the use of these operations many of the silvicultural goals and objectives of the FMP and IP are met.

Specific information regarding operations can be found in Appendix A, "Reforestation and Young Stand Management Summary" table, and in the discussion, below.

Due to current budget limitations, reforestation and young stand management activities are limited to those essential to forest establishment. Accordingly, these activities are readily supported within the base budget. Alternatively, other management operations such as stocking density control (Pre-commercial Thinning), pruning and low priority vegetation management (release), are not be fully funded.

Site Preparation

The purpose of site preparation is to prepare areas for replanting after harvest operations or rehabilitation activities by removing or controlling the vegetative or slash cover. This allows seedlings to become established while reducing the competition with other vegetation for moisture, sunlight, and nutrients. Both chemical and mechanical (slash piling and burning) site preparation may be used on the same acreage. During this operations plan period, one or more site preparation activity will be conducted on approximately 475 acres, with approximately \$78,000 in supplies and labor anticipated to be allocated for these activities. This work includes mechanical brush and slash piling, pile burning, and chemical site preparation. Contractors, inmate crews and district personnel will all conduct portions of this work.

Seedlings/Nurseries/Orchards

The district has ordered about 180,000 seedlings to be planted during this fiscal year. Seedlings are primarily barefoot, with a few container grown (plug) trees too. Seedlings will come from PRT, WDNR, IFA and Lewis River nurseries. There has been some fall-down reported from one nursery so far, due to freeze damage, which will result in about a 4% reduction in overall numbers. Seedling numbers are already tight, so the district may need to purchase seedlings from other districts or off of the open market. Another 275,000 seedlings will be sown or transplanted during this fiscal year to be outplanted in FY 2019 and 2020.

All district Douglas-fir seedlings are grown from improved seed (medium to very high gain) which comes from the Burnt Woods (BW) Orchard at Schroeder Seed Orchard. The BW Orchard is a member of the Northwest Tree Improvement Cooperative. Every two years, the BW Orchard members conduct Controlled Mass Pollination (CMP) in order to collect small batches of very high gain seed. In order to obtain this seed, the district must conduct some of the pollination work themselves. At this time, it is uncertain if the district will have the manpower to accomplish this work (about 8 days/year). Western hemlock seedlings are grown from mid to high gain improved seed that is collected from the Hemlock Orchard at Schroeder Seed Orchard. The Hemlock Orchard is a 1.5 generation orchard. Western red cedar is also collected from the Schroeder Seed Orchard, from seed trees that were natural selections from the mid to north Oregon coast. The FY 2018 cedar seed collection will be the first crop harvested after the orchard was rogued to select for trees exhibiting high terpene levels. This seed may be available for sowing in FY 2018. Seedlings grown from this seed will be less palatable to deer and elk, so will not be as likely to be browsed. This will hopefully lead to the ability to forgo tubing of most/all of the planted western red cedar in the future. The district works with the ODF Geneticist to procure seed for growing Sitka spruce and grand fir. The current spruce seedlot comes from spruce tip weevil resistant seed grown in Canada. The grand fir is from woods run collections.

Planting

Tree planting operations are conducted for various reasons. These include meeting Forest Practices Laws, quickly establishing a new stand of trees after timber harvesting, and increasing species diversity in the area and across the landscape. Some planting (under planting) is intended to create an additional tree layer in a partial cut stand for increased structure and diversity. Planting will also ensure future opportunities and options for the management of stands to produce desired structures across the landscape. The IP indicates that annual reforestation acreage will be between 200 and 400 acres. About 420 acres are scheduled to be planted (initial planting and interplanting) during FY 2018 at a total estimated cost of \$121,000. Contract crews will conduct the work.

Initial Planting:

This type of planting is conducted after a timber harvest reduces the stocking level to a degree that more trees are required on the site. There are eleven harvest units that are planned for initial planting which add up to approximately 400 acres. Seedlings will be planted at a rate of 400 trees per acre (TPA), which is slightly below usual planting levels. This is being done in order to reduce costs. Seedling mixes will consist of Douglas-fir, western hemlock and western red cedar, with Sitka spruce added to the mix on the west side of the coast range and grand fir added on the east side of the coast range.

Underplanting:

This type of planting is conducted after thinning in order to introduce both species diversity and an additional future layer of structure into a stand. No underplanting will occur during FY 2018.

Interplanting:

This type of planting will occur on areas that were initially planted one to three years previous, but for various reasons (animal damage, disease, seedling/planting quality, etc.) seedlings did not survive in sufficient numbers. It is estimated that approximately 20 acres may need interplant. A variety of tree species will be planted, depending on the site conditions and availability of stock.

Vegetation Management

Release operations are conducted in established plantations to control undesirable vegetation that competes for moisture, sunlight, and nutrients. The objective is to retain preferred trees in the stand and maintain acceptable growth rates of the established stands. Vegetation management operations are also used to eradicate noxious weeds which may not actually threaten seedlings but which have the potential to spread and displace desirable vegetation. Vegetation management methods are either manual or chemical.

Manual Release:

Areas of manual release are typically small areas in young plantations that are either too close to streams or private property to treat with chemicals or where target vegetation is too large to be effectively treated with chemicals. This type of release will keep preferred trees from being overtopped by competing vegetation. About 50 acres of manual release is forecast to be accomplished at an estimated cost of \$14,000. This work will be done by the Mill Creek inmate crew and will be limited by the amount of acres that they can accomplish.

Chemical Release:

These operations vary from aerial applications targeting multiple weed species growing over entire young plantations to ground based backpack applications targeting individual undesirable plants. Approximately 335 acres of both ground-based and aerial chemical vegetation management is forecast for this period with an estimated cost of \$29,000.

Noxious Weeds

Sites will be evaluated for treatment as they are identified. Roughly 20 acres of chemical and manual vegetation treatment targeting noxious weeds is forecast for FY 2018. This acreage does not include roadside management. These operations are typically on small acreage and will target such noxious weeds as Scotch broom, false brome, and spotted knapweed. The treatment areas will be scattered through most all of our management basins. The work will be conducted by the inmate crew and by district personnel.

Tree Protection

Tree protection operations are conducted to reduce, control, or mitigate animal damage on desired trees in the stands. These operations are intended to maintain stocking and growth rates at acceptable levels. The District uses three methods to provide protection to trees: installing tubes over seedlings, applying a big game repellent to the seedling, or trapping animals (mountain beaver).

Tubing:

On this District, tubing has proven effective in most cases in keeping deer and elk browse on cedar to an acceptable level. Tubes will be installed on all of the approximately 22,000 western red cedar (WRC) planted during this period with an expenditure of about \$16,000. The work will be done by the Mill Creek inmate crew. WRC will be planted on portions of all of the areas designated for initial planting during this period. There are several units infected with *Phellinus weirii*, WRC planting will be heavier in these units.

Big Game Repellent (BGR):

BGR (Plantskydd) has been applied from time to time on WRC in the past and more recently to western hemlock and Douglas-fir on a trial basis. It appears to have helped prevent near total removal of western hemlock by big game species in problem areas. Plantskydd will likely not be applied during FY 2018 due to budget constraints.

Direct Control:

Mountain beaver trapping may occur on all of the units that are planned for planting during this period (approximately 400 acres). Assessments will be made after the units are

harvested as to the need for control work. Maintenance trapping will also occur in portions of units that were trapped previously that show continued high levels of mountain beaver damage (approximately another 50 acres). During FY 2018, this work will be done by the Mill Creek inmate crew.

Pre-commercial Thinning

Pre-commercial thinning (PCT) operations are conducted on stands that are above a desired stocking level. The operations generally have several objectives including the following: 1) reduce stocking to levels which will maintain diameter growth, and to a lesser extent height growth; 2) provide an opportunity for selecting residual trees based on initial growth, form, and defect, and 3) favor particular species that are needed to improve stand composition and diversity. The IP states that annual PCT acreage will be between 200 and 800 acres. Approximately 350 acres of plantations or patchcuts are in need of PCT during the FY 2018 AOP period. These are stands that are currently stocked with 400 or more trees/acre. In order for these stands to become financially viable commercial thinning within 10-15 years, they will need to be thinned.

The plantations needing PCT, range from 13 to 16 years old and are stocked with an average of 400 TPA of Douglas-fir and other conifer. PCT would increase the health and vigor of the stands by removing an average of 150 TPA of the smallest and/or most defective Douglas-fir trees. Most conifers other than Douglas-fir and most hardwoods would be reserved from cutting, thus maintaining the present diversity. Due to budget constraints, PCT conducted during this period can only be done by the Mill Creek inmate crew. It is unlikely that they will be able to accomplish as many acres of PCT as is needed.

Pruning

The purpose of pruning is to remove limbs in order to create future high quality clear wood, or to reduce the potential for disease. The IP states that annual pruning acreage may vary between 0 and 50 acres.

Pruning for White Pine Blister Rust:

Approximately 20 acres of white pine pruning may occur during FY2018. Any work done will be by inmate crews.

Stocking Surveys

Stocking surveys of two, six, and thirteen-fifteen year old plantations will continue. Approximately 600 acres are planned for surveying by district personnel.

Recreation Management

Current recreational activities on the District consist mostly of dispersed camping, sightseeing, hiking, hunting, and fishing. However, there are three sites that do receive some level of consistent visitor use during certain periods of the year. They are:

1. **Big Elk Creek**. This area has two primitive campsites along Big Elk Creek that have all weather access. These campsites are consistently used during summer weekends and through much of the hunting seasons.
2. **Baber Meadows**. The Mt. Baber ATV Club uses Baber Meadows as an ATV staging/riding area. This staging area provides access to a 32.6 mile trail loop on ODF and private land. The club schedules some organized riding events but riders use the trail system at other times of the year, as well. The other staging area at Salmon Creek provides closer access to the Mt. Baber trail system for those riders coming from the Willamette Valley.
3. **Black Rock**. A mountain bike club, the Black Rock Mountain Bike Association (BRMBA), has created and maintains about 9.5 miles of trails in the eastern portion of ODF ownership at Black Rock. The club schedules some organized riding events but riders use the trail system at all times of the year, as well.

Recreation planning and management are covered in the 2012 IP in detail. Current economic and funding constraints do not allow for development of additional recreation infrastructure. However, long term vision and goals (given improved economic conditions) are outlined in the IP.

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

The facilities at Baber Meadows include a restroom, an informational kiosk, an adjacent kid's ATV track, all weather access roads to camping and staging areas, nine surfaced trailer sites with picnic tables and fire rings, and two primitive camp sites. There is also an overflow parking area to the west of the meadows. The district pays for the pumping of the pit toilet. The facilities at the Salmon Creek Staging Area consist of a surfaced parking lot and an informational kiosk.

Facilities at Black Rock include a small parking area, a stunt area/gathering area and an informational kiosk.

Table 6. Developed Facility and Dispersed Campsite Projects

Project Name	Project Type	Work Resources	Project Description
Baber Meadows	None		
Black Rock	None		
Salmon Creek Staging	None		
Dispersed Camping on Big Elk Creek	Rock Surfacing on access road & camping sites	District Staff	30 cy of 1 ½-0" crushed rock will be added to 2 primitive campsites and their access road. Rock to be furnished through the Doe Over timber sale which is adjacent to the site.

Trails

The 32.6 mile ATV trail loop on ODF and private forest land will be maintained throughout the year by the Mt. Baber ATV club members. About 4.2 miles of the trail system is on State land.

Table 7. Motorized Trail Projects

Project Name	Project Type	Work Resources	Project Description
None			

The 9.5 mile mountain bike trail system in the Black Rock area will be maintained throughout the year by the Black Rock Mountain Bike Association.

Table 8. Non-Motorized Trail Projects

Project Name	Project Type	Work Resources	Project Description
None			

Volunteer Program

All volunteer activities are focused on the Mt. Baber ATV Club and Black Rock Mountain Biking use areas and are organized and managed by the two organizations.

Event Management Activities

The Mt. Baber ATV club generally hold a number of organized riding events during the fiscal year. Riders use the staging areas and trails throughout the year unless restrictions are in place that would temporarily curtail activities (i.e. fire season restrictions, active timber sales, etc.).

The Black Rock Mountain Bike Association (BRMBA) may have some organized riding events along with scheduled “work party” events. The trail system is used continuously throughout the year. BRMBA has been exploring options to find better access to the mountain bike trail system that would alleviate the need to travel through Camp Tapawingo, a private church camp, where the current access is. The District may provide some

administrative support to help in this exploration of new access to State Forest ownership in conjunction with BRMBA.

Other Integrated Forest Management Operations

Aquatic and Riparian Resources

Stream restoration is a Forest Management Plan aquatic and riparian strategy for maintaining and improving aquatic functions. Within the West Oregon District Implementation plan, in the Aquatic Resources section, it is stated as a goal that the district will implement restoration projects to improve aquatic habitat, riparian function, and water quality where appropriate and feasible. Another goal in the IP is to implement 0-2 opportunistic projects per year if resources and partners are available. Due to the nature of the FY 2018 timber sale plan (limited access to Type F streams in the vicinities), no stream restoration projects are being considered in conjunction with timber sales. However, the District will be actively working with ODF&W on an OWEB-funded stream enhancement project on two miles of Long Prairie Creek on ODF land in Lincoln County during FY 2018. The District will be providing logs for placement in the stream to improve juvenile fish habitat. The District will also conduct site preparation activities (spot spraying) in preparation for planting trees in Reed Canary Grass dominated stretches of the riparian area, and will conduct some underplanting of conifer in the alder dominated stretches of the riparian area. An ODF&W fish biologist is designing and administering this project.

Land Exchange

There are currently no land exchanges planned, however assessment and evaluation of other potential land exchanges will be on going throughout the year. The district's "Land Acquisition and Exchange Plan" was updated in FY 2013.

Law Enforcement and Public Safety

The District will continue to contribute \$5,000 total during FY 2018 to help fund one forest deputy in Lincoln County and one forest deputy in Benton County. Other agencies and private forest land owners also contribute to the funding of these law enforcement officers. In the past, the District has also helped to fund a forest deputy in Polk County. This program was terminated by the PCSO a few years ago. There has been some recent and on-going discussions of re-starting this program. The District would evaluate participation if an opportunity becomes available.

The forest deputies patrol forest lands in their respective counties to enforce laws relating to fire and recreation; prevent vandalism, theft of forest products and dumping of trash; and aid in search and rescue efforts. The forest deputies are essential to the success and overall management of the forest and their presence benefits all forest users.

District Firewood Cutting Program

West Oregon District typically issues between 50 and 90 personal use firewood cutting permits each fiscal year, producing an estimated revenue through administrative fees of \$1,000 to \$1,800. In addition, the District issues between 5 to 10 commercial firewood permits with an estimated revenue of \$500 to \$1,000. This represents a significant workload, in the fall through spring months, for the forester in charge of permits. No personal use firewood permits are issued during closed fire season.

Purpose:

The primary objective of the District Firewood Cutting Program is to provide a source of firewood from State Forests to the public for personal use and secondarily to reduce fuel hazards, improve visibility along roads, and provide a recreational opportunity. The District's Firewood Cutting Program is tied to the completion of timber sales. Timber sale contracts require any non-merchantable wood or cull material that has been yarded to the landing and is suitable for firewood to be placed in a pile.

State Forests are managed for multiple benefits, and snags, downed wood and stumps are important habitat components under our Forest Management Plan. Permittees should follow the permit instructions, review the permit and district maps, and consult with ODF personnel to ensure they remain on State Forests land. Property lines are frequently unmarked and ODF firewood permits are only valid on State Forests land. Harvesting firewood without the landowner's permission is trespass.

Firewood is a high-risk vector for wood-boring insects, such as emerald ash borer and Asian long horned beetle, two species responsible for widespread defoliation of forests in Midwest and Eastern states. The Oregon Invasive Weed Council and ODF encourage people to obtain their firewood in a place as close as possible to the place where it will be burned. Recreationists have a role in protecting the forests by not moving firewood great distances.

Permit Fee:

The permit fee is \$20 for two cords of firewood and is not transferrable to another party.

When:

By phoning the Philomath office, the public may have their names put on a permit list opened each year on October 1st and again on March 1st. Persons will be notified, in order, when permits become available. Occasionally, if there is no wood forecast to be available during one of these periods, the district may opt not to maintain a list until the next period. Permits will be issued for a 2 week period, during the months outside of fire season. Fire season is generally from July 1st through October 15th, but actual dates can vary dramatically from year to year..

Who:

A limited number of personal firewood cutting permits will be issued to the public, on a first on the permit list-first served basis, with a limit of 2 permits per individual or

household within a 12 month period. The permit cannot be used to sell firewood to another party. Firewood cutting permits will be sold and administered to public employees under the same processes used by the public. Oregon Department of Forestry does not guarantee the quality or availability of wood when issuing firewood cutting permits, as such, permit fees will not be refunded. Exceptions to the two cord limit may be made for non-profit organizations, with prior district authorization.

Where:

Designated firewood cutting areas will be marked on the permit map, which excludes active and sold timber sales, recreation sites, and planned operations. There is no guarantee that units or travel routes will be posted in the field.

How:

Collected permit fees will be used to help reimburse administration of the firewood cutting program. Enforcement of firewood cutting permits will be accomplished by contracted law enforcement officers and following the Firewood Cutting Guidance described in 12.2.G1.2.2. Additional firewood cutting permit requirements and guidelines are provided with the permit.

Commercial Firewood Permits:

In areas behind locked gates or on unsurfaced road systems only open during dry weather, a limited number of commercial permits may be offered. The district maintains an on-going list of interested parties. Permits are sold for \$100 and the permittee is allowed up to 10 cords per permit. Permits are for a one-month time period. This wood may be sold by the permittee and therefore requires that the permittee fill out a Notification of Operations which is filed with the Oregon Department of Forestry and results in notification to the Department of Revenue. Permittee must fill out this notification regardless of whether they intend to sell the firewood or not.

Miscellaneous Forest Products

The District typically issues between 30 and 50 miscellaneous forest product permits for salal, vinemaple, forest plants, chanterelle mushrooms and Oregon grape each fiscal year. Permits are sold for \$100 per permittee and may have more than one permittee per permit. The estimated revenue from these permits is \$6,000 to \$9,000 a year.

Planning

Stand Level Inventory and Other Vegetation Inventories

There are approximately 25 stands which are planned for Stand Level Inventory (SLI) in FY 2018. This inventory will be contracted through Salem staff. Currently, 40% of the district's 983 stands have received SLI or about 48% of the district acreage. Many of the stands were inventoried in 2002 to 2007 and, while data is grown forward, the original inventory info is old.

All timber sale pre-cruise plots and cruise plots will be measured by district personnel.

Fish and Wildlife Surveys

There are numerous streams identified for fish presence surveys within or adjacent to all operation areas. The ODF&W fish biologists will be contacted for their assistance in conducting fish presence surveys for those streams currently classified as unknown associated with the harvest operations. If they are not available to provide assistance then District personnel will work with ODF Aquatic Specialist in utilizing the physical characteristic survey protocol to determine stream classification. There is an estimated 1.0 mile of streams in this sale plan in need of surveys.

In FY18 the district will continue its northern spotted owl survey program in order to comply with ODF's responsibilities under the State Endangered Species Act. The survey method utilized by ODF is the Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls. This protocol was originally dated March 1991 and was most recently revised in January 2012 and endorsed by the USFWS. The district determines survey requirement for planned timber sales with potential habitat according to the ODF Policy Guidance: Northern Spotted Owl Surveying on State Forest Lands. Most sales requiring NSO surveys receive two years of Operational Surveys, and two years of Spot Check Surveys. Surveys for northern spotted owls will be conducted for six operations. The estimated cost of surveys is \$111,344.

Table 1. Summary of Surveys for Northern Spotted Owls

Operation*	Survey Years¹	BA² Required	Special Considerations
Rudder Road	2014 - 2017	No	
Black Ice	2015 - 2017	No	
Camp Adeer	2015 - 2017	No	
Ice hole	2016 - 2017	No	
Cold Boulder	2016 - 2017	No	
Lost Steere	2015 - 2017	No	

¹Years that surveys have been completed or are planned.

²A Biologic Assessment is required for this operation due to the presence of NSO in the vicinity of the operation.

The district conducts a marbled murrelet survey program in order to comply with federal and state Endangered Species Acts and to contribute to Forest Management Plan goals. Operational surveys, as described in the October 2012 ODF Policy Guidance are being applied to sales within the Operational Survey Zone. The Operational Survey Zone is referred to as the North Coast Survey Zone in the current policy. All surveys are conducted according to the Pacific Seabird Group protocol (2003). Surveys for marbled murrelets will be conducted for nine operations. The estimated cost of 2 years of surveys is \$155,819.

Table 2. Summary of Surveys for Marbled Murrelets

Operation	Survey Years¹	BA² Required	Special Considerations
Rudder Road	2014-2015	No	
Black Ice	2016-2017	No	
Frosty Paw	2016-2017	No	
Camp Adeer	2015-2016	No	
Ice Hole	2016-2017	No	
Powerline Thin	2014-2015	No	
Thin Women	2013-2014	Yes	Harvest operation in non-habitat buffer of MMMA
Little Elk Thin	2014-2015	Yes	Harvest operation in non-habitat buffer of MMMA
Lost Steere	2015-2016	No	

¹ Years that surveys have been completed or are planned.

² A Biologic Assessment is required for this operation due to the presence of MM in the vicinity of the operation

Contractors complete all surveys and develop final reports for ODF. For both marbled murrelets and northern spotted owls, end of year (survey season) reviews will be done to discuss survey results. This end of season meeting is an opportunity to meet with surveyors to discuss findings and determine future survey needs and/or needed modifications to proposed operations.

Research and Monitoring

The following research and monitoring projects are on-going during this fiscal year, but it is not expected that any active measurements will be taken during the year. Any monitoring/measurement work will be done mainly by the cooperators:

1. Vegetation and wildlife response to gaps in young stands (Peuttman/OSU)
2. Growing stock study of thinned stands at Black Rock (McGuire/OSU)
3. Effects of sulfur applications on Swiss needle cast infected Douglas-fir (Kanaskie/OSU)
4. Effects of thinning in Swiss needle cast infected Douglas-fir stands (Mainwaring/OSU)

Other Planning Operations

During FY 2018, the District will be involved in the following planning activities:

1. FY 2019 AOP - This plan will cover all management operations on State Forest lands on the District for FY 2019, which begins July 1, 2018 and ends June 30, 2019.
2. Collecting additional data to enhance road inventory information, as workload permits.

Public Information and Education

Forestry Education

The District maintains supporting information on the Implementation Plan, Forest Land Management Classification System, and Annual Operations Plans for public review. In addition, District personnel will attempt to participate in watershed council meetings, outdoor school presentations, OSU College of Forestry class presentations (the Capstone Class), high school career fairs, sponsorship of local high school senior internships, ATV club meetings, and other public events as the opportunity arises and time permits. The District will continue to meet with concerned citizens or groups when they have questions or as needed. Participation in all of these activities will be driven by staffing and workload limitations.

Administration

District Organization

There are thirteen positions on the West Oregon District that are fully or partially funded for the management of State Forest lands. The District Forester, Assistant District Forester and the administrative support staff, are partially funded. These positions are divided into two functional groups: Administration and State Forests (See Figure 1).

Administration is composed of the District Forester, Assistant District Forester, Office Manager and two Administrative Specialists. The District Forester and Assistant District Forester provide the following functions for the management of State Forest lands on the District: policy direction; budgeting; coordination between units and programs; and oversight to the field units. The Administrative Specialists provide support for the management of State Forest lands. They are responsible for initial public contact, distribution and filing of documents, and providing assistance at timber sale auctions. They are also responsible for assisting with permits for firewood cutting and special forest products harvesting.

The State Forests Unit consists of six permanent positions and two seasonal positions. The unit is responsible for reforestation and young stand management; timber sale preparation and administration; forest planning; geographic information systems coordination; and road maintenance.

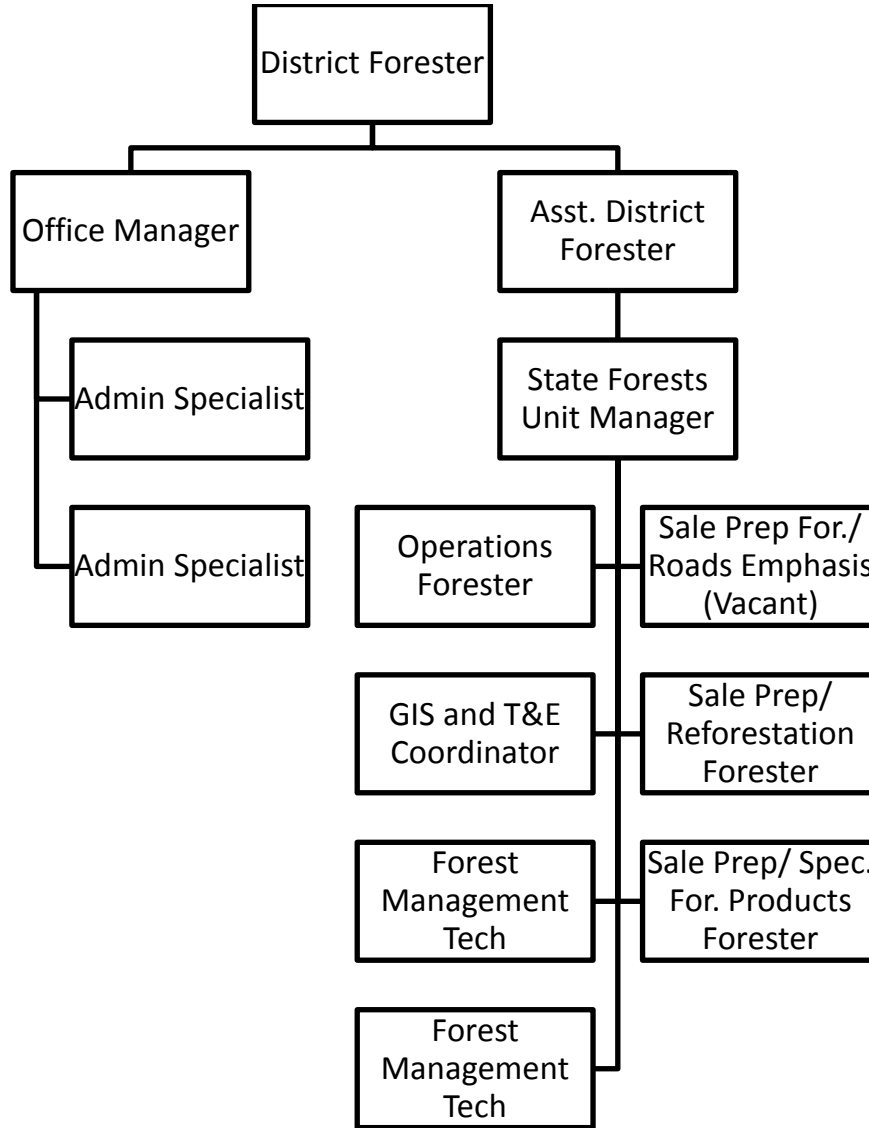
The State Forests Unit Supervisor coordinates all of the activities in the unit. The duties include employee supervision, reforestation and young stand management planning and oversight, timber sale contract review and approval, timber sale planning, and assuring that the property lines of all state forest land on the District are established and maintained. The Unit Supervisor prepares the annual operations plans for the District's state forest lands and is active in implementation of the District's IP and Northwest Oregon State FMP. The Unit Supervisor is also responsible for all recreation management on state forest lands.

Reforestation and young stand management is accomplished by a Timber Sale Prep/ Reforestation Forester and two seasonal Forest Management Technicians. They are responsible for all activities conducted in forest plantations from the time harvesting is completed through reforestation and stand establishment. Their activities include site preparation, tree planting, vegetation management, pruning, tree improvement, and pre-commercial thinning. In addition, the NRS 1 position is responsible for invasive species surveying, monitoring and treatment.

The GIS Coordinator is also the Threatened and Endangered Species Coordinator and assists with annual planning.

The timber sale preparation and administration is accomplished with a staff of one Operations Forester and three Sale Preparation Foresters (one of which is also the Reforestation Forester). Their responsibilities cover all aspects of timber harvesting; including unit layout, stream surveys, cruising, appraisal, contract preparation, and contract administration. They also ensure that current standards for retention of snags, green trees, and down wood are met and that riparian management strategies are correctly applied to the harvest units. They also assist with the layout and design of new roads. One Sale Preparation Forester is also a Road Specialist who is responsible for securing access to all state forest lands, managing service contracts for road repair and maintenance, and roadside spraying (this position is currently vacant and refilling of this position has been put on hold indefinitely). One Sale Preparation Forester is also responsible for managing the cutting of firewood and sale of miscellaneous forest products, such as salal and Oregon grape.

West Oregon District
State Forest Management Organization
Figure 1



All personnel involved with the management of state forest lands spend some portion of their time in public information and education, generally one to three days per year. The District Forester, Assistant District Forester, State Forests Unit Forester spend considerably more time on public information and education, because of their involvement with the Northwest Oregon State FMP.

APPENDIXES

A. Summary Tables

Timber Harvest Operations – Fiscal Summary
Timber Harvest Operations – Forest Resource Summary
Timber Harvest Operations – Forest Structure Summary
Forest Roads Management Fiscal Summary
Reforestation and Young Stand Management Summary
Recreation Management Summary

B. Maps

Vicinity Map (showing all Commercial Operations) relative to the District ownership.

C. Public and Other Agencies Involvement

This appendix summarizes the results of consultations with the Oregon Department of Fish and Wildlife, and other agencies as appropriate. This appendix contains any written comments received from state agencies.

D. Public Involvement

This appendix describes the results of the public involvement process of this AOP and contains any written comments received during the public comment period.

E. Pre-Operations Reports

Available from the district upon request.

F. Landscape Design – Minor Modification

This appendix describes the proposed minor modification to the Landscape Design.

Appendix A - Summary Tables

TIMBER HARVEST OPERATIONS - FINANCIAL SUMMARY

District: West Oregon

Fiscal Year: 2018

Date: 03/02/2017

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
Rudder Road	100%	0%	Polk	1	0	44	1.2	0.1	1.3	\$542,300	\$66,600	\$475,700
Black Ice	100%	0%	Lincoln	2	0	62	2.2	0.1	2.3	\$1,016,700	\$17,500	\$999,200
Frosty Paw	100%	0%	Benton	2	66	69	1.9	0.0	1.9	\$552,150	\$24,700	\$527,450
Camp Adeer	100%	0%	Lincoln	3	0	27	0.9	0.0	0.9	\$407,700	\$46,900	\$360,800
Powerline Thin	69%	31%	Lincoln	3	256	0	2.0	0.0	2.0	\$390,400	\$42,200	\$348,200
Ice Hole	100%	0%	Lincoln	4	0	86	1.5	0.4	1.9	\$715,950	\$43,100	\$672,850
Thin Women	43%	57%	Polk	4	183	2	1.5	0.0	1.5	\$226,950	\$39,100	\$187,850

Total:	505	290	11.2	0.6	11.8	3,852,150	280,100	\$3,572,050
---------------	------------	------------	-------------	------------	-------------	------------------	----------------	--------------------

Alternate Operations

Cold Boulder	89%	11%	Lincoln	Alt	0	91	1.7	0.1	1.8	\$714,350	\$38,300	\$676,050
Little Elk Thin	86%	14%	Lincoln	Alt	262	0	1.4	0.0	1.4	\$240,625	\$43,200	\$197,425
Little Thin on the Prairie	0%	100%	Lincoln	Alt	129	0	1.1	0.0	1.1	\$194,250	\$38,600	\$155,650
Lost Steere	0%	100%	Linc/Polk	Alt	0	49	1.4	0.1	1.5	\$645,700	\$273,200	\$372,500

Appendix A - Summary Tables

PRIMARY HARVEST OPERATIONS - FOREST RESOURCE SUMMARY

District: West Oregon

Fiscal Year: 2018

Date: 03/02/2017

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 ¹	Invasive Species	LYR/OFS Structures ²	Landscape Design LYR/OFS 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 MMMA	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
Rudder Road								X		X				X						House located within 400' of edge of unit
Black Ice	1	X	X	X	X															Parent Trees
	2	X		X	X															
Frosty Paw	1	X																		
	2	X																	X	
	3	X																	X	
Camp Adeer														X			X			
Ice Hole		X			X								X	X						Permanent plot
Powerline Thin	1 & 2						X							X			X			Permanent plot (Area 2)
Thin Women	1	X	X							X			X	X						Sulfur trial plots & pruned trees
	2	X								X				X			X			
	3		X				X			X			X	X						
	4		X							X			X	X						
	5		X							X			X	X						
	6		X							X			X	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 (LYR/OFS)

⁴ The final decision on these projects will occur during sale preparation and inconultation 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.

Appendix A - Summary Tables

ALTERNATE HARVEST OPERATIONS - FOREST RESOURCE SUMMARY

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

Alternate Harvest Operations	Unit (Optional)	Forest Health Issues ¹	Invasive Species	LYR/OFS Structures ²	Landscape Design LYR/OFS 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 MMMA	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	
Cold Boulder		X								X				X							
Little Elk Thin			X		X		X	X					X	X		X	X	X	X	X	Permanent plot (Area 2) & Phellinus
Little Thin on the Prairie		X			X		X		X				X	X		X					
Lost Steere			X				X			X			X	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 (LYR/OFS)

⁴ The final decision on these projects will occur during sale preparation and inconslutation 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.

Appendix A - Summary Tables

TIMBER HARVEST OPERATIONS - FOREST STRUCTURE SUMMARY

Primary Operations

District: West Oregon

Fiscal Year 2018

Date: 02/16/2017

Current Structure		Post Harvest Structure ¹					Desired Future Condition ²		
	Total	REG	CSC	UDS	LYR	OFS	GEN	LYR	OFS
REG	0	0	0	0	0	0	0	0	0
CSC	462	23	0	439	0	0	462	0	0
UDS	332	268	0	64	0	0	332	0	0
LYR	1	1	0	0	0	0	1	0	0
OFS	0	0	0	0	0	0	0	0	0
Total	795	292	0	503	0	0	795	0	0

1. Expected structure 5 - 10 years after FY 2017 operations are completed.

2. This table reflects the landscape design after the modifications described in the Forest Management Operations section have been approved.

Appendix A - Summary Tables

REFORESTATION AND YOUNG STAND MANAGEMENT SUMMARY

District: West Oregon

Fiscal Year: 2018

Date: 02/11/2016

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*	322	\$300.00	\$96,600.00	76	\$300.00	\$22,800.00	398	\$119,400.00
Interplanting*	16	\$100.00	\$1,600.00	4	\$100.00	\$400.00	20	\$2,000.00
Underplanting*	0	\$200.00	\$0.00	0	\$200.00	\$0.00	0	\$0.00
Tree Protection-Barriers**	44	\$285.00	\$12,540.00	11	\$285.00	\$3,135.00	55	\$15,675.00
Tree Protection-Direct Control**	362	\$40.00	\$14,480.00	86	\$40.00	\$3,440.00	448	\$17,920.00
Site Prep-Chemical- Aerial	232	\$67.00	\$15,544.00	76	\$67.00	\$5,092.00	308	\$20,636.00
Site Prep-Chemical- Hand **	90	\$200.00	\$18,000.00	0	\$125.00	\$200.00	90	\$18,200.00
Site Prep -Slash Burning ** ***	156	\$115.00	\$17,940.00	2	\$115.00	\$230.00	158	\$18,170.00
Site Prep -Mechanical	75	\$250.00	\$18,750.00	10	\$250.00	\$2,500.00	85	\$21,250.00
Fertilization	0	\$0.00	\$0.00	0	\$0.00	\$0.00	0	\$0.00
Noxious weeds **	16	\$115.00	\$1,840.00	4	\$115.00	\$460.00	20	\$2,300.00
Release-Chemical- Aerial	259	\$80.00	\$20,720.00	57	\$80.00	\$4,560.00	316	\$25,280.00
Release,-Chemical-Hand **	16	\$200.00	\$3,200.00	4	\$200.00	\$800.00	20	\$4,000.00
Release-Mechanical-Hand **	40	\$270.00	\$10,800.00	10	\$270.00	\$2,700.00	50	\$13,500.00
Precommercial Thinning**	168	\$200.00	\$33,600.00	4	\$200.00	\$800.00	172	\$34,400.00
Pruning (for disease control only)	0	\$200.00	\$0.00	0	\$200.00	\$0.00	0	\$0.00
Stocking Surveys	485	\$5.00	\$2,425.00	115	\$5.00	\$575.00	600	\$3,000.00
Totals	2,281	--	\$268,039.00	459	--	\$47,692.00	2,740	\$315,731.00

*Planting costs include seed, seedlings, hauling, storage and labor.

** Work to be completed by Mill Creek Inmate Crew

*** Includes pile covering & supplies

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 A - Summary Tables

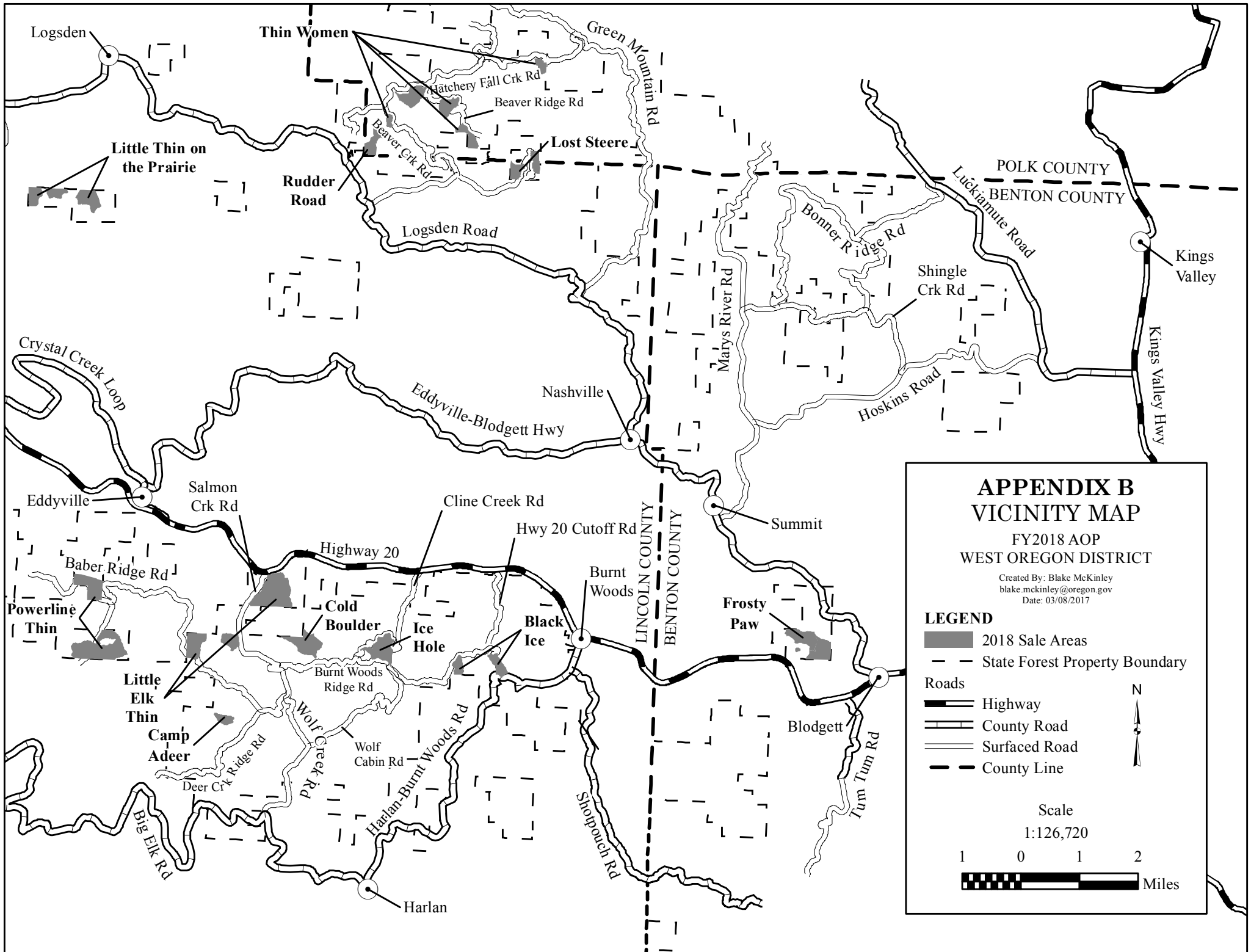
RECREATION MANAGEMENT SUMMARY

District: West Oregon

Fiscal Year: 2018

Date Filled Out: 02/23/2017

Operation	Construction Projects	Construction Cost (Funding)		Improvement Projects	Improvement Cost (Funding)		Operations and Maintenance	Operations/Maint. (Funding)		Total Costs	Comments
		ODF	Other		ODF	Other		ODF	Other		
Facilities											
<u>Campgrounds</u>											
Baber Meadows								\$1,000		\$1,000	Maintained mostly by Mt Baber ATV Club; ODF pumps pit toilet.
										\$0	
										\$0	
										\$0	
<u>Designated Dispersed Campsites</u>											
Big Elk								\$0		\$0	
										\$0	
										\$0	
										\$0	
<u>Day Use Areas</u>											
Black Rock Stunt Area								\$0		\$0	Maintained entirely by Black Rock Mountain Bike Association.
										\$0	
Black Rock Parking Area								\$0		\$0	Maintained entirely by Black Rock Mountain Bike Association.
										\$0	
<u>Trailheads</u>											
None										\$0	
										\$0	
<u>Interpretive Sites</u>											
None										\$0	
										\$0	
<u>Trails</u>											
<u>Non-Motorized</u>											
Black Rock bike trails										\$0	Maintained entirely by Black Rock Mountain Bike Association.
										\$0	
<u>Motorized</u>											
Mt. Baber ATV trails										\$0	Maintained entirely by Mt. Baber ATV Club.
<u>Other Operations</u>											
Law Enforcement								\$5,000		\$5,000	Lincoln & Benton County Forest Patrols
Dumpsites Cleanup								0		\$0	
Special Projects								\$0		\$0	
										0	
									District Total	\$6,000	
									Other Total	\$0	
									TOTAL	\$6,000	



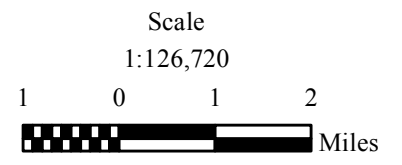
APPENDIX B VICINITY MAP

FY2018 AOP
WEST OREGON DISTRICT

Created By: Blake McKinley
blake.mckinley@oregon.gov
Date: 03/08/2017

LEGEND

- 2018 Sale Areas
- State Forest Property Boundary
- Roads**
- Highway
- County Road
- Surfaced Road
- County Line



APPENDIX C

CONSULTATION WITH OTHER AGENCIES FOR THE 2018 ANNUAL OPERATIONS PLAN

This appendix is used to report written comments received from other governmental agencies regarding the activities described in this draft plan and the district's response or resolution of those comments.

- No written comments from Oregon Department of Fish and Wildlife (ODF&W) have been received, however, verbal comments from field and office reviews were considered while preparing this AOP.
- Archaeologists from the Oregon Department of Transportation (ODOT) have reviewed the proposed timber harvests and road construction projects to review potential impacts to cultural resources. One archaeological resource was identified during this review.

The following area was identified as a known or potential cultural resource site:

- Archaeological resource sites (2): Little Elk Thin, Area 1. These sites are located across Highway 20 from the timber sale area. There is no potential for the operation to impact these sites, so no follow up recommended by ODOT.
- Biological Assessments for two alternate operations (Little Elk Thin and Little Thin on the Prairie) were sent to the United States Fish and Wildlife Service (USFWS) for review two years ago and resulted in a low risk of incidental take. The Biological Assessment for one primary operation (Thin Woman) was sent to USFWS for review this year. The District received a response from USFWS stating that based on the harvest prescription, the seasonal restrictions and the other protective and avoidance measures, they believe that there is low risk of take of marbled murrelets on this timber sale. They suggested that post-harvest assessments be made on this sale to validate harvest prescriptions and canopy retention and that any variances affecting habitat quantity or quality be reported back to them for consultation. See attached letter from the USFWS. Post-harvest inventory will be done on the thinned units and evaluated to see if USFWS will need to be consulted. The District will discuss and resolve any concerns raised by the USFWS regarding this operation prior to the auction of the timber sale.

Note: A complete list of all comments and the responses for other districts related to the FY18 AOP can be found on our web site:

<http://www.oregon.gov/ODF/Working/Pages/StateForests.aspx>



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Oregon Fish and Wildlife Office
2600 SE 98th Avenue, Suite 100
Portland, Oregon 97266

Phone: (503) 231-6179 FAX: (503) 231-6195

Reply To: 8503.2003(15)
TS Number: 15-578

Brian Pew
Deputy Division Chief, State Forests
Oregon Department of Forestry
State Forester's Office
2600 State Street
Salem, OR 97310-1336

JUL 28 2015

Dear Mr. Pew:

This responds to your May 27, 2015, letter requesting a review of whether harvest activities associated with six timber sales and a road daylighting project proposed to be included in the Fiscal Year 2016 Operations Plans comply with the protection requirements of the Endangered Species Act of 1973, as amended. The proposed timber sales include: Deer Joe Combo, Lower Trout, Lucky Stulls, Half Pipe, Little Elk Thin, Little Thin on the Prairie, and the road daylighting proposal titled Crystal Creek. Accompanying the letter were preliminary biological assessments for each of the proposed harvest activities. Our comments are based upon the contents of the preliminary biological assessments and some previous informal discussions with Oregon Department of Forestry staff about some of these proposed harvests.

The Deer Joe Combo timber sale does not contain suitable habitat for marbled murrelets (*Brachyramphus marmoratus*). However, of the five areas for this timber sale, Areas 2 and 4 occur within the non-habitat buffer of the Benson Headwaters and Deer Creek Marbled Murrelet Management Areas (MMMA's). Sale Area 2 is a 20 acre commercial thin of two stands of 35 and 40 year-old second-growth Douglas-fir stands. This sale area occurs within the buffer of Benson Headwaters MMMA. These stands have an average dbh of 12 inches and have a range of 178-225 trees per acre. The moderate partial cut would result in a density of 80-90 trees per acre and have an expected canopy cover between 60-75 percent.

Area 4 is a 16 acre second entry commercial thinning composed of 47 year-old second growth Douglas-fir. This sale area occurs within the buffer of Deer Creek MMMA. The stand was previously thinned about 15 years ago. The stand currently has an average dbh of 17 inches with approximately 172 trees per acre. The target post-harvest density is 80-90 trees per acre with an expected canopy cover between 60-75 percent.

The Lower Trout timber sale does not contain suitable habitat for marbled murrelets. Areas 2 and 4 of this timber sale occur within the non-habitat buffer of Trout Mouth MMMA. Sale Area 2 is a 15 net acre commercial thinning composed of two stands of 34 and 49 year-old Douglas-fir. These stands have

an average dbh of 13 inches and have a range of 193-208 trees per acre. Sale Area 4 is an eight acre commercial thinning within a 50 year-old Douglas-fir stand with an average dbh of 15 inches and approximately 152 trees per acre. The moderate partial cuts within these two sale areas will result in a tree density of 80-90 trees per acre with an expected canopy cover between 60-75 percent.

The Lucky Stulls timber sale consists of two sale areas and contains marbled murrelet suitable habitat that has been surveyed for murrelets in 2011 and 2012 with no indications of occupancy. Area 1 is a 20 acre modified clear cut outside of the MMMA. Area 2 is two acres of thinning that fall within the suitable habitat buffer of the MMMA and is intended to accelerate development of marbled murrelet habitat. Area 2 is within a 137 year-old Douglas-fir stand with an average dbh of 23 inches and 83 trees per acre. Post-harvest there would remain a density of 35-40 trees per acre. The stand would be thinned from below, retaining the largest and healthiest trees as well as retaining some understory trees for layering. Canopy cover after harvest is expected to be about 60-70 percent.

The Half Pipe timber sale is a 45 acre clear cut of a mixed species, uneven-aged stand that is 49 to 82 years-old with a density of 130 to 157 trees per acre and an average dbh from 13 to 26 inches. The sale area is adjacent to the Salmon Creek MMMA. Post-harvest there will be five trees per acre with an average dbh from 15 to 26 inches. The sale area was surveyed for murrelets in 2014 with no detections. A second year of surveys is scheduled for 2015. Multiple tail-holds are likely to be necessary within the 100 meter buffer and occupied murrelet habitat. The likelihood for mechanical damage to suitable nesting platforms will be reduced or avoided by siting cables in areas of lower quality habitat and away from platform bearing branches. Impacts from noise disturbance will be avoided by use of seasonal timing restrictions that prohibit the use of chainsaws and other mechanized equipment within and adjacent to the MMMA during the nesting period.

The Little Elk Thin Area 3 timber sale is a 41 acre commercial thin of an approximately 28 year-old stand with a density of 198 trees per acre and an average dbh of 13 inches. Approximately nine acres of this timber sale occur within the buffer of Salmon Creek MMMA. Post-harvest, there is expected to be about 110 trees per acre remaining and the canopy cover is expected to be about 56 percent. Because the timber sale is in the preliminary stages of planning, the exact location of landings, tailholds, and extent of road improvement have not yet been determined.

The Little Thin on the Prairie timber sale consists of three sale areas that are partially located within the buffer of West Prairie MMMA. Sale Area 1 is a 39 acre commercial thin in a Douglas-fir plantation that is approximately 35 years-old and densely stocked at 249 trees per acre with an average dbh of 15 inches. None of the trees in the sale area have developed platform structures or provide cover to trees with platform structures. Post-harvest there would remain about 100 trees per acre and a canopy coverage of about 40 percent.

Sale Area 2 is a 29 acre commercial thin in a Douglas-fir plantation that is approximately 35 years-old, contains about 177 trees per acre, and has an average dbh of 14 inches. None of the trees in the sale area have developed platform structures or provide cover to trees with platform structures. Post-harvest there would remain about 120 trees per acre and a canopy coverage of about 68 percent.

Sale Area 3 is a 61 acre commercial thin in a Douglas-fir plantation that is approximately 35 years-old, contains about 93 trees per acre, and has an average dbh of 16 inches. None of the trees in the sale area have developed platform structures or provide cover to trees with platform structures. Post-harvest there would remain about 84 trees per acre. The preliminary biological assessment states that because the current stand conditions are not precisely known, additional cruise information, or closer contract

administration may be necessary. While current canopy coverage is unknown, it is assumed that there would be greater than 40 percent canopy coverage after treatment.

The proposed thinning and cable yarding in Areas 1-3 will impact approximately 42 acres of the West Prairie MMMA buffer. There will likely be tailhold and guyline anchors within the buffer and occupied habitat of the MMMA as well.

The Crystal Creek timber sale is a road clearing project located along three miles of the commonly used Crystal Creek Road. Tree removal is expected within a maximum of 20 feet on either side of the road and amounts to about 14.8 acres. The sale is designed to remove red alder and Douglas-fir that have encroached into the right-of-way and pose a safety issue for vehicles using the road. Trees to be removed range from below 11 inches to 18 inches dbh, and 40 to 100 feet tall. Two stockpile areas for soil and rock storage from maintenance activities are also planned and will require timber harvest. These two areas at the end of short spur roads are approximately one acre each and contain 30 year-old trees. The timber sale area is within 1.5 miles of the Foley Creek northern spotted owl (*Strix occidentalis caurina*) circle, and within the 100 meter, non-habitat buffer of the Crystal Barn MMMA. The timber sale will not remove trees with suitable marbled murrelet nest platforms or any adjacent trees that provide cover to potential nest platforms. The stockpile areas are not considered to be northern spotted owl or marbled murrelet habitat.

Approximately 70 percent of the area within the Foley Creek owl circle is considered suitable habitat and the proposed road clearing should not alter that significantly. Due to the limited amount of tree removal along the road, and the non-suitable habitat to be harvested within the two, one acre stockpile areas, we believe the risk of incidental take of spotted owls is low.

Summary of Effects to Marbled Murrelets

The preliminary biological assessments of all the proposed timber sales contain a list of standard ODF protection and mitigation measures that include restrictions and requirements involving: seasonal timing restrictions to prevent disturbance to nesting murrelets (from April 1-August 5, then daily timing restrictions from August 6-September 15) will be implemented for harvest related activities (e.g., road improvement, felling, installation of guyline anchors with mechanized equipment, and yarding) to avoid disturbance during the breeding season; trash policing and removal from all sale areas, landings, and roadways on a daily basis to reduce the attraction of predators; tailhold and guyline use restrictions to protect potential nest platform trees or future platform trees; and, construction and use of roads and landings in MMMA buffers to reduce habitat fragmentation and attraction of predators.

The proposed thinnings should not significantly alter the function of the MMMA buffers because they should not create an abrupt edge to the mature trees within the MMMA's due to the remaining density of trees post-harvest. Forest edges are known to serve as foraging corridors for potential avian predators such as corvids. The preliminary biological assessments state that the sale areas within the buffer may continue to provide ameliorating effects on predation risk relative to more heavily thinned stands or clear-cut harvest. In addition, the preliminary biological assessments state that the proposed thinnings are not likely to increase the risk of blow-down based upon the residual tree density, or the risk, and/or the area affected, is relatively small.

Another concern is the potential increase of fruit-producing shrubs and vines in the understory due to the opening up of the canopy. Since the canopy cover should remain above 40 percent, there is a low risk of a significant fruit flush due to increased sunlight post-thinning that may attract predatory corvids. The

potential for a low to moderate flush should not result in a short- or long-term measurable increase in corvid foraging habitat. The canopy should begin closing within a decade to further limit this risk.

By surveying the timber sale areas according to protocol, incorporating protection and mitigation measures, conducting harvest activities outside of the breeding season, not removing potential nest trees or nearby trees that provide shelter to potential nest platforms in occupied habitat, using caution to protect potential platform trees when setting tailholds and guylines in designated occupied habitat, we concur with your assessment that the proposed harvest activities associated with the Deer Joe Combo, Lower Trout, Lucky Stulls, Half Pipe, Little Elk Thin, Little Thin on the Prairie timber sales, and the Crystal Creek road daylighting proposal, should have a low risk of incidental take of marbled murrelets.

Additional Comments

Our conclusion above regarding the Half Pipe timber sale is contingent upon the pending second year of marbled murrelet surveys not detecting significant behavior in or near the timber sale.

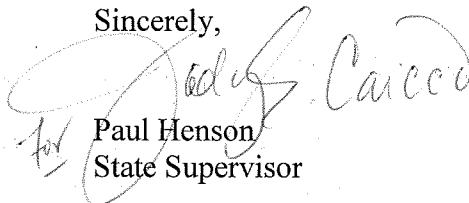
Little Elk Thin timber sale is in the preliminary stages of planning such that the exact location of landings, tailholds, and extent of road improvement have not yet been determined. Therefore, our conclusions of a low risk of incidental take of marbled murrelets does not reflect any potential impacts within these unassessed areas.

Area 1 of the Little Thin on the Prairie timber sale is expected to retain about 40 percent canopy cover following thinning. Area 3 of this timber sale has limited timber cruise information such that the current stand conditions are not precisely known. We request that ODF directly measure the post-harvest canopy coverage of these two sale areas to determine whether they remain above 40 percent. In general, we request that ODF monitor a reasonable sample of the timber sales' post-harvest canopy coverages to determine whether they fall within the estimates provided in the preliminary biological assessments. If they do not, we suggest that ODF either update the estimation methodology and/or closely monitor the harvest operations to help assure that the canopy coverage estimates are reasonably accurate, and that they do not fall below 40 percent. If any of the timber sale areas are found to fall below 40 percent immediately after thinning, we request that ODF let us know of those areas and what measures ODF can take to reduce that likelihood in the future.

Since the risk of windthrow can be difficult to assess, we request that ODF perform some post-harvest monitoring and inform us of any windthrow that occurs within ten years post-harvest in or immediately adjacent to the timber harvest areas submitted for review.

If you have any questions about this response, please contact Richard Szlemp at 503-231-6179. We appreciate your efforts to avoid negative impacts to federally-listed species such as the marbled murrelet and northern spotted owl, and look forward to continued coordination in this regard.

Sincerely,


for Paul Henson
State Supervisor



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Oregon Fish and Wildlife Office

2600 SE 98th Avenue, Suite 100

Portland, Oregon 97266

Phone: (503) 231-6179 FAX: (503) 231-6195

Reply To: 8503.2001(17)
TS Number: 17-395

Marganne Allen
Acting State Forests Deputy Division Chief
Oregon Department of Forestry
State Forester's Office
2600 State Street
Salem, OR 97310-1336

MAY 05 2017

Dear Mr. Pew:

This responds to your March 20, 2017, letter requesting review of 10 planned timber sales proposed to be conducted in your 2018 Fiscal Year which runs from July 1, 2017 through June 30, 2018. The following six proposed timber sales have been identified as having potential impacts to the federally-listed northern spotted owl (*Strix occidentalis caurina*) (spotted owl): Nicolai, Plympton East, By George, London Broil, Wildcat, and Kilchis Saddle. The remaining four proposed timber sales may have potential impacts to the federally-listed marbled murrelet (*Brachyramphus marmoratus*) and include: Thin Women, Cal Barr, Sassy Sally, and Woody Woodpecker. Attached with your letter were the pre-operations reports and preliminary biological assessments for the proposed timber sales, portions of which are briefly summarized below. Our comments are based upon the information provided in your letter and its attachments.

Spotted Owl related timber sales

The Nicolai timber sale in the Oregon Department of Forestry's (ODF) Astoria District is located within 1.5 miles of the Plympton Ridge spotted owl activity center. The sale is a proposed clear cut of mostly 60 year-old second growth Douglas-fir totaling 101 net acres, with 22 acres inside the activity center site. Those 22 acres are located about 1.2 miles from the activity center and considered suitable spotted owl habitat. Post-harvest, there will be approximately 2,402 acres of suitable habitat, or 53.1 percent of the 1.5 mile radius area. Forty percent suitable habitat within a home range radius of spotted owls is considered to be an average minimum to adequately support spotted owls. Due to the distance from the activity center, the small amount of habitat removal, and the remaining available habitat within the 1.5 miles of the activity center, we consider this timber sale to have a low risk of incidental take of spotted owls.

The Plympton East timber sale consists of three sale areas, with areas 1 and 2 also within 1.5 miles of the Plympton Ridge spotted owl activity center. Sale area 1 is a proposed right of way for a new road that will remove approximately 0.9 acres of suitable spotted owl habitat, but only about 43 square feet are inside the 1.5 mile radius from the Plympton Ridge activity center. Sale area 2 is a thinning of

approximately 38 acres, of which 12 acres are within the outer edge of the 1.5 mile radius of the activity center. Sale area 2 consists of 76 year-old western hemlock and silver fir with an average diameter at breast height (dbh) of 17 inches, and a density of 186 trees per acre (TPA). Thinning would result in 80-100 TPA remaining. Since the Nicolai timber sale is considered a primary operation and Plympton East is considered an alternate, Nicolai is likely to be harvested before Plympton East. After completion of both Nicolai and Plympton East timber sales, approximately 2,390 acres or 52.8 percent of the 1.5 mile radius area surrounding the Plympton Ridge spotted owl site will remain in suitable habitat. Due to the distance from the activity center, the small amount of habitat removal taking into account the Nicolai timber sale, and the remaining available habitat within 1.5 miles of the activity center, we consider this timber sale to have a low risk of incidental take of spotted owls.

The By George timber sale in the Forest Grove District consists of one area totaling 153 net acres containing 83 year-old Douglas-fir with an understory of western hemlock and western red cedar. All of these acres are considered suitable spotted owl habitat. Stands average about 24 inches dbh and about 85 TPA. Approximately 141 of these acres are within 1.5 miles, and 0.25 acres are within 0.7 miles of the South Fork Rock Creek spotted owl activity center. The prescription calls for a thinning to 50 TPA. There are approximately 2,767 acres of state-owned and 37 acres of privately owned habitat within 1.5 miles of the activity center. Post-harvest, 62 percent of the area within the 1.5 mile radius circle surrounding the activity center will remain suitable habitat. We consider this timber sale to have a low risk of incidental take of spotted owls due to the remaining habitat available post-treatment.

The London Broil timber sale in the Southwest District consists of four sale areas with 235 net acres of harvest. The sale is primarily composed of 85-95 year-old Douglas-fir with some incense cedar, madrone, and oak species in the understory. The average dbh of the stands is 13-14 inches. Areas 1 and 4 will be a partial cut involving a thinning from below of the intermediate size classes of conifer and hardwoods. Thinning is intended to promote development of a layered stand. An upper diameter limit will be established to preserve the largest and healthiest trees in the stands. The prescription for areas 2 and 3 is a modified clear cut removing merchantable conifer as well as most hardwood species. Some of the largest trees will be retained, averaging 5-10 TPA scattered throughout the unit.

The London Broil timber sale will clear cut four net acres and partial cut 46 net acres within the 0.7 mile circle for the Wolf Creek spotted owl site. There are currently 714 acres of suitable habitat within 0.7 miles of the activity center. If these acres are removed, 664 acres of suitable habitat will remain within 0.7 miles of the activity center. This timber sale will clear cut 73 net acres and partial cut 161 net acres within the 1.3 mile circle for the Wolf Creek spotted owl site. If these acres are removed, 2149 acres (63 percent) of suitable habitat will remain within 1.3 miles of the activity center.

This timber sale is also located within the 1.3 mile circle for the Malone Peak spotted owl site and will clear cut three net acres and partial cut 82 net acres. No harvest will occur within the 0.7 mile circle. If these acres are removed, 2183 acres (64 percent) of suitable habitat will remain within 1.3 miles of the activity center.

We consider this timber sale to have a low risk of incidental take of spotted owls associated with the Wolf Creek and Malone Peak sites due to sufficient remaining habitat available within their home ranges post-treatment. Both sites will continue to have greater than 40 percent habitat within their home range and greater the 500 acres surrounding the activity centers within 0.7 miles.

The Wildcat timber sale in the Western Lane District consists of 152 net sale acres comprised of 81 year-old stands of second growth Douglas-fir with scattered pockets of western hemlock, western red

cedar, big-leaf maple, and red alder. This timber sale will clear cut three net acres on the edge of the 1.5 mile circle for the Walton spotted owl site. Only one of these acres is considered to be functioning as suitable spotted owl habitat. These three acres are not connected to any nearby habitat with the 1.5 mile circle. A current habitat analysis of the Walton spotted owl site indicates that there are approximately 1383 acres (31 percent) of suitable habitat available within 1.5 miles of the activity center. While suitable spotted owl habitat is deficient within the 1.5 mile circle, loss of one acre 1.5 miles from the activity center that is not connected to any additional habitat should not significantly contribute to loss of suitable habitat for this owl site. Therefore, we believe the Wildcat timber sale poses a low risk of incidental take of spotted owls.

The Kilchis Saddle timber sale in the Tillamook District consists of two sale units, but only a portion of one of them, sale unit 732, is located within a spotted owl home range radius. Sale unit 732 totals 115 acres, with 35 acres located near the edge of the 1.5 mile radius from the Whitney Ridge spotted owl site. However, only 22 acres of spotted owl suitable habitat will be harvested. This sale unit has an average age of 55 years and an average dbh of 16 inches, and consists primarily of Douglas-fir and red alder with scattered western hemlock. Post-harvest, there will remain approximately 2,225 acres or 49 percent of the 1.5 mile radius area as suitable habitat. Based upon the remaining amount of suitable habitat and the distance from the activity center, we believe the Kilchis Saddle timber sale will have a low risk of incidental take of spotted owls.

Marbled murrelet related timber sales

The Thin Women timber sale in the West Oregon District is composed of multiple sale areas that extend into multiple marbled murrelet management areas (MMMA). This timber sale includes partial cut thinning that will encourage growth and branching on the remaining trees in the stand. Sale area 1 is a commercial thin of a Douglas-fir plantation composed of mostly 31 year-old trees with an average dbh of 12 inches, at a density of 207 TPA. Sale area 1 is partially within the buffers of the Thin Woman and Beaver's Rock MMMA (1.2 and 6.7 acres, respectively). The treatment would result in a density of 122 TPA, an average dbh of 13 inches, and would maintain at least 60 percent canopy cover. Road and landing improvement, guyline anchors, and tailhold anchors are also proposed in this sale area.

Sale area 3 is a commercial thin in a Douglas-fir plantation composed of 36 year-old trees with an approximate dbh of 14 inches and 238 TPA. Sale area 3 includes 9.9 acres within the buffer of the Upper Steere MMMA. Road and landing improvement, guyline anchors, and tailhold anchors are proposed. The thinning would result in a tree density of 108 TPA and would maintain at least 60 percent canopy cover.

Sale area 4 consists of a thin in a mixed-age Douglas-fir stand with a small hardwood component. The sale area is composed of three stand types that include trees 36-81 years old, with average dbh's between 13 and 24 inches, and older portions with 48-95 TPA and younger areas with 271 TPA. This sale area includes 2.4 acres within the Cedar Beaver MMMA where road construction, road improvement, guyline anchors, and tailhold anchors are proposed. The older portion contains suitable marbled murrelet habitat that was surveyed in 2015 and 2016 yielding no detections. The thinning would result in a tree density of 113 TPA and maintain at least 60 percent canopy cover.

Sale area 5 consists of a thin in a Douglas-fir plantation composed of 37 year-old trees with an average dbh of 15 inches and density of 215 TPA. This sale area includes 2.7 acres within the Cedar Beaver MMMA where road construction, road improvement, guyline anchors, and tailhold anchors are proposed. The thinning would result in a tree density of 111 TPA and maintain at least 60 percent

canopy cover. Sale areas 4 and 5 will result in approximately 5.1 acres of Cedar Beaver MMMA buffer being thinned by cable yarding. There is approximately 335 feet of new road construction and 430 feet of road improvement within the MMMA buffer. Existing protection measures within ODF policy are intended to minimize impacts to marbled murrelets by providing operational (i.e., trash removal, tailhold and guyline use restrictions) and seasonal restrictions such that impacts to potential nest trees, increases in nest predation, and disturbance to any nesting marbled murrelets are not expected. Based upon the harvest prescription, seasonal restrictions, and the other protective and avoidance measures, we believe the Thin Women timber sale will have a low risk of incidental take of marbled murrelets.

We did note that the Thin Women and Cedar Beaver MMMA contain designated occupied segments that are only several tree canopy widths in diameter. While partly a reflection of available trees with suitable nest platforms, harvest within adjoining buffer areas may have greater potential effects under these circumstances. We recommend that when designating occupied habitat areas, additional protected habitat should be added to such linear areas so as to reduce the likelihood of affecting the quality of the areas currently containing suitable nest platforms. We also recommend smoothing out the edges of MMMA's by not solely attempting to designate occupied boundaries by drawing lines around individual potential nest trees.

The Cal Barr timber sale in the Astoria District entails the thinning of a mixed species stand dominated by western hemlock and red alder. Sale area 6 is comprised of an 11 acre stand that is located in the buffer of the Leonard Road MMMA. The stand is approximately 61 years old, with an average dbh of 15 inches, a density of 231 TPA, and greater than 80 percent canopy cover. The stand is not known to contain suitable marbled murrelet nest platforms. Thinning would reduce the density to 110-120 TPA and an overstory canopy cover of at least 50 percent. The thinning is intended to promote older forest structure and to accelerate the development of marbled murrelet nesting habitat. Based upon the harvest prescription, seasonal restrictions, and the other protective and avoidance measures, we believe the Cal Barr timber sale will have a low risk of incidental take of marbled murrelets.

The Sassy Sally timber sale in the Astoria District consists of the thinning of mixed species stands dominated by Douglas-fir, Sitka spruce, and red alder. Sale area 2 includes two stand types totaling 19 acres located within the Sally Ridge MMMA. The stands are approximately 75-80 years old with average dbhs of 14-22 inches and 106-301 TPA. Canopy coverage is estimated at greater than 80 percent. The prescription is a partial cut that would result in 90-120 TPA and canopy coverage greater than 80 percent. While currently not considered suitable habitat, the prescription is intended to promote layering and larger limb growth. Based upon the harvest prescription, seasonal restrictions, and the other protective and avoidance measures, we believe the Sassy Sally timber sale will have a low risk of incidental take of marbled murrelets.

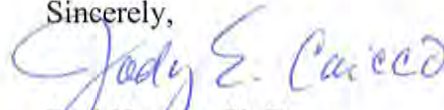
The Woody Woodpecker timber sale in the Astoria District consists of commercial thinning of a mixed species stand, dominated by Douglas-fir, western hemlock, and red alder. The thinning is intended to promote older forest structure with layering and larger limb growth. Sale area 2 contains 9 acres composed of four different stand types which occur within the buffer of the Boulder Candyflower MMMA. Generally, the stands are approximately 64-91 years old, have 14-18 inch dbh's, and densities between 144-259 TPA. Current canopy cover is estimated at greater than 80 percent. The thinning would result in a tree density of 80-100 TPA, and a canopy cover greater than 40 percent.

ODF evaluated the MMMA and used the marbled murrelet survey information to delineate occupied habitat based upon contiguous forest associated with the survey observations. Second year surveys in 2017 are planned for area 2 and area 3 of this timber sale to determine the status of murrelet use outside

of the current MMMA designation. If occupied behavior is observed, the designated occupied habitat could increase for this MMMA. The MMMA would then need to be reconfigured and a new biological assessment would need to be prepared. Currently, we are assuming that no nesting platforms would be impacted by the thinning in the MMMA buffer proposed in area 2. Existing protection measures within ODF policy are intended to minimize impacts to marbled murrelets by providing operational (i.e., trash removal, tailhold and guyline use restrictions) and seasonal restrictions such that impacts to potential nest trees, increases in nest predation, and disturbance to any nesting marbled murrelets are not expected. Based upon the harvest prescription, seasonal restrictions, and the other protective and avoidance measures, we believe the Woody Woodpecker timber sale will have a low risk of incidental take of marbled murrelets. However, if surveys result in new occupancy information that influence the configuration of the Boulder Candyflower MMMA and occupied habitat, we would need to reexamine our current conclusion.

We have a few recommendations to further reduce the likelihood of adversely impacting spotted owl and marbled murrelet habitats. In order to better assess the potential impacts of proposed thinning treatments, we suggest that post-harvest assessments be made to validate the harvest prescription and canopy retention targets and that any significant variances from the assumptions presented in the biological assessment that may affect the quality or quantity of habitat be reported back to us for future consultations. We also suggest that designated occupied areas be no less than 300 feet in diameter regardless of current forest structure conditions so as to better preserve or create more interior forest environments when future potential harvest activities occur in designated MMMA buffers. If you have any questions about this response, please contact Richard Szlemp at 503-231-6179. We appreciate your efforts to avoid negative impacts to federally-listed species such as the northern spotted owl and marbled murrelets, and look forward to continued coordination in this regard.

Sincerely,



Paul Henson, Ph.D.
State Supervisor

Acting

APPENDIX D
PUBLIC COMMENT PROCESS
FOR THE 2018 ANNUAL OPERATIONS PLAN

The Oregon Department of Forestry provided a formal 45 day public comment period for the 2018 Annual Operations Plans from March 20 to May 4, 2017.

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

Past experience has shown that public comments have the potential to improve plans, so the objective was not only to inform the public, but to receive feedback that would help to clarify the AOP's, improve their consistency with the long range FMPs and IPs, and to become aware of any new information that could affect a planned operation or improve its efficiency or effectiveness.

At the end of the public comment period, the West Oregon District received one comment specific to the 2018 AOP relating to timber harvest levels. Harvest levels were reviewed and are in alignment with the district's Implementation Plan. See attached letter from Hampton Tree Farms.

The State Forests Advisory Committee (SFAC) reviewed the West Oregon District FY 18 AOP and had no specific comments.

Note: A complete list of all comments and the responses for other districts related to the FY18 AOP can be found on our web site:

<http://www.oregon.gov/ODF/Working/Pages/StateForests.aspx>



HAMPTON TREE FARMS, LLC

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May 4, 2017

Public Affairs Office
State Forests Division
Oregon Department of Forestry
2600 State Street
Salem, Oregon 97310

RE: 2018 Annual Operations Plans (AOP) for the Astoria, Forest Grove, Tillamook, North Cascade, and West Oregon Districts

(2018 AOP Harvest Levels / Net Revenue: Astoria – 74 MMBF / \$27.5 million, Forest Grove – 61 MMBF / \$31.8 million, Tillamook – 47 MMBF / \$11.9 million, North Cascade – 20 MMBF / \$9.5 million, West Oregon – 12 MMBF / \$3.6 million, Totals – 214 MMBF / \$84.3 million)

Dear Sir / Madam:

Hampton Tree Farms, LLC (HTF) strongly encourages the Department of Forestry (DOF) to operate at the upper end of the Implementation Plan (IP) allowable harvest levels on all Districts. For each 1 million board feet of additional timber sold, the districts could respectively produce the following additional net revenue based on projected 2018 AOP calculations: Astoria - \$372,000.00, Forest Grove - \$521,000.00, Tillamook - \$253,000.00, North Cascade - \$475,000.00, West Oregon - \$300,000.00. If all the above districts produced 1 million board feet of additional timber in FY18 (2.3% increase), the DOF would increase revenue by \$1,921,000.00. This increase would improve county funding by \$1,225,000.00 (63.75% of increase) as well as support an additional \$696,000.00 (36.25% of increase) of DOF costs or projects.

The DOF portion of Astoria District revenue increase would total \$135,000.00. This additional revenue could help fully fund the precommercial thinning that is needed as stated by the AOP or better support overall ODF staffing levels and the Alternate Forest Management Plan process.

The DOF portion of Forest Grove District revenue increase would total \$189,000.00. As a member of SFAC, I am acutely aware of the target shooting conundrum the district faces. Additional funding could help find a more robust solution for this use of the forest. Precommercial thinning backlogs could also be addressed.

The DOF portion of Tillamook District revenue increase would total \$92,000.00. The revenue change could help support Stand Level Inventory (SLI) updates, reestablish Cook Creek or West Fork road access, or help assess and treat the thousands of acres of young stands. The current lack of investment will only further jeopardize the ability of this district to be financially self sustaining in the future.

The DOF portion of North Cascade District revenue increase would total \$172,000.00. Areas in need of extra revenue identified by the districts AOP include: precommercial thinning, SLI, or forest patrols to protect investments.

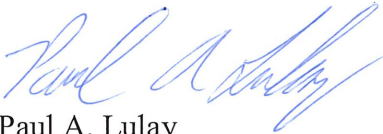
The DOF portion of West Oregon District revenue increase would total \$109,000.00. The revenue increase could support research and monitoring that is currently only being performed by cooperators, update aging inventory information, or fund precommercial thinning treatments.

In consideration of the current projected financial cliff and the continued delay of reinvestment in the state forests, the timing could not be more opportunistic. HTF strongly encourages the DOF to fully support their financial success and stability. Any incremental harvest increase will provide more revenue and help support the future success and existence of the DOF. The DOF has the ability through increased harvest levels that will not jeopardize sustainable future harvests to fully fund their own operations. Underperforming on implementation plan investment levels on state forestland management can be at minimum partially remedied by operating at even slightly higher harvest levels.

It is troubling to me as a professional forester, (SFAC) member, and citizen of this state to see how our state forests have been under utilized in regard to: supporting local industry and jobs, managing a renewable sustainable building material source, improving county revenues, sufficiently funding research and monitoring, and self funding management.

The time to act is now.

Sincerely,
HAMPTON TREE FARMS, LLC



Paul A. Lulay
Forester

APPENDIX E

Pre-Operations Reports

Pre-Operations Reports are available from the district upon request

<http://www.oregon.gov/ODF/Working/Pages/StateForests.aspx>

APPENDIX F CHANGES TO LANDSCAPE DESIGN – MINOR MODIFICATION TO THE WEST OREGON DISTRICT IMPLEMENTATION PLAN

The Landscape Design for the West Oregon District designates 31 percent of the land base which is designated to achieve a Desired Future Condition (DFC) of either Layered (LYR) or Older Forest Structure (OFS). The 31 percent landscape design was adopted in 2012 as part of the revised West Oregon District Implementation Plan (IP). The landscape design is a long term vision of the arrangement of stand structures to be developed across the district to achieve the landscape objectives set forth in the Northwest Forest Management Plan (FMP).

In order to adapt to new information such as: updated forest inventory, new threatened and endangered species sites, forest land management classification updates, landscape changes due to storm damage, insect and/or disease or other significant events; the landscape design was anticipated to change over time. In addition, various GIS layers including the DFC are always in need of aligning and fine tuning as part of the improvement and maintenance of the data. Changes of up to 240 acres annually are considered minor changes and can be approved by the District Forester concurrent with the Annual Operation Planning (AOP) process. Changes that are greater than 240 acres are considered major and require a public comment period and are approved by the State Forester.

The proposed changes are driven by two primary factors: 1) new threatened and endangered species sites; and 2) landscape changes due to storm damage. The currently proposed changes consist of removing 67 acres of DFC Complex from the Black Ice and Ice Hole sales and adding 67 acres of DFC Complex into the Lower Yaquina Marbled Murrelet Management Area. A summary of the desired future condition of the proposed changes is shown in Table 1, and the summary of the current forest condition of the proposed changes is shown in Table 2.

Table 1. Minor changes to the Landscape Design, summary of DFC changes.

Operation/Unit	Modification	Acres Added to DFC Complex	Acres Removed from DFC Complex
Black Ice A1	Remove DFC - LYR	0	5
Black Ice A2	Remove DFC - LYR	0	35
Black Ice A2	Remove DFC - OFS	0	1
Ice Hole	Remove DFC - LYR	0	26
Lower Yaquina MMMA	Add DFC – LYR	66	0
Lower Yaquina MMMA	Add DFC – OFS	1	0
Total Change		67	67

Total current LYR acres after this modification are 2981 (8% of District Acres), and total current OFS acres are 109 (<1% of District Acres).

Table 2. Minor changes to the Landscape Design, summary of Current Condition changes.

Acres Removed		Acres Added	
Current Stand Condition	Acres	Current Stand Condition	Acres
NF	0	NF	0
REG	0	REG	3
CSC	0	CSC	0
UDS	66	UDS	64
LYR	1	LYR	0
OFS	0	OFS	0
Total Acres Removed	67	Total Acres Added	67