



# Oregon

Kate Brown, Governor

## Department of Forestry

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"STEWARDSHIP IN FORESTRY"

July 16, 2021

To: Andy White, Area Director

From: Michael Curran

CC: Liz Dent, State Forests Division Chief  
Ron Zilli, State Forests Deputy Division Chief  
Colleen Kiser, State Forests Planning Manager

Re: Information Item – Approved Annual Operations Plan for FY 2022

The FY 2022 State Forests Annual Operations Plan (AOP) for the West Oregon District has been completed. During my review of this plan, I have found that it conforms to the Oregon Forest Practices Act and is consistent with the 2010 Northwest Oregon State Forest Management Plan, the 2012 District Implementation Plan, and the FY 2022 State Forests budget instructions.

During its preparation, this plan was reviewed by technical specialists from within the department, biologists from the Oregon Department of Fish and Wildlife and archeologists from the Oregon Department of Transportation. Information on the consultations with other agencies can be found in Appendix C. The draft AOP also underwent a 45-day public comment period. All comments were carefully considered and incorporated where appropriate. All changes that have occurred since the public comment period ended are summarized in Appendix D of the AOP.

Also included in the AOP is a minor modification to the District IP. Appendix G summarizes the changes made to the District Landscape Design. Changes of up to 240 acres annually are considered minor changes and can be approved by the District Forester concurrently with the AOP. The signing of this letter will approve these proposed changes.

As prepared, this AOP consists of 14.3 MMBF of harvest volume. This volume will be achieved through 457 acres of partial cut harvest and 335 acres of regeneration harvest. There are 5 primary operations and 4 alternate operations within this plan. The operations are estimated to generate gross revenues of approximately \$4,284,700 and net revenues of \$4,056,902 within Lincoln County, gross revenues of approximately \$971,250 and net revenues of \$900,087 within Polk County, and gross revenues of approximately \$360,750 and net revenues of \$335,756 within Benton County. The volume is over the IP target of 12 MMBF. The reason for this higher volume is due to lower than anticipated volumes in previous fiscal years. This volume will achieve the goal of averaging of the Annual Harvest Objective (AHO) over the expected duration for the IP.

Reforestation and young stand management activities and investments are aligned with FMP objectives and budget considerations. Recreation facilities and trails are managed and maintained for safety, positive experiences and protecting other resources like water quality and are consistent with the FY 2022 budget level.

Approval of this plan does not constitute final approval of individual project details. Individual operations are subject to additional review processes at the district and division staff level before implementation. The planned amount and location of all management activities are based on the latest site-specific assessments and estimates of operational, T&E surveys, and market variables. Management activity levels may be adjusted and modified to

account for any significant changes to these variables. The alternate sales in this Annual Operations Plan may be used to replace the primary sales that cannot be completed as planned. Actual revenue realized from this AOP could change due to market fluctuations. Harvest operations and the associated project work provide an accurate picture of what will be designed and prepared for contract in FY 2022. Due to the time lag with contract duration, most of the actual harvest operations with associated revenues will not occur for a period of one to two years beyond the end of the fiscal year. Forest management activities such as reforestation and recreation projects will occur in FY 2022

The official copy of this AOP will be on file at the district office. Additional copies are available at the State Forests Program office in Salem, and are also available on the ODF web site at:

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

Approved:

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Michael Curran  
West Oregon District Forester

# **West Oregon District 2022 ANNUAL OPERATIONS PLAN**



# West Oregon DISTRICT

## FY 2022 ANNUAL OPERATIONS PLAN

### OVERVIEW

This plan describes the activities and outcomes that Oregonians can expect to see on the West Oregon District for FY 2022. The state forest on the West Oregon District is an actively managed forest, valued by many Oregonians for its 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 high quality, allowing for off-highway vehicles, bicycling, hiking, hunting, horseback riding, and more, striving to minimize user and environmental conflicts in the context of a working forest.

Managing a 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 state forest timber sales go to local counties and other taxing districts, or to the Common School Fund. Oregon Department of Forestry (ODF) uses the remaining third of the 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 habitat improvement. We are striving to continue to provide the current opportunities, and are considering a few opportunities for change.

Every year in the Forest, 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, engineers, adjacent landowners, and a variety of interest groups and the plan underwent a 45-day public comment period.

This Annual Operations Plan (AOP) has been reviewed by 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, local tribes, motorized and non-motorized recreation users, hunters, fishermen, and wildlife advocates, as well as Oregonians in general.

The activities shown in the Summary Document and appendixes are estimates based on plans, information, and conditions as known at this point in time. The type, amount, and specific activities will be further adjusted based on field work conducted and on updated assessments that occur during the 2022 fiscal year.

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

- Planting 112,000 trees on 349 acres and conducting vegetation management on approximately 670 acres and animal damage mitigation activities on an additional 300 acres to ensure the survival and growth of young plantations.
- Conducting density surveys for northern spotted owls and operational surveys for marbled murrelets and surveying 3.5 miles of streams for the presence of fish habitat.
- Protecting streams and water resources through a series of buffers and seasonal restrictions.
- Stream improvement projects. After review by ODF's Aquatic and Riparian Specialist and by ODFW during the AOP cooperators meeting, it was determined that no primary sales in the FY 22 AOP were good candidates for stream enhancement projects.
- 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.
- Maintaining 27.0 miles of road and improving approximately 12.0 miles of road to ensure ditch water is dispersed and filtered as much as possible, keeping runoff from entering streams. These roads provide access to timber harvest as well as various recreational opportunities.
- Reviewing District roads to develop plans to block or vacate roads to help manage trash dumping, off-road use, and irresponsible target shooting.
- Proposing to harvest approximately 14.3 million board feet of timber volume, through modified clearcuts, and partial cuts generating revenue of an estimated \$5.3 Million net value. 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.
- Completing initial planning and conceptual design work for the Black Rock Mountain Bike Trailhead project in partnership with the Black Rock Mountain Bike Association; and in consultation with neighboring landowners to ensure that there are no future conflicts with trailhead and trail locations.
- Maintaining and managing the existing motorized and non-motorized trail networks through adopt-a-trail agreements, while striving to protect the trail investments, provide for user safety, and protect trees, wildlife and water quality.

- Supporting pre-planned organized motorized and non-motorized recreation events. Evaluating new recreational proposals for fit with forest goals.
- Providing a firewood cutting program and miscellaneous forest products permits (salal, mushrooms, etc.).
- Supporting ongoing research and educational opportunities on the district, in partnership with research cooperatives and universities. Among other opportunities, the district will maintain a newly installed 7-acre progeny site in cooperation with the NW Tree Improvement Cooperative. In any one year, the district typically host between 4-8 research projects. Current research projects include a seismic monitoring study, a watershed monitoring study and multiple pollinator studies.

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# **INTRODUCTION**

This annual operation plan (AOP) outlines activities on state-owned forestland managed by the West Oregon District for Fiscal Year 2022 (FY22), which begins July 1, 2021 and ends June 30, 2022. This document describes how the activities and projects undertaken by the district will achieve the goals, strategies, and objectives of the *NW Oregon Forest Management Plan (FMP)*, and the *West Oregon District 2012 (modified in 2015) Implementation Plan (IP)*. Please refer to the district IP's for more specific information on physical characteristics and other district resource information.

The AOP document is divided into five major categories: Integrated Forest Management; Planning and Information Systems; Public Information and Education; Administration and Appendices. A short summary of proposed activities is listed within this introduction. In addition to describing forest management activities for FY22, Appendix F describes any modifications to the Forest Land Management Classification System. Appendix G describes any modifications to the West Oregon District's Landscape Design\*.

The proposed harvest operations and activities are planned to be designed, engineered, and submitted for processing during the FY22 time period. Actual on-the-ground operations will likely not occur during FY22 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 FY22.

A 45-day public comment period was held from May 7, 2021 through June 21, 2021. A summary of these comments can be found in Appendix D. The District Forester reviewed and considered all comments received before approving this plan.

Accomplishments of forest management activities that occurred under previous AOPs can be found in several reports, including the *State Forester's Annual Report for the Association of Oregon Counties* and the *Common School Forest Lands Annual Report*. These reports are available through the local district office or online.\*\*

\*Minor/major modifications and the procedures for making these changes are described in West Oregon District IP.

\*\*The State Forests' individual district annual reports are available on the Oregon Dept. of Forestry website under "Reports." You can access here: <http://www.oregon.gov/ODF/Pages/Reports.aspx>

# **INTEGRATED FOREST MANAGEMENT**

## **OPERATIONS**

### **Timber Harvest Operations**

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

All of the Primary and Alternate harvest operations and many of the other forest management activities have been reviewed by ODF's wildlife biologists, aquatic specialist, geotechnical engineer, road engineer, and planning manager, as well as fish and wildlife biologists from the Oregon Department of Fish and Wildlife, and archeologists from Oregon Department of Transportation. Occasionally, operations may contain a resource or activity where review with another state agency, such as the Department of Agriculture is warranted. Written comments from the external resource specialists and the resolution of those comments can be found in Appendix C.

The FY22 AOP is estimated to produce 14.3 million board feet in volume, generate gross revenues of approximately \$5,616,700 and net revenues of \$5,292,745. The goal is to achieve the average of the Annual Harvest Objective (AHO) of 12.0 MMBF over the expected duration for the IP. The increase in volume planned for harvest in this fiscal year will contribute toward realigning harvest volumes with the average AHO volume. Under normal circumstances, the volume proposed in an AOP will be near the AHO target. However, some events may result in an AOP volume that is farther from the AHO target. These events may consist of, but are not limited to, storm damage, insect and/or disease outbreaks, timber market conditions or other significant events. Alternate timber sales included in the AOP may be sold as primary operations in response to any of these circumstances.

Additional operations may produce timber volume for the district during the 2022 fiscal year but are not included in this AOP. These are generally small areas, produce little volume, and/or are time sensitive in nature. These sales do not require significant effort to develop and execute and will comply with all policies, the district IP, and the FMP. Examples of these sales include salvage, pulp sales, removal of hazard trees, pole sales, etc.

Refer to the attached West Oregon District Financial Summary Table (Appendix A, Table A-1) and vicinity map (Appendix B) for more detail.

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

Annual Harvest Objectives	IP Annual Objective		2022 AOP
	Low	High	
Volume (MMBF)	12		14.3
Partial Cut Harvest	0	1,200	457
Regeneration Harvest	255	400	335

Table 1 shows the proposed acres by harvest type. The 335 acres of regeneration harvest planned for FY22 represents <1 percent of the district acreage. All of the regeneration harvest acres will be designed as modified clearcuts. There are two first entry moderate partial cut sales in young stands which will help improve the growing conditions within these stands. The anticipated harvest acres, volume, and revenue for each proposed operation in this AOP are listed in the “Harvest Operations – Financial Summary” Table A-1 in Appendix A.

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

<b>Fiscal Year</b>	<b>IP Annual Objective</b>	<b>AOP Planned Volume</b>	<b>AOP Sold Volume</b>	<b>Cumulative Difference from Objective<sup>1</sup></b>
FY 13	10.0	10.0	7.7	-2.3
FY 14	12.0	12.0	11.5	-2.8
FY 15	12.0	13.2	9.5	-5.3
FY 16	12.0	13.4	12.9	-4.4
FY 17	12.0	12.8	12.9	-3.5
FY 18	12.0	11.8	13.5	-2.1
FY 19	12.0	12.4	9.7	-3.3
FY 20	12.0	13.4	13.4	-2.0
FY 21 <sup>2</sup>	12.0	13.3	11.6	-2.4
FY 22	12.0	14.3		

1. IP Harvest Objective versus Sold Volume.
2. Estimated volume based on sold and remaining to be sold sales.

### Overview of Structural Components

The guidelines for managing structural habitat components listed under Landscape Management Strategy 3 in the NWO State Forests Management Plan (pg. 4-52), will be followed for the FY22 Annual Operations Plan. Structural components may be retained at higher levels in some units and at lower levels in other units. The intent is to achieve the targets outlined in the Forest Management Plan strategies in a given annual operations plan.

The green tree retention target for regeneration harvest units is an average of five trees per acre in the NW FMP. Green tree arrangements for this AOP may include; scattered individual trees, clumps of trees, and trees concentrated in and adjacent to riparian management areas, inner gorge areas or headwalls. The final decision on the location and arrangement of the green trees is made while the sale is being laid out to incorporate information on potential minor tree species, unique stand features, steep slopes, visual considerations, reforestation considerations, etc. To promote diversity on the landscape a variety of green tree placement strategies will be used.

The NW FMP strategy for hard snags is to manage for at least two per acre on average across the landscape. The FMP strategy for Down Woody Debris is to retain an average of 600 to 900 cubic feet of hard conifer logs (class 1 & 2) per acre during regeneration harvest. Strategies for retaining snags and down wood are determined using a current condition assessment from forest inventory data or timber cruising data. The need for snag creation in each unit is evaluated

based on cruise or inventory information that documents snags in decay class 1 and 2 in the sale and surrounding landscape. Areas with less than 2 hard snags per acre will be evaluated and an appropriate snag prescription will be developed as needed. Down Wood will continue to be created through bucking practices, leaving felled snags in the unit and tops on ground yarding areas.

The West Oregon District has experienced a number of large wind and snow break events over the last 10-15 years. This has produced a large number of residual snags and down woody debris components across the landscape where older stands are present. Due to this snag creation is not perused. If snags are found in an area during sale layout efforts are made to leave them on the landscape where safety permits.

### **Harvest Operations within Terrestrial Anchor Sites and Aquatic Anchors**

The West Oregon District 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) areas are intended to benefit terrestrial wildlife species of concern, especially those associated with older forest or interior habitat conditions, sensitive to forest fragmentation, or do not readily disperse across younger forest conditions. Management within TAS is intended to be limited, to emulate natural small-scale disturbance patterns, and to 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 AA.

The Species of Concern Strategies provide long term goals for TAS and AA. The management activities within those areas are 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.

#### Terrestrial Anchor Sites

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 2022 AOP and the cumulative operations planned in TAS since the strategy was adopted (AOPs 2013 through 2022).

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

Acres within TAS	Current AOP (FY 2022)		Cumulative Harvest (Since FY 2013)	
	Clearcut	Partial Cut	Clearcut	Partial Cut
<b>Terrestrial Anchor Site (TAS) Basins</b>				
<b>Green Mountain (1,625 ac)</b>	0	0	0	0
% of Acres	0%	0%	0%	0%
<b>Wolf Creek (1,001 ac)</b>	0	0	0	0
% of Acres	0%	0%	0%	0%
<b>All TAS (2,626 ac)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>% of Acres</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>

Aquatic Anchors

Increased water protection measures will be implemented on regeneration harvest operations planned within the AA's as specified in the Species of Concern strategy. Table 4 shows the current harvest and the cumulative total from FY 2013

**Table 4. Summary of Harvest Operations within AA (acres and percent)**

Acreages	Current AOP (FY 2022)		Cumulative Harvest (since FY 2013)	
	Clearcut	Partial Cut	Clearcut	Partial Cut
<b>Aquatic Anchor (AA) Basins</b>				
<b>Little Rock Creek (4,768 ac)</b>	0	0	279	227
% of Acres	0%	0%	6%	5%
<b>Upper Yaquina – Amphibian Emphasis (3,493 ac)</b>	0	0	113	181
% of Acres	0%	0%	3.2%	5.2%
<b>Wolf Creek (3,194 ac)</b>	0	201	228	374
% of Acres	0%	6.3%	7.0%	11.7%
<b>All Aquatic Anchors (11,455 ac)</b>	0	201	620	782
<b>% of Acres</b>	<b>0%</b>	<b>1.7%</b>	<b>5.4%</b>	<b>6.8%</b>

**Summary of Timber Harvest Operations by Basin**

In the following section, the harvest operations planned for FY22 will be summarized in the context of the five management basins on the West Oregon District. Since the Forest Management Plan strategies provide standards for structural components such as green trees, snags, down wood as well as riparian protection, these are not discussed in the summary. Road strategies and standards are discussed in the Forest Roads Management section. Additional information regarding the harvest operations may be found within Table A-2, the Forest Resources Summary in Appendix A.

**Table 5. Summary of Timber Harvest Operations in each basin. All values are in net acres.**

Basin	2022 AOP Primary Sales	
	Partial Cut	Clearcut
Big Elk Creek	305	138
Luckiamute River	55	42
Marys River		
Siletz River		70
Upper Yaquina River	100	85
<b>Totals</b>	<b>460</b>	<b>335</b>

### **Big Elk Creek Basin**

Long John (Primary Sale) – This sale is a modified clearcut of 138 acres in two units of primarily 43-46 year-old mixed Douglas-fir, bigleaf maple, and red alder. The sale units were previously commercially thinned. The current condition for stands within the operation is Understory. The Desired Future Condition (DFC) is non-complex structure. Following the completion of harvest, the units will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

No new roads are needed for harvest. Approximately 4.7 miles of road are planned to be improved with the sale. Approximately 1.3 miles of property line survey will be needed between the two units.

Approximately 33% of the sale is on Common School Land.

Grouse Bully Thin (Primary Sale) – This sale consists of three partial cut units totaling 351 acres in 33-35 year-old Douglas-fir plantations. 305 acres are in the Big Elk Creek Basin and 46 acres are in the Upper Yaquina River Basin. The current condition of stands within the operation is Understory. The DFC of the stands is non-complex structure.

Approximately 0.05 miles of new roads will be constructed to facilitate harvest. Approximately 3.4 miles of roads are planned to be improved with the sale.

The FLMC layer shows that the stream through the middle of Unit 3 is a domestic water site stream, however no registered point of diversion or domestic water site is shown on the Water Resources Department Layer. Since this operation is a thinning, no impact to the water resource will occur. During sale layout, foresters will look for the presence of a water intake within the sale boundary.

Unit 2 is located within the Wolf Creek Aquatic Anchor Site.

Unit 1 of this sale is located within the within the Upper Yaquina River Basin.

Beaver Believer Thin (Alternate Sale) – This sale is comprised of two partial cut units in 31 to 35 year old Douglas-fir plantations. Total sale acreage is 197. The current condition of the two stands is Understory and the DFC is for non-complex stands.

A request will be made of Weyerhaeuser to build a short dirt spur across their property to access a portion of Unit 2. Approximately 2.4 miles of road will be improved for sale access.

Doe-A-Deer (Alternate Sale) – There are 3 modified clearcut units in this sale, consisting of 57 acres of 60 to 86 year old Douglas-fir, red alder and bigleaf maple. The sale area totals 57 acres. Half of the acreage is in Understory current condition, the other half is in Layered. A small portion of Unit 3 has a DFC of complex, which will remain in place after harvest. Following the completion of harvest, the unit will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 0.3 miles of new road will be constructed to access Unit 2 and a portion of Unit 3. One mile of road will be improved.

The FLMC layer shows that the stream adjacent to Unit 3 is a domestic water site stream, however no registered point of diversion or domestic water site is shown on the Water Resources Department Layer. This stream is also potentially a Type F stream and will be buffered accordingly. During sale layout, foresters will look for the presence of a water intake within the sale boundary.

Approximately 87% of the sale is on Common School Land.

### **Luckiamute River Basin**

Old Fort Combo (Primary Sale) – This sale consists of one 42 acres modified clear cut unit and two partial cut units totaling 55 acres. The entire sale is primarily 30 year old Douglas-fir. Much of the stand was damaged in the 2014 ice-storm, leaving about half of the trees with broken tops. On February 15<sup>th</sup> of this year, the stand was again affected by an ice storm. Unit 1 was originally planned as a partial cut as well but was converted to a modified clear-cut due to the significant damage caused by this most recent ice-storm event. The current condition is Understory and the DFC is non-complex.

There are several domestic water intakes outside of the east boundary of the sale on private land. The streams originate in the sale area. The sale will implement FMP stream buffer strategies at a minimum which provide important protection measures for all waters, including domestic.

There is a potential cultural resource (a “foundation”) located in the sale, a preliminary search showed a raised area in the stand which will be looked at further to determine any needs for protection or avoidance.

Very little road improvement is needed as most of the access roads were recently improved with a neighboring timber sale.

### **Marys River Basin**

Mahrvelous (Alternate Sale) – This sale consists of one modified clearcut unit of 48 to 75 year-old Douglas-fir and red alder, totaling 91 acres. The sale’s stands are all current condition Understory and their DFC is non-complex. The older stands in the sale were commercially thinned 20 years ago. Following the completion of harvest, the unit will be planted with a mixture of seedlings to be determined closer to the time of reforestation. ODOT archaeological review shows that the historic Indian Trail from Kings Valley to Siletz is located just south of the sale area, likely on what is now a commonly used county road.

Approximately 0.2 miles of spur road construction will take place and 2.0 miles of road improvement. It is likely that the entire west property line will require a line survey (0.9 miles).

Approximately 29% of the sale is on Common School Land.

### **Siletz River Basin**

Cool Hand Lucas (Primary Sale) – This sale is a modified clearcut of 70 acres in a stand of 65 year-old mixed Douglas-fir, western hemlock, and red alder. Most of the unit was previously commercially thinned. The current condition for stands within the operation are Layered or Understory. The DFC of the stand is part of the proposed minor mod for FY22 to change 5 acres from a future condition of a complex stand to a non-complex stand. Following the completion of harvest, the unit will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

No new roads are needed for the harvest. Approximately 1.5 miles of road are planned to be improved with the sale. Approximately 0.2 miles will be vacated by pulling culverts and pulling back side-cast material onto the road bed.

### **Upper Yaquina River Basin**

Grouse Bully Thin (Primary Sale) – Approximately 46 acres (Unit 1) of this sale is within the Upper Yaquina River Basin. The full sale description can be found under the “**Big Elk Creek Basin**” heading listed above in this document.

Roger Miller (Primary Sale) – This sale consists of 3 modified clearcut units, ranging from 45 to 60 years old and totaling 85 acres; and 2 partial cut units, 35 and 48 years old and totaling 54 acres. The clearcut stands are a mix of Douglas-fir, red alder and bigleaf maple. The partial cut units will remove only Douglas-fir, leaving behind a mix of Douglas-fir and red alder. All stands are in current condition Understory. All units, except Unit 4, have a DFC of non-complex. Unit 4 is partially DFC Complex and partially DFC non-complex. This unit is in the buffer portion of the Salmon Creek MMMA. Unit 2 was commercially thinned 15 years ago.

Approximately 0.3 miles of new road construction will be needed to access Unit 1. Approximately 0.75 miles of property line survey will be needed for Unit 1 and Unit 2.

Approximately 23% of the sale is on Common School Land.

All is Well Thin (Alternate Sale) – This sale is comprised of 3 partial cut units which are Douglas-fir plantations ranging from 29 to 33 years old. All units are in current condition Closed Single Canopy and the DFC for all units is non-complex. ODOT archaeological review shows that the historic Yaquina & Corvallis Road and the Pioneer Road were likely located within the sale boundaries on now what are commonly used forest roads. Foresters will look for remnants of these roads during sale preparation.

Approximately 0.1 miles of new road are planned and 3.5 miles of road improvement.

## **Forest Roads Management**

### **Overview**

The State Forest road network provides access for forest management activities, fire suppression, and recreation. Visions, guiding principles, and goals for managing the road network are discussed in the Northwest Oregon State Forests Management Plan (April 2010) and the State Forest Roads Manual (July 2000). The State Forest Roads Manual also provides standards and guidance for all road management activities and definitions, road classifications and other terms. The newly formed Area Roads Maintenance Team will assist the district with developing a district wide road maintenance plan and will also assist, as available, in developing roads maintenance contracts.

Most of the roadwork in this AOP is being conducted to construct spur roads and to improve haul routes for the FY22 timber sales. Some roadside vegetation management and rock stockpile creation will benefit access outside of the FY22 timber sale haul routes. This section describes the types of road management activities that will occur in FY22 and the attached Forest Roads Summary Table (Appendix A, Table A-3) describes the anticipated total amounts.

### **Road Construction**

Road construction and improvement identified in this plan will be primarily achieved through project work connected with timber sales. LiDAR based slope information is helpful in locating roads away from locally steep slopes.

### **Road Improvement**

Road improvement projects will use ODF road inventory protocols to assess existing road drainage, stability, surfacing and vegetation conditions, and to aid in the development of transportation system improvement plans. The majority of this improvement work will be performed on collector and spur roads and will consist of installing new cross drains and disconnect culverts, replacing culverts, ditchline improvements, and new surfacing.

### **Road Access Management**

Access to the State Forest is generally not restricted. However, roads that pose a high risk of damage to water quality are candidates for closure. Closing and vacating roads reduces the district's maintenance cost and helps to minimize impacts to the environment from roads. We retain the option of closing roads if vandalism, neighbor concerns, or excessive road damage from public use becomes a problem in particular areas. Several sales are accessed across private or other public land (USFS/BLM) and portions of two sales are on gated roads.

### **Road Maintenance**

Roads will be maintained as necessary to protect water quality and the road system asset value. Road maintenance activities will follow the maintenance guidance in Chapter 7 of the Forest Roads Manual and the Forest Practices rules. Road maintenance is accomplished under timber sale contracts for roads used for hauling forest products, using the State Forest road crew or work order contracts. Maintenance is focused on ensuring proper drainage to prevent sediment entering streams. Collector roads and roads in active sale areas need and get the most

maintenance. District personnel respond to heavy storms and thaw periods by performing road inspections, maintenance through existing contracts, and where necessary, stopping heavy truck use during periods when roads cannot handle traffic without damage to water quality or the road asset.

### **Management of Rock Source/Supply**

The District plans for durable rock to be used on in-sale spurs and haul routes, which allows for year-round harvest opportunities on most timber sales. Purchasing rock from commercial sources is necessary to provide road rock for planned road construction, road improvement, and road maintenance activities. The district has not been successful in locating viable rock sources on district lands.

### **Land Surveying**

Every year surveying needs are analyzed and planned to be kept at a minimum level while ensuring property lines and corners are clearly marked. Survey work may be accomplished through service contracts with licensed professional land surveyors, cost sharing with adjacent landowners or utilizing the licensed surveyor on staff with ODF. Land surveying will be necessary on the following primary sales:

- Cool Hand Lucas (1,300 feet)
- Long John (6,900 feet)
- Roger Miller (4,000 feet)

### **Young Stand Management**

The State Forest strategy is to use a range of silvicultural tools to establish and maintain diverse stands of well-adapted natural species throughout the landscape to meet the objectives and goals in the Forest Management Plan and District Implementation Plan. These tools include site preparation, planting, tree protection, vegetation management, pre-commercial thinning, early commercial thinning and interplanting or replanting. Each practice must be considered and prescribed for individual stands on a site-specific basis.

This section describes the types of reforestation and young stand management activities that will occur in FY22 and the attached Young Stand Management Table (Appendix A, Table A-4) describes the anticipated total amounts. The location and amount (acres) of these activities are estimates based on plans, information and conditions as known at this point in time. The type, amount and specific stand management prescriptions will be further adjusted based on when existing harvest units are completed and on updated assessments and surveys that will occur during and after the 2021 growing season.

The majority of reforestation activities will be completed by using experienced contractors. A portion of the activities will be completed by utilizing crews from a Correctional Institution. These crews work on activities such as inter-planting, tree protection, mechanical hand release, and noxious weed control.

## Seedlings / Nurseries

In order to meet the goals of the Forest Management Plan, the State Forests Program requires tree seedlings that are physiologically healthy and best suited for the planting sites. A wide variety of native species seedlings are grown through contracts at forest nurseries throughout the Pacific Northwest to meet the reforestation needs. Seedlings are grown in three different stock types: 1) plug seedlings or one-year-old container grown seedlings, 2) plug +1 seedlings which are grown one year in a container followed by a second year in a bare root bed, and 3) straight bare root seedlings grown from seed in a bare root seed-bed and then transplanted to a wider spacing transplant bed. The budget accounts for a string of growing costs over several years rather than just those costs of the trees being grown and planted in the winter. The budget for seedlings includes portions of the costs for growing seedlings for three planting years. Additionally, there are costs associated with the seed production, transportation costs and various costs associated with packaging and freezer and/or cooler storage. The individual species mixture and stock type used for a particular reforestation unit is determined after the final inventory from the forest nursery and varies by District.

All State Forest's Douglas-fir seedlings are grown from improved seed. Most minor species seed also comes from tree improvement coop orchards. For FY22 outplant, district seedlings are being grown at the IFA, and Lewis River nurseries. Species consist of Douglas-fir, western redcedar and western hemlock.

## Site Preparation

Site preparation is any planned measure to prepare a site to allow for favorable growing conditions for newly planted seedlings. More than one of these techniques may be used for any given site based on the attributes and reforestation prescription for the site. The three main site preparation techniques are mechanical, chemical and slash burning.

- 1) Slash Burning: Slash burning can be accomplished by broadcast burning the entire unit or burning piles that result from mechanical site preparation.
- 2) Mechanical: Mechanical site preparation is the use of mechanized equipment to rearrange or alter forest slash and/or disturb the forest surface layer and vegetation to create seedbeds or planting spots. Planting spots are created in a fairly even distribution. Dense slash concentrations created during timber harvest may be mechanically piled as part of the timber sale contract.
- 3) Chemical: Chemical site preparation involves the application of herbicides to control competing vegetation before planting or natural regeneration and during the early stages of seedling establishment. Applications occur by two primary methods: aerially by helicopter or ground based with the use of backpack application equipment. The objective is to control brush species to allow stand establishment and maintain 2-3 years free of significant competing vegetation. The actual site preparation plan will be prepared in late spring when harvest unit availability and brush development is better known.

## 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. Planting is comprised of matching the appropriate species and stock type to the planting site. Forest health strategies are addressed on a site specific basis when the planting plan is developed. Site specific prescriptions consider target species, aspect, elevation, soil types, Swiss Needle Cast risk where applicable, *Phellinus weirii* (laminated root rot) presence, required stocking guidelines, natural advanced regeneration, and the desired future condition of the stand. To accomplish this, a mixture of species are planted to provide for a healthy, productive, and sustainable forest ecosystem over time and to be more resilient to climate change. The following are different types of planting.

- 1) Initial Planting: Planting activities establish the desired species and stocking levels to meet the goals in the Forest Management Plan and Forest Practices Laws. Planted seedlings will be well suited and adapted to the reforestation site and where appropriate, a mixture of species may be planted to increase diversity on the landscape.
- 2) Interplanting: Interplanting may occur when stocking levels fall below or are at risk of falling below Forest Practices Act (FPA) minimums. In certain instances, interplanting will occur to increase stocking on high quality sites to fully capture the site. In other areas, lower stocking will be acceptable, as it will provide high quality early seral habitat while still meeting FPA requirements.
- 3) Underplanting: This type of planting is occasionally conducted after thinning in order to introduce both species diversity and an additional future layer of structure into a stand.
- 4) Natural Regeneration: Units or portions of units are assessed prior to planting. Natural regeneration is considered primarily in western hemlock stands that have been salvaged from wind storms, where small gaps and holes less than 2 acres have been created in partial cut units, and in unit rock outcrops or cliffs. Natural regeneration of red alder and other minor species is used to provide diversity in all harvest units.

## **Tree Protection**

Animal damage on newly planted seedlings reduces their overall size, health and vigor. Extensive damage can lead to plantation failure and require interplanting, may extend the time to achieve free to grow status as defined by the Forest Practices Act and prevent meeting Forest Management Plan goals. Deer and elk, as well as mountain beaver, can heavily damage young seedlings. Various tree protection strategies are applied to help re-establish trees in areas with high concentrations of these species. Most commonly, various types of physical barriers (bud caps, vexar tubes, etc.) help prevent damage from big game. Direct control includes trapping mountain beaver in highly populated areas prior to planting in order to prevent damage to trees once they are planted.

## **Vegetation Management – Release Treatments**

Vegetation management is done to reduce light, moisture or nutrient competition from undesirable vegetation in a young stand of trees to improve survival and growth. It can also be used to alter tree species composition under pressure from insect and disease and favor species that are tolerant or resistant to the threat. Vegetation management may be required to meet Forest Practices reforestation stocking requirements, the NW Oregon State Forests Management Plan and the District Implementation Plans. There are two types of vegetation management, chemical and manual release treatments. They are described below.

**Chemical Release:** Chemical release treatments involve the application of herbicides to control undesirable vegetation. Typical application methods are broadcast, directed spray, and hack and squirt. Broadcast application treatments are sprayed over the top of seedlings and undesirable vegetation using either aerial or backpack methods. Directed spray applications are made with a backpack and target individual plants. This method is often used to remove invasive species such as Scotch broom from young stands. Hack and squirt involves basal or stem injection of chemicals. This method is typically applied to hardwoods as a way to release conifers from hardwood competition.

**Manual Release:** Manual release can include cutting down of noxious weeds or hardwoods. Hardwood release is used when ingrowth of hardwoods, mainly red alder in the northwest and madrone and tanoak in the southwest, threaten to change the stand from conifer dominate to hardwood dominate. In this treatment, the majority of hardwoods are removed using chainsaws leaving all of the conifer trees. This differs from PCT (described below) in the fact that conifer spacing and species are not manipulated. While hardwoods are important on the landscape and some are retained, long-term conifer production is the goal for many stands across the district.

### **Pre-Commercial Thinning (PCT)**

PCT is a silviculture activity used to manipulate the density, structure or species composition of overstocked young forest stands. Generally, the purpose of a PCT operation is to release the biggest and best growing trees so they can maintain their growth. PCT is normally conducted in a stand between the ages of 10 and 20 years old. In areas of disease such as Swiss Needle Cast or *Phellinus weirii*, PCT can be used to favor species other than impacted Douglas-fir trees in the residual stand. The IP states that annual PCT acreage may vary between 0 and 800 acres.

### **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. No pruning is planned for FY 2022.

### **Stocking Surveys**

The State Forests Unit has the responsibility of ensuring that the goals of the Forest Management Plan are met. Stocking surveys is one tool to ensure the stands are on track for the desired future condition. The surveys are done in order to check initial plantation survival at a time when the seedlings are vulnerable and there is still time to remedy problems, by using interplanting and animal damage control measures as examples. In addition, stocking surveys are conducted in order to assess free-to-grow status and to get baseline data on the stand for future management planning, for example evaluating release treatments and pre-commercial thinning candidates.

### **Invasive Species**

Most noxious weeds or invasive plants are found along roads and have spread into plantations. The main sources for the weed introduction into the forest are vehicle tires, equipment moved into and out of district, and where soil disturbance occurs. 100% weed-free grass seed and certified weed-free straw used for mulch is required for project work

on roads. Equipment washing is required in timber sale contracts to prevent the introduction of weed seed from other sites. It is also required that weed-free hay is used for feeding stock on State Forest Lands.

The State Forests Unit continues to identify appropriate steps they can take to prevent the introduction and spread of invasive plants. Knotweed, Scotch broom, English ivy and false brome are the primary species known to exist in the District. Active control measures are being planned and prioritized for roadside, in-unit, and trail treatment.

## **Roadside Vegetation Management**

The State Forests Unit manages vegetation alongside forest roads. Vegetation management protects the investment by preventing damage from unchecked vegetation growth, helps to maintain a safe driving environment by maintaining clear sight distance, controls noxious weeds, and reduces fire hazards. Roadside vegetation will be controlled manually, mechanically or chemically where necessary. The method used will depend on the characteristics of the vegetation and its location. During the spring of 2021, roadside vegetation surveys will be conducted to determine roadside treatment needs for FY22. In most cases, roadside chemical applications and roadside mechanical brushing will be part of a timber sale's project work, conducted by an experienced contractor. Some roadside manual treatment will be conducted by Correctional Institution crews.

## **Recreation Management**

### **Overview of Recreation Management**

The FY22 AOP continues to be a time of transition for ODF's Recreation Program. This will be the first year that recreation management has shifted from a District responsibility to a cooperative effort between the District and the Recreation, Education and Interpretation (REI) Team, with the REI Team providing the leadership. Keys to successful implementation of this shift in organizational structure will be good communication and ensuring the continued fostering of relationships with our user groups.

Current recreational activities on the District consist of dispersed camping, sightseeing, hiking, hunting, fishing and ATV and mountain bike riding. There are four sites that receive 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/camping 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.

4. Yaquina Falls. There are currently no organized activities on-going here, but the falls receive frequent visits on un-improved trails.

These recreation activities will be managed and maintained consistent with past practices and in collaboration with our partners. Recreation planning and management are covered in the 2012 IP in detail.

**Facilities**

The facilities at Baber Meadows include a vault toilet, an informational kiosk, a 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 campsites. There is also an overflow parking area to the west of the meadows. The district pays for the pumping of the vault 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 with portable toilet and changing station, a staging area/gathering area and two informational kiosks.

See Table 6 below for developed and dispersed facility maintenance and improvement projects planned for FY22.

**Table 6. Developed and Dispersed Facility Projects**

Project Type	Project Name	Work Resources	Project Description
Sign Replacement	Mt. Baber Staging Areas Site Sign Replacement	South Fork and Volunteers	Replacement of worn, out-of-date site signs for both ATV staging areas.
Maintenance/Repair	Baber Meadows	Volunteers	Repair and replace rope fencing around perimeter of Mt. Baber Staging Area.
Planning	Black Rock Trailhead	Volunteers, REI Team and District Staff	ODF is in the process of purchasing Weyerhaeuser land adjacent to ODF’s Black Rock parcel. The REI Team will work with District staff and BRMBA to develop a conceptual plan for a new trailhead on this site.

**OHV Trails**

**Table 7. Motorized Trail Projects**

Project Type	Project Name	Project Mileage	Work Resources	Project Description
Planning	Salmon Creek OHV Trail	1.0	Volunteers, REI Team and District Staff	Develop plan for a new trail segment to improve Mt Baber OHV Trail system connectivity to the Salmon Creek OHV Staging Area.

## Non-motorized Trails

**Table 8. Non-Motorized Trail Projects**

<b>Project Type</b>	<b>Project Name</b>	<b>Project Mileage</b>	<b>Work Resources</b>	<b>Project Description</b>
Trail System Planning	Black Rock Mountain Bike Area	TBD	Volunteers, REI Team and District Staff	Trail system planning for Black Rock Mountain Bike Area.

### **Trail Maintenance (OHV and Motorized)**

**Motorized:** 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.

**Non-motorized:** The 9.5 mile mountain bike trail system in the Black Rock area will be maintained throughout the year by BRMBA.

## **Volunteer Program and Partnerships**

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 through cooperative adopt-a-trail agreements. Both agreements will be reviewed and updated in FY22.

## **Event Management**

The Mt. Baber ATV club generally holds 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, resource protection restrictions).

The Black Rock Mountain Bike Association (BRMBA) may have some organized riding events along with regularly scheduled “work party” events. The trail system is used continuously throughout the year.

## **Grants**

Grant Research – ODF and BRMBA will research grant and funding opportunities to support design and construction phases of the Black Rock Mountain Bike Area Trailhead project.

## **Other Integrated Forest Management Projects**

### **Aquatic & Riparian Management**

All fish bearing streams found in State Forests are subject to the Management Standards for Aquatic and Riparian Areas as outlined in Appendix J found in the Northwest Oregon State Forests Management Plan (2010). An objective of State Forests' aquatic resources is to maintain, enhance, and restore quality fish habitat. This is achieved primarily through riparian buffer strategies specific to the aquatic resource characteristics such as presence of fish, size, and flow duration. The goal of all riparian management prescriptions is to obtain mature forest conditions (e.g., development of the natural community appropriate for that site) as expediently as possible. Aquatic Anchors (AA) have been established on watersheds in the District in which additional aquatic conservation measures are applied when regeneration harvesting. Small, perennial, non-fish bearing streams will be protected with 50 foot no harvest buffers and all fish bearing streams and large and medium non-fish bearing streams will be protected with 100 foot no harvest buffers as per AA Species of Concern strategies.

Several strategies, described in the Forest Management Plan, dictate protection measures designed to protect, maintain, and restore aquatic and riparian functions. These strategies are employed during harvest activities and include but are not limited to: leave trees adjacent to streams to protect stream temperature, provide nutrients, protect stream banks, and eventually provide wood to improve fish habitat. Best management practices for road construction, reconstruction, and maintenance minimize impacts to water quality.

Threatened and Endangered Fish Species: Federally Threatened Salmon and Steelhead listed species with Critical Habitat Designations found within the District include Upper Willamette Winter Steelhead and Coastal Coho Salmon.

Fish Distribution Surveys: Streams are classified in part as supporting fish (Type F) or not supporting fish (Type N). Riparian protection measures depend in part on the presence of fish. Many streams in the past have been surveyed with electro-fishing techniques that established the upper extent of fish use. However, many small streams have not yet been surveyed for fish presence. Streams needing classification in the AOP will be evaluated with a Physical Habitat Survey. The physical methodology was developed in conjunction with Oregon Department of Fish and Wildlife. The seasonal/perennial break in stream flow will also be evaluated prior to sale layout.

Restoration Goals and Identification Process: The overarching principles for fish habitat restoration are described in the Forest Management Plan. After review by ODF's Aquatic and Riparian Specialist and by ODFW during the AOP cooperators meeting, it was determined that no primary sales in the FY 22 AOP were good candidates for stream enhancement projects.

Restoration accomplishments are reported to Oregon Watershed Enhancement Board using the Oregon Watershed Restoration Inventory electronic filing process and reported by ODF annually in our report to the counties, board of forestry, and Division of State Lands.

### **Land Exchange**

There are currently no land exchanges planned. The district's "Land Acquisition and Exchange Plan" was updated in FY 2013.

## **Law Enforcement and Public Safety**

The District expects to contribute \$7,000 total during FY22 to help fund one forest deputy in each of the following counties: Lincoln, Benton and Polk. Other agencies and private forest land owners also contribute to the funding of these law enforcement officers.

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.

## **Firewood Cutting Program**

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. The permit fee for personal firewood cutting is \$20 for two cords. Permits are issued for a period of two weeks. Historically personal use firewood cutting has only been allowed outside the months of fire season. The District typically sells 80-150 woodcutting permits each year. In addition, the District issues between 5 to 10 commercial firewood permits per year with an estimated revenue of \$500 to \$1,000.

## **Non-Timber Forest Products**

The District typically issues between 30 and 50 miscellaneous forest product permits for salal, vine maple, 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. Revenue from these permits ranges from \$7,000 to \$10,000 per fiscal year.

# **Planning**

Below are the significant district-level planning projects currently scheduled for commencement, completion, or both in FY22.

## **Forest Inventory**

The State Forests Division is developing a lidar-based inventory that will replace SLI when completed. Lidar data was collected in 2020 for most ODF lands in the Northwest Oregon Area. Contract crews collected USFS FIA plot data on the majority of the proposed plots. The remaining plots will be sampled in 2021. The State Forest Division's Inventory Program is in the process of developing a raster-based estimate of forest biometrics across most of its ownership in Astoria, Tillamook, Forest Grove, North Cascade, and West Oregon Districts.

## **Wildlife Surveys**

### Northern Spotted Owl Surveys

For the FY22 AOP, the District will continue the northern spotted owl (NSO) survey program, in order to comply with federal and state Endangered Species Acts and to contribute to Forest

Management Plan (FMP) goals. Survey requirements are determined in accordance with *ODF Northern Spotted Owl Operational Policies*, November 2017.

### Marbled Murrelet Surveys

In FY22, the District will continue its marbled murrelet survey program in order to comply with Federal and State Endangered Species Acts and to contribute to Forest Management Plan goals. Survey requirements are determined in accordance with ODF policy, guidance, and survey protocols.

### T&E Plants

The District will continue to screen harvest operations against the Oregon Biodiversity Information Center (Orbic) database and other known locations on the District to identify potential conflicts with plant species listed in the District IP.

### Species of Concern Wildlife

The District will continue to screen harvest operations against several wildlife databases to identify potential conflicts with wildlife of concern listed in the District IP.

## **Research and Monitoring**

Districts will assist in a variety of research and monitoring projects in FY22. Examples include:

- Bumble Bee Populations within Managed Conifer Forests in the Oregon Coast Range (Zitomer/OSU).
- Influence of Forest Management Activities/Intensity on Pollinators in the Oregon Coast Range (Galbraith/OSU)
- Growing stock study of thinned stands at Black Rock (McGuire/OSU)
- Watershed Monitoring Study (Coble/NCASI)
- Nursery Seedling Stock trials (District).
- Seismic Monitoring – Mt. Baber (PNW Seismic Network/UofO)
- Evaluating Pollinator plant associations, diversity and abundance across a watershed-scale gradient of stand in the Oregon coast range (NCASI/Moriarty)

## **Other Planning Operations**

The district will continue collecting additional data to enhance road inventory information and rock inventories as workload permits. In conjunction with the REI Team the District will provide input and context to recreation planning. The district will also continue to participate in FMP and HCP reviews as needed.

## **Public Information and Education**

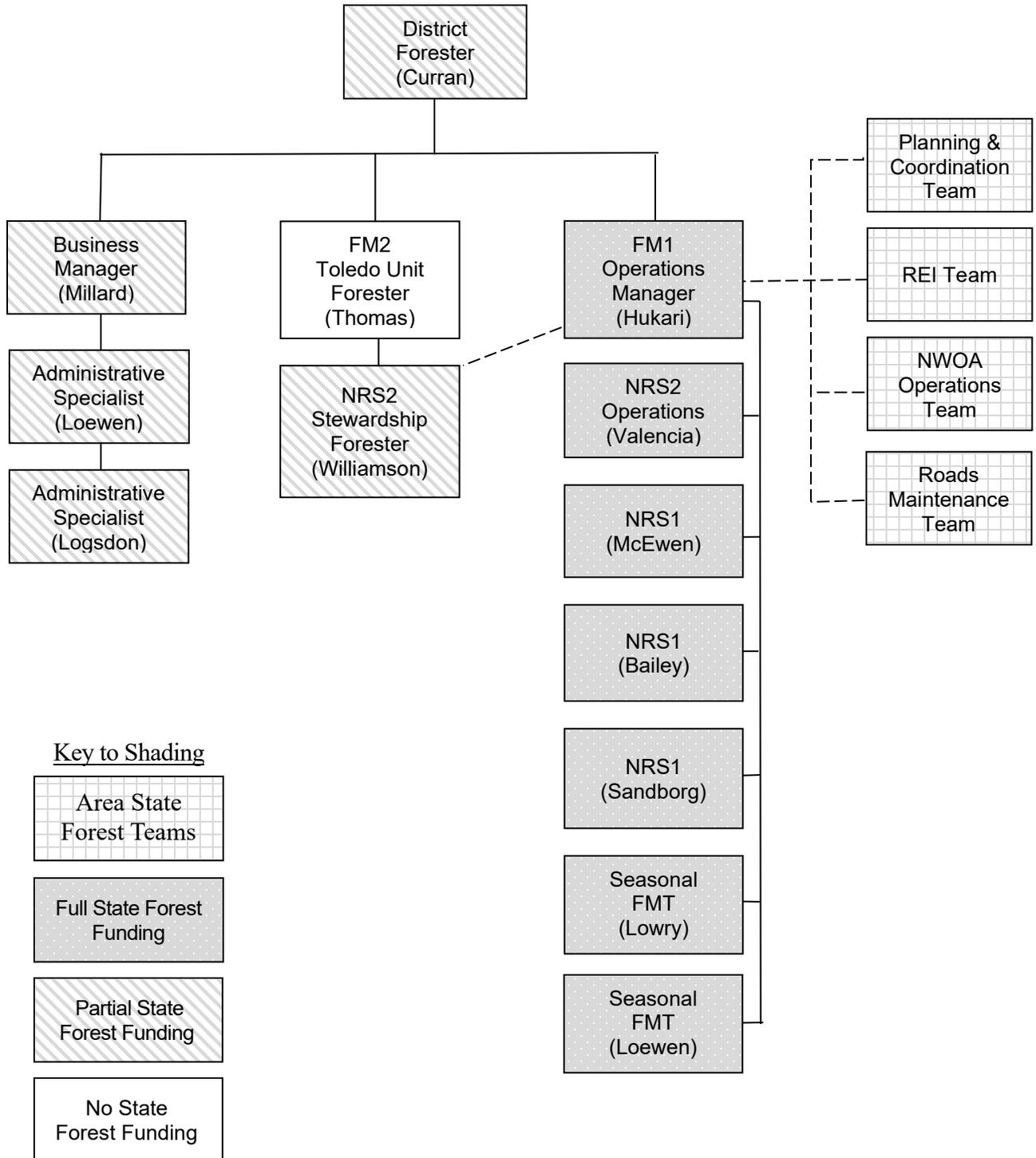
### **Forestry Education**

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 outdoor school presentations, OSU College of Forestry class presentations, 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. Staffing and workload limitations will be a factor in staff availability for participation in these activities.

## **Administration**

There are 12 positions on the district that are fully or partially funded for the management of State Forest land: 5 permanent personnel who work full-time on state forest management, 5 permanent personnel who work part-time on state forest management, and 2 seasonal personnel who work winter/spring on state lands. In addition, the District is supported by the NWOA REI Team, the NWOA Roads Maintenance Team and the NWOA Operations Team as well as the Division Planning and Coordination Team. All are responsible for implementing the 2022 Annual Operations Plan. The State Forest Unit is responsible for ensuring that all management approaches, activities and projects for timber marketing, road management, recreation and young stand management are designed to meet the goals, strategies and objectives of the FMP, Implementation Plan, AOP, and Recreation Plan. The sales and projects are coordinated across the district and with the NWOA and Division Teams from the development of the AOP to the final sale administration for consistency within and between units to meet common goals.

## West Oregon District Organization Chart



# **APPENDICES**

## **A. Summary Tables**

1. Harvest Operations – Financial Summary
2. Harvest Operations – Forest Resource Summary
3. Forest Road Management Summary
4. Reforestation and Young Stand Management Summary
5. Recreation Site Management Summary

## **B. Maps**

1. Harvest Operations Vicinity Map

## **C. Consultations with Other State Agencies**

This appendix summarizes the results of consultations with the Oregon Department of Fish and Wildlife, Oregon Department of Transportation and other agencies as appropriate.

## **D. Public Involvement**

This appendix will describe the results of the public involvement process of this AOP.

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

Pre-Operations Reports are available from the district upon request.

## **F. Forest Land Management Classification**

## **G. District Implementation Plan Minor Modification – Landscape Design**

# Appendix A

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## Summary Tables

- **Table A-1: Commercial Forest Management Operations - Financial Summary**
- **Table A-2: Commercial Forest Management Operations – Forest Resource Summary**
- **Table A-3: Forest Roads Summary**
- **Table A-4: Reforestation and Young Stand Management Summary**
- **Table A-5: Recreation Site Management – Financial Summary**
- **Table A-6: Recreation Trail Management – Financial Summary**

**TIMBER HARVEST OPERATIONS - FINANCIAL SUMMARY**

District: West Oregon

Fiscal Year: 2022

Date: 07/02/2021

Primary Operation	Fund %		County	Sale Quarter	Net Acres		Volume (MMBF)			Value		
	BOF	CSL			Partial Cut	Clear-cut	Conifer	Hard-woods	Total	Gross	Projects	Net
Old Fort Combo	100%	0%	Benton	1	52	42	1.1	0.0	1.1	\$360,750	\$24,994	\$335,756
Cool Hand Lucas	100%	0%	Polk	1	0	70	2.2	0.4	2.6	\$971,250	\$71,163	\$900,087
Roger Miller	74%	26%	Lincoln	2	54	85	2.3	0.4	2.7	\$1,029,850	\$86,021	\$943,829
Long John	67%	33%	Lincoln	3	0	138	4.7	0.2	4.9	\$2,589,300	\$67,595	\$2,521,705
Grouse Bully Thin	100%	0%	Lincoln	4	351	0	3.0	0.0	3.0	\$665,550	\$74,182	\$591,368
												\$0
												\$0
												\$0
												\$0
												\$0

<b>Sub-total:</b>	457	335	13.3	1.0	14.3	\$5,616,700	\$323,955	\$5,292,745
<b>Project WOC Sub-total:</b>	0	0	0.0	0.0	0.0	\$0		
<b>Total:</b>	457	335	13.3	1.0	14.3	\$5,616,700	\$323,955	\$5,292,745

**Alternate Operations**

Beaver Believer Thin	100%	0%	Lincoln	ALT	197	0	1.6	0.0	1.6	\$358,875	\$54,369	\$304,506
All is Well Thin	100%	0%	Lincoln	ALT	222	0	1.6	0.0	1.6	\$349,650	\$51,035	\$298,615
Mahrvelous	71%	29%	Benton	ALT	0	91	2.8	0.7	3.5	\$1,774,500	\$75,687	\$1,698,813
Doe a Deer	13%	87%	Lincoln	ALT	0	57	1.6	0.5	2.1	\$1,121,400	\$53,151	\$1,068,249

<b>Total:</b>	419	148	7.6	1.2	8.8	\$3,604,425	\$234,242	\$3,370,183
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**PRIMARY HARVEST OPERATIONS - FOREST RESOURCE SUMMARY**

District: West Oregon

Fiscal Year 2022

Date: 07/02/2021

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

Primary Harvest Operations	Unit (Optional)	Forest Health Issues <sup>1</sup>	Invasive Species	LYR/OFS Structures <sup>2</sup>	Landcape Design LYR/OFS <sup>3</sup>	Install/Replace Culverts on Fish Bearing / Perennial Streams	Harvesting within 100' of Fish Bearing Stream	Domestic Water Source	Potential Stream Habitat Improvement <sup>4</sup>	Within Aquatic Anchor	Within Terrestrial Anchor	Operating within a NSO Provincial Circle (BA Required)	Operating within a MMMA (BA Required)	Murrelet Timber Sale Screening Process Required (MM Policy 2.27)	T&E Fish Adjacent to Harvest Unit / Haul Route <sup>5</sup>	T&E Plants	Geotechnical Issues Needing Field Review	Recreation Sites	Cultural Resources	Scenic Resources	Other Resources or Issues
Old Fort Combo		X	X					X							X		X		X		
Cool Hand Lucas				X	X									X			X				Minor mod of 5.4 acres that are in DFC Layered
Roger Miller								X							X					X	
Long John					X									X	X					X	Minor mod 0.4 acres that are in DFC Layered
Grouse Bully Thin							X	X		X					X		X				

<sup>1</sup> A 'x' (in any column) indicates yes the resource or other issue occurs within or near the harvest operation and is addressed by the Pre-Operations Report

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

<sup>3</sup> A 'x' indicates that the operation contains areas that have been designated for the development of complex forest stands (LYR/OFS)

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

<sup>5</sup> This table lists harvest operations (units or log haul routes) that are adjacent to streams that are known to contain T&E fish.

**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 <sup>1</sup>	Invasive Species	LYR/OFS Structures <sup>2</sup>	Landcape Design LYR/OFS <sup>3</sup>	Install/Replace Culverts on Fish Bearing / Perennial Streams	Harvesting within 100' of Fish Bearing Stream	Domestic Water Source	Potential Stream Habitat Improvement <sup>4</sup>	Within Aquatic Anchor	Within Terrestrial Anchor	Operating within a NSO Provincial Circle	Operating within a MMMA (BA Required)	Murrelet Timber Sale Screening Process Required (MM Policy 2.27)	T&E Fish Adjacent to Harvest Unit / Haul Route <sup>5</sup>	T&E Plants	Geotechnical Issues Needing Field Review	Recreation Sites	Cultural Resources	Scenic Resources	Other Resources or Issues
Beaver Believer Thin					X		X								X						
All is Well Thin		X													X					X	
Mahrvelous								X											X		
Doe a Deer				X	X			X						X							Minor mod of 1.7 acres that are in DFC OFS

<sup>1</sup> A 'x' (in any column) indicates yes the resource or other issue occurs within or near the harvest operation and is addressed by the Pre-Operations Report

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

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

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

<sup>5</sup> This table lists harvest operations (units or log haul routes) that are adjacent to streams that are known to contain T&E fish.

## FOREST ROADS SUMMARY

District: West Oregon

Fiscal Year: 2022

Date: 07/02/2021

Primary Operations	Construction		Improvement		Other Projects	Total Project Costs	Gross Value of Operation	Total Cost as a percent of Gross Value	Comments
	Miles	Cost	Miles	Cost					
Old Fort Combo	0.00	\$0	0.40	\$8,169	\$16,825	\$24,994	\$360,750	6.9%	
Cool Hand Lucas	0.00	\$0	1.50	\$29,594	\$41,569	\$71,163	\$971,250	7.3%	other = grading/brushing & vacating
Roger Miller	0.90	\$24,445	1.90	\$41,076	\$20,500	\$86,021	\$1,029,850	8.4%	
Long John	0.00	\$0	4.70	\$36,504	\$31,091	\$67,595	\$2,589,300	2.6%	other = grading/brushing/stockpile
Grouse Bully Thin	0.05	\$857	3.40	\$55,050	\$18,275	\$74,182	\$665,550	11.1%	
<b>Sub-total</b>	<b>1.0</b>	<b>\$25,302</b>	<b>11.9</b>	<b>\$170,393</b>	<b>\$128,260</b>	<b>\$323,955</b>	<b>\$5,616,700</b>	<b>5.8%</b>	
<b>Sub-total WOC (see below)</b>	<b>0.0</b>	<b>\$0</b>	<b>0.0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		
<b>Totals</b>	<b>1.0</b>	<b>\$25,302</b>	<b>11.9</b>	<b>\$170,393</b>	<b>\$128,260</b>	<b>\$323,955</b>	<b>\$5,616,700</b>	<b>5.8%</b>	

### Alternate Operations

Beaver Believer Thin	0.10	\$3,196	2.40	\$24,749	\$26,424	\$54,369	\$358,875	15.1%	other - spot rock & grade
All is Well Thin	0.10	\$2,746	3.50	\$29,720	\$18,569	\$51,035	\$349,650	14.6%	
Mahrvelous	0.20	\$23,116	2.00	\$14,679	\$37,892	\$75,687	\$1,774,500	4.3%	other - includes stockpile
Doe a Deer	0.20	\$17,528	1.00	\$15,876	\$19,747	\$53,151	\$1,121,400	4.7%	
<b>Total</b>	<b>0.6</b>	<b>\$46,586</b>	<b>8.9</b>	<b>\$85,024</b>	<b>\$102,632</b>	<b>\$234,242</b>	<b>\$3,604,425</b>	<b>6.5%</b>	

**Road Projects Not Associated with Harvest Operations in this AOP: None**

### Road Projects to be Completed as a Work Order Contract

Operation	Construction		Improvement		Other Projects	Total Project Costs	Funding Source	Comments
	Miles	Cost	Miles	Cost				
<b>Total</b>	<b>0.00</b>	<b>\$0</b>	<b>0.00</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>		

## REFORESTATION AND YOUNG STAND MANAGEMENT SUMMARY

District: West Oregon

Fiscal Year: 2022

Date: 07/02/2021

Projects Conducted by ODF Staff or Contractors	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
Seedling / Nursery Costs	299	\$195.57	\$58,475.43	28	\$195.57	\$5,475.96	327	\$63,951.39
Site Prep - Broadcast Burning	0		\$0.00	0		\$0.00	0	\$0.00
Site Prep - Piling Burning *	46	\$34.00	\$1,564.00	42	\$34.00	\$1,428.00	88	\$2,992.00
Site Prep - Mechanical **	20	\$402.35	\$8,047.00	2	\$402.35	\$804.70	22	\$8,851.70
Site Prep - Chemical - Aerial	0		\$0.00	0		\$0.00	0	\$0.00
Site Prep - Chemical - Ground	300	\$106.50	\$31,950.00	20	\$106.50	\$2,130.00	320	\$34,080.00
Initial Planting	264	\$165.00	\$43,560.00	20	\$165.00	\$3,300.00	284	\$46,860.00
Interplanting	35	\$115.00	\$4,025.00	10	\$115.00	\$1,150.00	45	\$5,175.00
Underplanting	0		\$0.00	0		\$0.00	0	\$0.00
Tree Protection - Barriers	7	\$482.00	\$3,374.00	1	\$482.00	\$482.00	8	\$3,856.00
Tree Protection - Direct Control	65	\$70.00	\$4,550.00	5	\$70.00	\$350.00	70	\$4,900.00
Release - Chemical - Aerial	0		\$0.00	0		\$0.00	0	\$0.00
Release - Chemical - Ground	253	\$125.00	\$31,625.00	25	\$125.00	\$3,125.00	278	\$34,750.00
Release - Manual	0	\$125.00	\$0.00	0	\$125.00	\$0.00	0	\$0.00
Precommercial Thinning	273	\$135.00	\$36,855.00	17	\$135.00	\$2,295.00	290	\$39,150.00
Pruning	0		\$0.00	0		\$0.00	0	\$0.00
Stocking Surveys *	1,550	\$0.00	\$0.00	250	\$0.00	\$0.00	1,800	\$0.00
Invasive Species	0	\$100.00	\$0.00	0	\$100.00	\$0.00	0	\$0.00
Roadside Vegetation Mngt	290	\$25.31	\$7,339.32	73	\$25.31	\$1,847.63	363	\$9,186.95
Other			\$0.00			\$0.00	0	\$0.00
<b>Totals</b>	<b>3,402</b>	<b>--</b>	<b>\$231,364.75</b>	<b>493</b>	<b>--</b>	<b>\$22,388.29</b>	<b>3,895</b>	<b>\$253,753.04</b>

\* Work to be completed by ODF staff; cost are for materials only

\*\* Work conducted through timber sale contracts

Projects Conducted by South Fork (or Mill Creek) Crews	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
Site Prep - Broadcast Burning	0		\$0.00	0		\$0.00	0	\$0.00
Site Prep - Piling Burning	0		\$0.00	0		\$0.00	0	\$0.00
Site Prep - Mechanical	10	\$0.00	\$0.00	2	\$0.00	\$0.00	12	\$0.00
Initial Planting	0		\$0.00	0		\$0.00	0	\$0.00
Interplanting	15	\$0.00	\$0.00	5	\$0.00	\$0.00	20	\$0.00
Underplanting	0		\$0.00	0		\$0.00	0	\$0.00

Tree Protection - Barriers (tubes)	10	\$328.00	\$3,280.00	1	\$328.00	\$328.00	11	\$3,608.00
Tree Protection - Direct Control	80	\$0.06	\$4.80	10	\$0.06	\$0.60	90	\$5.40
Release - Manual	65	\$0.00	\$0.00	15	\$0.00	\$0.00	80	\$0.00
Precommercial Thinning	35	\$0.00	\$0.00	10	\$0.00	\$0.00	45	\$0.00
Pruning (roadside prune/brush)	15	\$0.00	\$0.00	5	\$0.00	\$0.00	20	\$0.00
Invasive Species	0		\$0.00	0		\$0.00	0	\$0.00
Other (bud capping)	96	\$12.93	\$1,241.28	24	\$12.93	\$310.32	120	\$1,551.60
<b>Totals</b>	<b>316</b>	<b>--</b>	<b>\$4,526.08</b>	<b>70</b>	<b>--</b>	<b>\$638.92</b>	<b>386</b>	<b>\$5,165.00</b>

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





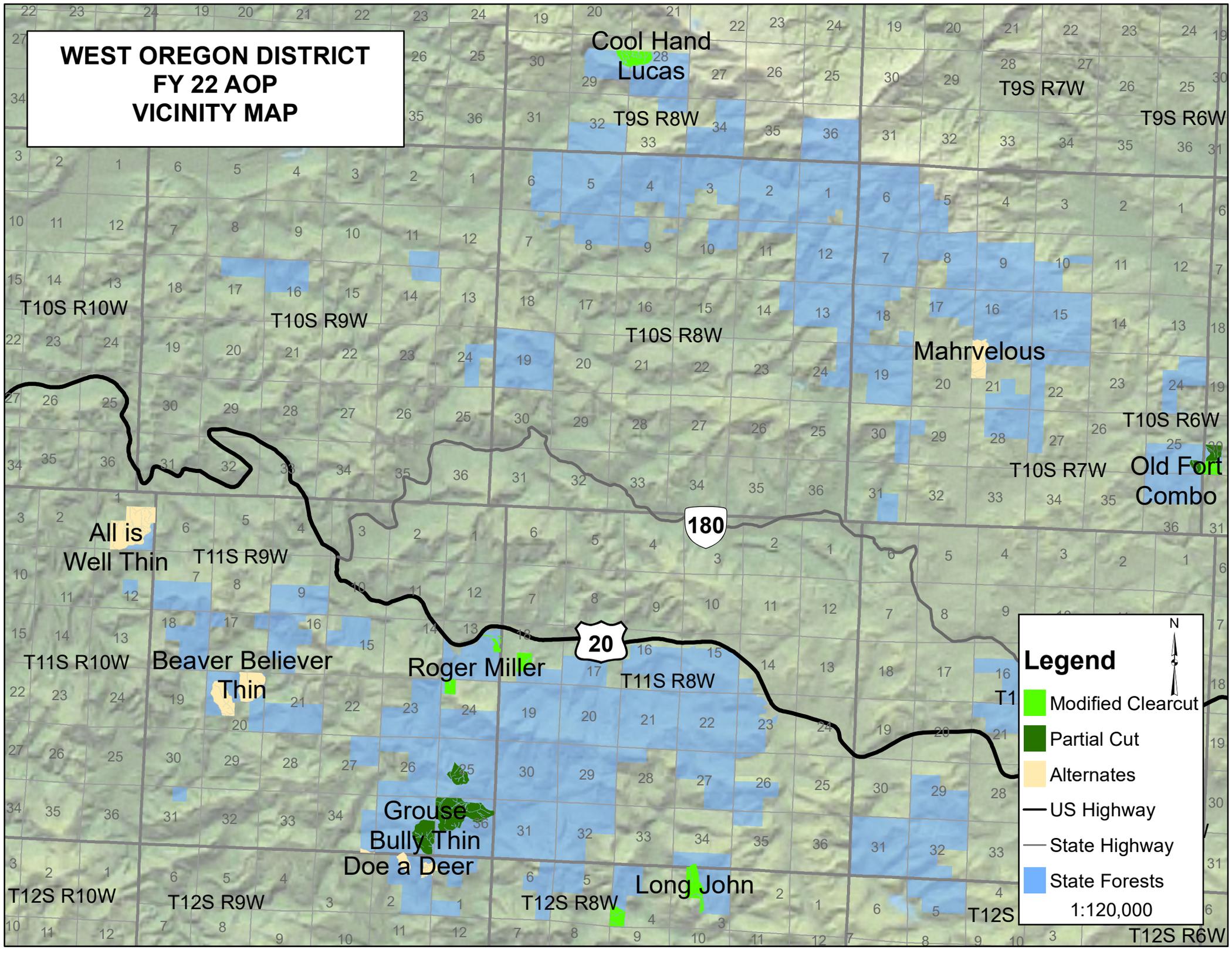
# Appendix B

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## Vicinity Maps

- **Harvest Operations Vicinity Map**

**WEST OREGON DISTRICT  
FY 22 AOP  
VICINITY MAP**



**Legend**

- Modified Clearcut
- Partial Cut
- Alternates
- US Highway
- State Highway
- State Forests

1:120,000



**180**

**20**

Cool Hand Lucas

T9S R7W

T9S R6W

T9S R8W

T10S R10W

T10S R9W

T10S R8W

Mahrvelous

T10S R6W

T10S R7W

Old Fort Combo

All is Well Thin

T11S R9W

T11S R10W

Beaver Believer Thin

Roger Miller

T11S R8W

**Legend**

Grouse Bully Thin

Doe a Deer

Long John

T12S R10W

T12S R9W

T12S R8W

T12S

T12S R6W

# Appendix C

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## **Consultations with Other State Agencies**

### **Oregon Department of Fish and Wildlife (ODFW):**

ODFW biologists were provided the FY22 AOP Summary and Pre-Operations Reports for review. Written comments have been received from them. A follow up cooperator/specialist meeting was held to address questions and concerns. Field visits have been scheduled to address some of these comments.

### **Oregon Department of Transportation – Archaeologists:**

Archaeologists from the Oregon Department of Transportation (ODOT) have reviewed the proposed timber harvests, road construction and recreation projects for potential impacts to cultural resources. No known historical or archaeological sites were found during this review. However, ODOT's review of historic maps and other information indicates there was human activity near some of our planned operations that could have led to the presence of cultural artifacts today.

The following areas (listed by historic activity) will be reviewed on the ground to determine if cultural artifacts are present:

- Potential Indian Trail from Kings Valley to Siletz River: Mahrvelous Timber Sale (alternate)
- Potential historic Corvallis and Yaquina Road and the Pioneer Road: All is Well Timber Sale (alternate)

# Appendix D

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## Public Involvement and Summary of Changes

The Oregon Department of Forestry issued a Press Release in May 2021, announcing a formal 45 day public comment period for the FY22 Annual Operations Plans from May 7th, 2021 through June 21st, 2021.

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

The following changes have been made since the AOP Draft went out for public comment:

Old Fort Combo Sale: Minor spatial adjustments were made to the harvest shape based on additional field review that has occurred since the Draft phase. The adjustments decreased the size of the harvest unit by 1 net acre.

-Increased partial cut area by 8 acres.

-Decreased modified clear-cut area by 9 acres.

Coold Hand Lucas Sale: Descriptions of the minor modification in Pre-Op and Summary document were amended to clarify the objectives of the minor modification.

Doe a Deer Alternate Sale: Descriptions of the minor modification in Pre-Op and Summary document were amended to clarify the objectives of the minor modification.

Below is a link to a summary of all comments received for the Astoria, Forest Grove, Klamath-Lake, West Oregon, Western Lane and Tillamook district FY22 AOPs and ODF's responses to those comments.

<https://www.oregon.gov/odf/working/documents/aop-public-comments-astoria-forestgrove-klamathlake-tillamook-westoregon-westernlane-fy22.pdf>

# Appendix E

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## Pre-Operations Report

Pre-Operations Reports are available online through a Web Application at the following link:

<https://geo.maps.arcgis.com/apps/webappviewer/index.html?id=ae569c1ff445457eb8fe1b556699bce8>

Zoom to the District you are interested and click on any sale. A pop-up box will show a link to the Pre Op Report for the selected sale.

# APPENDIX F

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## **Forest Land Management Classification System (FLMCS) Modification Notification**

No modifications are proposed with the FY22 AOP.

# Appendix G

## Landscape Design – West Oregon District Implementation Plan Minor Modification Notice

As described in the 2012 District IP (modified in 2015), the district has mapped a Landscape Design that designates 30% of the district acres in a future complex condition, either Layered (LYR) or Older Forest Structure (OFS). The term General management (GEN) or non-complex will be used to describe the desired future condition (DFC) of stands that are not planned for OFS or LYR in the West Oregon District’s landscape design. The DFC landscape design for the West Oregon district was done using a “broad brush” method incorporating a variety of landscape design principles and strategies. The original Landscape Design mapping process used stand types instead of geographical breaks to define the future complex stand boundaries with the intent that the boundaries could be fine-tuned during the planning process. Actual boundaries between complex and general DFC’s are determined on the ground during the sale planning and preparation process. Minor changes in the DFC landscape design may occur on an annual basis due to a variety of reasons. These reasons may include; refinement of the DFC boundary on the ground, forest health issues, and fitting a stand to a more appropriate or realistic pathway based on additional data collected through Stand Level Inventory (SLI) and field observations during the AOP planning process. Changes of up to 240 acres annually are considered minor changes and can be approved by the District Forest concurrent with the Annual Operation Planning process.

Description of change: The district is proposing to change 5.8 acres that have a current DFC of Layered and 1.7 acres that have a current DFC of Older Forest Structure to non-complex or “general”. These acres are being removed to accommodate operational timber sale boundaries for FY22, to align harvest operations with the boundaries of nearby draft HCA areas, and and to fix mistyped DFC boundaries. These areas were reviewed with ODFW and various ODF resource specialists and biologists.

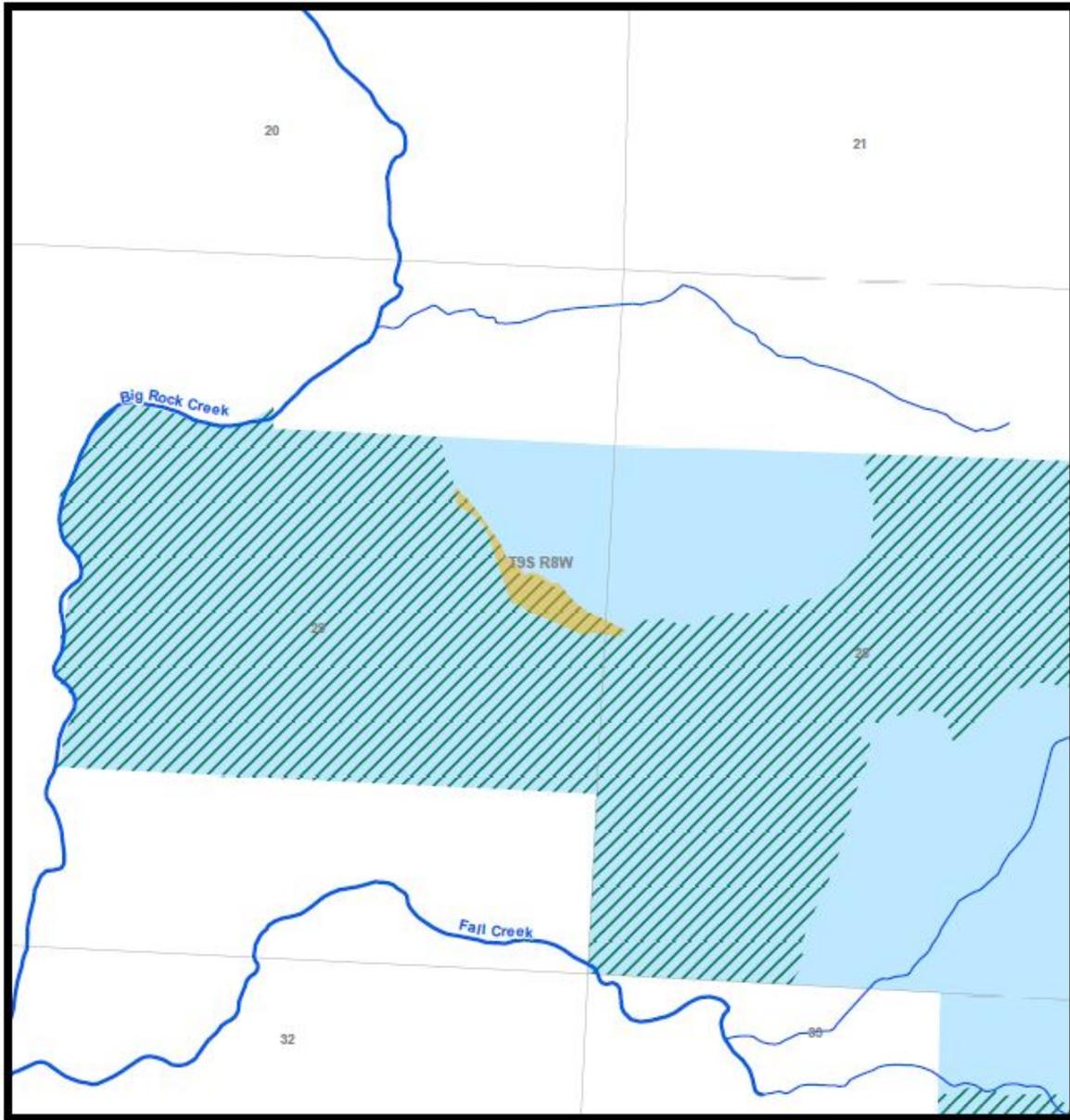
The designation of DFC complex on the West Oregon District is still 31.0% following the proposed changes.

Summary of Minor Landscape Design Modification			
Acres Removed		Acres Added	
Desired Future Condition	Acres	Desired Future Condition	Acres
OFS	1.7	OFS	0
LYR	5.8	LYR	0
Total Acres Removed	7.5	Total Acres Added	0

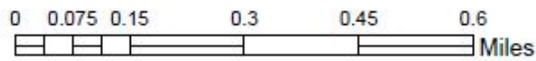
# West Oregon District

## Landscape Design - Desired Future Condition Revision

Map 1 of 3



- Large Stream
- Medium Stream
- Change From DFC Complex to Non-Complex
- Current DFC Complex
- State Forest Land



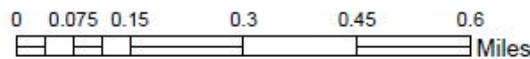
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03/11/2021

# West Oregon District Landscape Design - Desired Future Condition Revision

Map 2 of 3



-  Medium Stream
-  Change From DFC Complex to Non-Complex
-  Current DFC Complex
-  State Forest Land

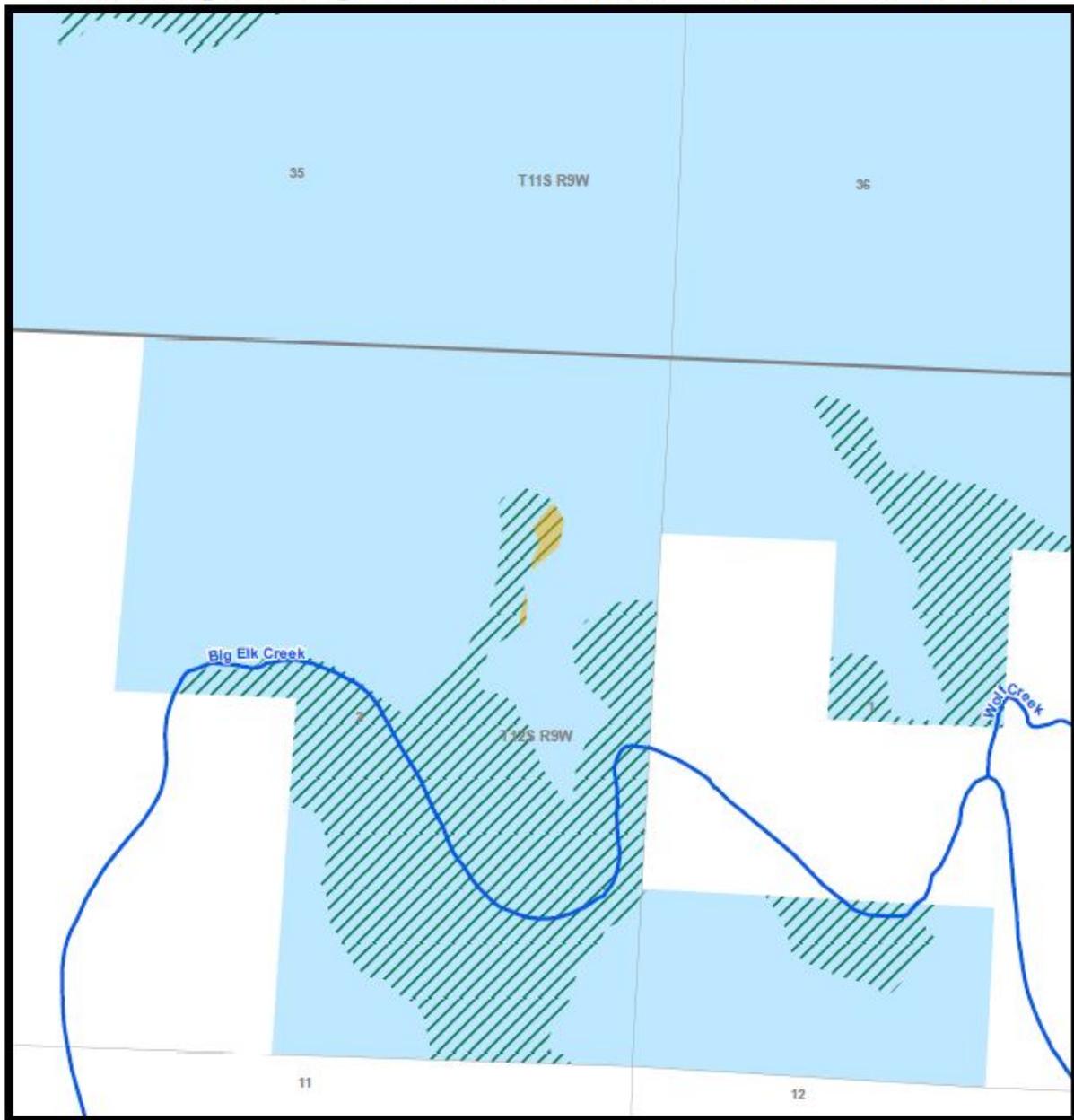


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03/11/2021

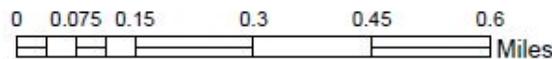
# West Oregon District

## Landscape Design - Desired Future Condition Revision

Map 3 of 3



-  Large Stream
-  Change From DFC Complex to Non-Complex
-  Current DFC Complex
-  State Forest Land



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03/11/2021