



Oregon

Kate Brown, Governor

Department of Forestry

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"STEWARDSHIP IN FORESTRY"

To: Andy White, Area Director
From: Mike Cafferata, Forest Grove District Forester

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 Forest Grove 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 2011 Forest Grove District Implementation Plan (IP), the 2022 Annual Operation Planning Standards, 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 of 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 60.8 MMBF of harvest volume. This volume will be achieved through 405 acres of partial cut harvest and 1,251 acres of regeneration harvest. There are 14 primary operations and 6 alternate operations within this plan. The operations are estimated to generate gross revenues of approximately \$31,170,625 and net revenues of \$28,663,625 (\$12,239,025 in Tillamook County; \$10,135,800 in Washington County; \$3,621,300 in Columbia County; and \$2,667,500 in Clatsop County). The volume is right at the IP target of 61 MMBF. 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:



Mike Cafferata
Forest Grove District Forester

Forest Grove District 2022 ANNUAL OPERATIONS PLAN



FOREST GROVE DISTRICT

FY 2022 ANNUAL OPERATIONS PLAN

OVERVIEW

This plan describes the activities and outcomes that Oregonians can expect to see on the eastern side of the Tillamook State Forest for FY 2022. The Tillamook State Forest 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, including schools. 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) will be 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, 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 approximately 581,188 trees on 1,333 acres. Conducting vegetation management activities on 2,101 acres and animal management activities on an additional 2,089 acres to ensure the survival and growth of these plantations.
- Conducting surveys for northern spotted owls and marbled murrelets covering the majority of the district and surveying 24 miles of streams for the presence of fish habitat.
- Protecting streams and water resources through a series of buffers and seasonal restrictions.
- Habitat development projects such as creating snags by removing the tops, retaining green trees in clearcut areas, and leaving down wood, all for wildlife benefits in harvest areas and future forests.
- Maintaining 102 miles of road and improving approximately 33 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 and target shooting.
- Proposed Forest Gates. The installation of 14 gates for Fire Prevention have been proposed at key locations across the District. The installation of 3 gates (1 with a primary sale and 2 with alternate sales) and the relocation of 1 existing gate have been proposed for Public Health and Safety. See *Road Access Management* page 20 for more information.
- Proposed Recreation Gates. The installation of 4 gates have been proposed for facility improvement at key locations in the Stagecoach Horse Camp and Browns Camp. See *Recreation Management* page 27 for more information.
- Proposing to harvest approximately 60.8 million board feet of timber volume, through modified clearcuts, and partial cuts generating revenue of an estimated \$28.7 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.
- Operating and maintaining the following developed facilities in a safe, clean, and responsible manner:
 - 5 campgrounds
 - 2 day use picnic areas
 - 2 highway wayside interpretive sites
 - 14 trailhead facilities
 - 4 target shooting lanes

- Providing a safe and clean environment for the myriad of dispersed activities that occur across the forest – hunting, camping, angling, sight-seeing, target shooting, swimming, mushroom picking, etc.
- Improving, maintaining, managing, and patrolling the 117 miles of motorized and 66 miles of non-motorized trails, striving to protect the trail investments, provide for visitor safety, address developing trail issues, and protect water quality.
- Facilitating the important volunteer network that supports Recreation management through the following volunteer programs:
 - Camp Hosts
 - Adopt a Trail
 - Trail Patrol
 - Forest Clean-ups
 - Trail Maintenance and Construction Work Parties
- Facilitating the pre-planned 8 to 10 organized motorized trail use events and writing and administering 2 to 4 special use permits for motorized and non-motorized trail use events.
- Evaluating new event proposals for fit with Recreation program and forest management goals and objectives.
- Providing a firewood cutting program and miscellaneous forest products permits (salal, mushrooms, etc.) as done in previous years.
- Supporting ongoing research on the district, in partnership with research cooperatives and universities.

TABLES OF CONTENTS

Summary	3
INTRODUCTION	8
INTEGRATED FOREST MANAGEMENT OPERATIONS	9
Timber Harvest Operations	9
Overview of Timber Harvest Operations.....	9
Harvest Operations within Terrestrial Anchor Sites & Aquatic Anchors .	11
Summary of Timber Harvest Operations by Basin	13
Forest Roads Management	19
Overview.....	19
Road Construction.....	20
Road Improvement.....	20
Road Access Management	20
Road Maintenance	20
Management of Rock Source/Supply.....	21
Land Surveying.....	21
Young Stand Management	21
Seedlings / Nurseries.....	21
Site Preparation	22
Planting.....	23
Tree Protection.....	23
Vegetation Management – Release Treatments	24
Pre-Commercial Thinning (PCT)	24
Pruning	24
Stocking Surveys.....	24
Invasive Species.....	25

Roadside Vegetation Management	25
Recreation Management.....	25
Overview of Recreation Management	25
Facilities	25
Dispersed Use	26
OHV Trails	27
Non-motorized Trails	28
Trail Maintenance	29
Volunteer Program and Partnerships	30
Event Management	30
Grants	30
Target Shooting	31
Unplanned Activities	31
Other Integrated Forest Management Projects	32
Aquatic & Riparian Management.....	32
Land Exchange.....	33
Law Enforcement and Public Safety.....	33
Firewood Cutting Program.....	34
Non-Timber Forest Products	34
Planning	34
Forest Inventory.....	34
Wildlife Surveys	34
Research and Monitoring	35
Recreation Program Planning.....	35
Other Planning Operations	35
Public Information and Education	35
Administration	36

APPENDICES 39

A. Summary Tables 40

B. Maps 52

C. Consultation with Other Agencies 56

D. Public Involvement 57

E. Pre-Operations Reports 58

F. Land Management Classification System 59

G. Landscape Design Minor Modification 60

INTRODUCTION

This annual operation plan (AOP) outlines planned activities for state-owned forestland managed by the Forest Grove 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)*, *Tillamook State Forest Recreation Action Plan*, and the *Forest Grove District 2011 Implementation Plan (IP)*. Please refer to the district IPs 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 Forest Grove District 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 the comments received can be found in Appendix D. The District Forester reviewed and considered all comments received before approving this plan.

As the Division works on implementing its new organization under Work Force Futuring, recruitments are still taking place with the goal of being fully staffed in early 2022. Training of new employees at the district level will be occurring throughout FY22. This should improve over the course of this fiscal year and into the next.

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 Forest Grove 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 60.8 million board feet in volume, generate gross revenues of approximately \$31,170,625 and net revenues of \$28,663,625. The volume objective is slightly under the 61 MMBF goal outlined in the Forest Grove District’s 2011 Implementation Plan (IP). The goal is to achieve the average of the Annual Harvest Objective (AHO) over the expected duration for the IP. 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 Forest Grove 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 Forest Grove District 2011 Implementation Plan. Harvest values are acres, Volume is in MMBF.

Annual Harvest Objectives	IP Annual Objective		2022 AOP
	Low	High	
Volume (MMBF)	61		60.8
Partial Cut Harvest	0	2,100	405
Regeneration Harvest	500	2,000	1,251

Table 1 shows the proposed acres by harvest type. The 1,251 acres of regeneration harvest planned for FY22 represents 1 percent of the district. All of the regeneration harvest acres will be designed as modified clearcuts. There is one first entry moderate partial cut in young stands to help improve the growing conditions within the sale. There is one partial cut within older stands intended to help move the stands towards or maintain a desired complex condition. 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)

Fiscal Year	IP Annual Objective	AOP Planned Volume	AOP Sold Volume	Cumulative Difference from Objective ¹
FY 12	61	59	60.8	-0.2
FY 13	61	63.5	63.1	1.8
FY 14	61	59	63.3	4.1
FY 15	61	56.7	64.9	8.0
FY 16	61	58.1	57.4	4.4
FY 17	61	56.1	55.5	-1.2
FY 18	61	65.5	68.2	6.1
FY 19	61	56.5	55.2	0.3
FY 20	61	61.5	64.0	3.3
FY 21	61	58.4	58.8 ²	1.1
FY 22	61	60.8		0.8

1. IP Harvest Objective versus Sold Volume.

2. This number is a combination of sold sale volume and planned sale volume and will be updated as sales continue to be sold.

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 wind events of December 2006, November 2007, December 2007, and the snow/ice event of January 2017 made significant contributions to snag and DWD levels despite the salvage of some large concentrations of blow down. This in turn led to scattered bark beetle outbreaks resulting in additional tree mortality during 2009. The majority of beetle caused mortality is located within the McGregor, Wheeler, and Upper Salmonberry Basins. Minor amounts were observed in Larch Mtn., Gales Creek, and Roger's Basins. Based on these observations, snag creation may only be required on planned sales in the Sunday Creek Basin, Wilark Basin, Scoggins Basin, and portions of Gales Creek and Roger's Basins.

Harvest Operations within Terrestrial Anchor Sites and Aquatic Anchors

The District 2011 IP implemented the State Forests' Species of Concern Strategies that specifically identifies fish and wildlife species of concern on the Tillamook State Forest. 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 the July 2011, the district has been proceeding with operations in these areas. Great care has been given in selecting stands for harvest and developing prescriptions in these areas to ensure that these harvest activities achieve the goals of the TAS. These sales were reviewed with ODF and ODFW Resource Specialists. Table 3 shows there are 309 acres within the TAS proposed in the 2022 AOP and also shows the cumulative operations in TAS since the strategy was adopted (AOPs 2012 through 2022).

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

Acres within TAS	Current AOP (FY 2022)		Cumulative Harvest (Since FY 2012)	
	Clearcut	Partial Cut	Clearcut	Partial Cut
Terrestrial Anchor Site (TAS) Basin				
South Fork Wilson (2,081 ac)	0	0	0	0
% of Acres	0%	0%	0%	0%
Upper Salmonberry (3,097 ac)	0	309	0	674
% of Acres	0%	10%	0%	21.8%
Wolf Creek (4,199 ac)	0	0	0	809
% of Acres	0%	0%	0%	19%
All TAS (9,377 ac)	0	309	0	1,483
% of Acres	0%	3%	0%	16%

Aquatic Anchors

The AAs became effective July 1, 2013 and replaced the Salmon Anchor Habitat Strategy that expired June 30, 2013. 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 2014.

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

Acreages	Current AOP (FY 2022)		Cumulative Harvest (since FY 2014)	
	Clearcut	Partial Cut	Clearcut	Partial Cut
Aquatic Anchor (AA) Basins				
Ben Smith Creek (2,410 ac)	0	0	0	0
% of Acres	0%	0%	0%	0%
Devils Lake Fork Wilson River (6,132 ac)	222	0	692	118
% of Acres	3.6%	0%	11.3%	1.9%
Elkhorn Creek (1,049 ac)	96	0	205	0
% of Acres	9.2%	0%	19.5%	0%
Lousignont Creek/Upper Nehalem River (12,355 ac)	108	96	2,037	1,360
% of Acres	<1%	<1%	16.5%	11%
S. Fork Salmonberry River (5,659 ac)	0	309	86	595
% of Acres	0%	5.5%	2%	10.5%
Upper Rock Creek (3,295 ac)	0	0	132	86
% of Acres	0%	0%	4%	2.6%
All Aquatic Anchors (30,900 ac)	426	405	3,152	2,159
% of Acres	1.4%	1.3%	10.2%	7%

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 eleven management basins on the Forest Grove 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	
	Partial Cut	Clearcut
Bell Mountain	0	0
Isolated Tracts	0	0
Gales Creek	0	0
Larch Mountain	0	0
McGregor	0	120
Rogers	0	392
Scoggins Creek	0	241
Sunday Creek	0	272
Upper Salmonberry	309	0
Wheeler	96	108
Wilark	0	118
Totals	405	1,251

Bell Mountain Basin

No harvest operation is planned for this basin.

Isolated Tracts Basin

No harvest operation is planned for this basin.

Gales Creek Basin

Double Parked (ALT): This is a two unit modified clearcut totaling 155 acres. The Douglas-fir and red alder stands within this sale are 72 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands on 153 acres and of complex stands on 2 acres. The DFC of the complex stands are proposed to be changed to a DFC of non-complex stands to create logical operation boundaries. Please see Appendix G for more information regarding these proposed changes. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 0.6 miles of spur road will be constructed to help facilitate the harvest of this sale. Approximately 4.32 miles of road will be improved in conjunction with this sale.

Unit 2 is adjacent to Gales Creek Campground. The Marketing Unit and Roads Unit will work closely with the Recreation, Education, and Interpretation (REI) Team during sale layout and contract writing to put provisions in place to protect the campground infrastructure and to mitigate conflicts with the recreation public.

Portions of Unit 1 and Unit 2 may be visible from Highway 6. This will be taken into account while determining green tree retention strategies.

Larch Mountain Basin

Hoggendas (ALT): This is a 112 acre modified clearcut. The mixed conifer stands within this sale are between 63 and 70 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands on 109 acres and of complex stands on 3 acres. The DFC of the complex stands are proposed to be changed to a DFC of non-complex stands to create logical operation boundaries. Please see Appendix G for more information regarding these proposed changes. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 0.35 miles of spur road will be constructed to help facilitate the harvest. Approximately 4.03 miles of road will be improved in conjunction with this sale.

Larch Madness (ALT): This is a 72 acre light partial cut of mixed conifer between the age of 65 & 70 years old. The current stand condition of this operation is Understory with a DFC of non-complex stands. The partial cut will target the removal of some of overstory Douglas-fir trees while retaining western hemlock and western red cedar trees. The prescription will help improve stand growing conditions and help move the Understory stands towards the pathway of complex stands.

No new roads will be needed for this sale.

This sale is located within the Middle Drift Creek Northern Spotted Owl site. The NWOA biologist has prepared a biological assessment for this proposed sale. The assessment will be reviewed by the US Fish and Wildlife service.

The Fear and Loaming Trail exists within and adjacent to the sale area. The Marketing Unit and Roads Unit will work closely with the REI Team during sale layout and contract writing to put provisions in place to reduce impacts to the trail to mitigate conflicts with the recreation public.

McGregor Basin

Rabbit Tracks: This is a two unit modified clearcut totaling 120 acres. The mixed conifer stands within this sale are between 76 and 83 years old. The stands within the sale have a current condition of Understory (101 acres) and Closed Single Canopy (19 acres) with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 0.56 miles of spur road will be constructed to help facilitate the harvest. Approximately 11.59 miles of road will be improved in conjunction with this sale.

Rogers Basin

Backwoods: This is an 80 acre modified clearcut. The mixed conifer stands within this sale are 65 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

No new roads will be needed for this sale. Approximately 1.27 miles of road will be improved in conjunction with this sale.

Devilooze: This is a 98 acre modified clearcut of 66-year-old Douglas-fir and some red alder. The stands within the sale have a current condition of Understory (97 acres) and Closed Single Canopy (1 acre) with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 0.21 miles of spur road will be constructed to help facilitate the harvest of this sale. Approximately 3.61 miles of road will be improved in conjunction with this sale.

A motorized trail runs thru the sale. The Marketing Unit and Roads Unit will work closely with the REI Team during sale layout and contract writing to put provisions in place to reduce impacts to the trail to mitigate conflicts with the recreation public.

A gate is planned to be installed on Saddle Mtn. Road at the junction with Beaverdam Road.

This sale is located within the Devils Lake Fork Wilson River Aquatic Anchor (AA).

Unparalleled: This is a two unit modified clearcut totaling 124 acres. The Douglas-fir and red alder stands within this sale are between 56 and 68 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 1.42 miles of spur road will be constructed to help facilitate the harvest of this sale. Approximately 4.5 miles of road will be improved in conjunction with this sale.

A non-motorized trail runs along the boundary of Unit 1 while a motorized trail runs thru Unit 2. The Marketing Unit and Roads Unit will work closely with the REI Team during sale layout and contract writing to put provisions in place to reduce impacts to the trail to mitigate conflicts with the recreation public.

The existing gate on the haul route for Unit 1 is planned to be moved to the south before the Transmission Line road. A gate is planned to be installed on the Transmission Line adjacent to Unit 2.

Portions of Units 1 and 2 may be visible from Highway 6. This will be taken into account while determining green tree retention strategies.

This sale is located within the Devils Lake Fork Wilson River Aquatic Anchor (AA).

Will C: This is a three unit modified clearcut totaling 90 acres. The mixed conifer stands within this sale are between 61 and 68-years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 0.43 miles of spur road will be constructed to help facilitate the harvest. Approximately 5.35 miles of road will be improved in conjunction with this sale.

Scoggins Creek Basin

Mainly Sain: This is a three unit modified clearcut totaling 141 acres. The sale consists of 68 to 77 year-old Douglas-fir trees with a 5 acre stand containing trees of 107 years old. The stands within this sale are currently classified as Understory with a DFC of non-complex stands. Trees over 100 years old will be prioritized for wildlife tree/leave tree requirements unless they are a safety hazard. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

No new roads will be needed for this sale. Approximately 1.76 miles of road will be improved in conjunction with this sale. Approximately a half mile of road is planned to be vacated following the completion of harvest.

Nor Skogg (ALT): This is a 107 acre modified clearcut that consists of Douglas-fir and red alder between 68 and 88 year old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 1.45 miles of spur road will be constructed to help facilitate the harvest. Approximately 0.75 miles of road will be improved in conjunction with this sale.

Valley View: This is a 100 acre modified clearcut. The mixed conifer stands within this sale are 67 years old. The stand within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

No new roads will be needed for this sale. Approximately 2.2 miles of road will be improved in conjunction with this sale.

Sunday Creek Basin

Daily Edition: This is a 108 acre modified clearcut. The Douglas-fir and red alder stands within this sale are 72 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 0.43 miles of spur road will be constructed to help facilitate the harvest. Approximately 0.22 miles of road will be improved in conjunction with this sale.

Elkberg: This is a 96 acre modified clearcut. The sale contains Douglas-fir, western hemlock and noble fir trees between 56 and 73 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 1.08 miles of spur road will be constructed to help facilitate the harvest. Approximately 0.45 miles of blocked, dirt road will be improved on BLM to access the sale area. BLM will be contacted to obtain a License Agreement.

This sale is located within the Elkhorn Creek AA.

Neverstill: This is a 68 acre modified clearcut. The mixed conifer stands within this sale are between 63 & 68 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 0.15 miles of spur road will be constructed to help facilitate the harvest.

This operation is immediately adjacent to Barney Reservoir. Buffer and boundary strategies are planned to mimic the unit immediately adjacent to the east. A variety of green tree retention strategies will be considered, including but not limited to Green Tree Retention areas, posted stream buffers and snag creation.

Two Windy (ALT): This is a two unit modified clearcut totaling 132 acres. The mixed conifer and red alder stands within this sale are between 64 & 73 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

Approximately 0.22 miles of spur road will be constructed to help facilitate the harvest. Approximately 1.96 miles of road will be improved in conjunction with this sale.

Upper Salmonberry Basin

Point Belding: This is a 309 acre moderate partial cut of mixed conifer and red alder between the age of 68 & 83 years old. The stands within the sale have a current condition of Understory. The Desired Future Condition of 164 acres of the sale are for Older Forest Structure and 145 acres are for Layered. The partial cut will target the removal of some of overstory Douglas-fir trees while retaining western hemlock and western red cedar trees. The prescription will aim to move the Understory stands towards the pathway of complex stands.

This sale is located within the South Fork Salmonberry River AA and within the Upper Salmonberry Terrestrial Anchor Site.

Approximately 1.1 miles of new roads will be constructed to facilitate the harvest. Approximately 1.33 miles of road will be improved in conjunction with this sale.

Wheeler Basin

Doty Mill: This is a 108 acre modified clearcut. The mixed conifer stands within this sale are 82 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

No new roads will be needed for this sale.

This sale is located within the Lousignont Creek/ Upper Nehalem River AA.

Ingersoll PC: This is a 96 acre first entry partial cut of 34 year-old Douglas-fir trees. The current stand condition is Understory and the DFC is for non-complex stands.

No new road construction is expected for harvest.

The Inner Zone of the RMA is planned to be thinned in order to help move the stand to Mature Forest Condition. The prescription exceeds the FMP riparian standards.

This sale is located within the Lousignont Creek/ Upper Nehalem River AA.

Round Bell (ALT): This is a 109 acre modified clearcut. The mixed conifer and red alder stands within this sale are 71 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

No new road construction is expected for harvest. Approximately 2.55 miles of road will be improved in conjunction with this sale.

A gate is planned to be installed on the haul route to the west of the sale.

A non-motorized trail runs thru the sale. The Marketing Unit and Roads Unit will work closely with the REI Team during sale layout and contract writing to put provisions in place to reduce impacts to the trail to mitigate conflicts with the recreation public.

This sale is located within the Lousignont Creek/ Upper Nehalem River AA.

Wilark Basin

Karthenon: This is a 118 acre modified clearcut. The mixed conifer stands within this sale are 82 years old with an approximately 7 acre stand containing trees from 82 to 112 years old. The stands within the sale have a current condition of Understory with a DFC of non-complex stands. Trees over 100 years old will be prioritized for wildlife tree/leave tree requirements unless they are a safety hazard. Following the completion of harvest, the sale will be planted with a mixture of seedlings to be determined closer to the time of reforestation.

No new road construction is expected for harvest. Approximately 0.96 miles of road will be improved in conjunction with this sale.

The western edge of the sale is immediately adjacent to Camp Wilkerson Park, run by Columbia County, and non-motorized trails managed by Columbia County exist within the sale boundary. The Marketing Unit and Roads Unit will work closely with the Columbia County Parks Manager during sale layout and contract writing to put provisions in place to protect the campground and trail infrastructure and to mitigate conflicts with the recreation public.

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.

Almost all of the roadwork in this AOP is related to constructing spur roads and for improving haul routes for the FY22 timber sales. 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. New 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. The public may still access these areas on foot, bicycle or horseback.

Gates are planned to be installed in several locations to improve management of public use during fire season. Gate locations are major access points to the forest along the south side of Highway 26 (Salmonberry Road, Shields Road, Section 10 Road), along Timber Road (Lousignont Road), on Cochran Road in the State Ownership, on Carlson Creek Road, along the south side of Highway 6 (Beaverdam Road, Rogers Camp Day Use, Rutherford Road, University Falls Road, Bates Road, S. Fork Wilson Road), at interior forest locations (Lyda Road), and in the Sunday Creek basin on North Fork Trask River Road. The purpose of these gates is for fire prevention. Maps are available by request at the Forest Grove District Office.

Gates are also planned to be installed with 3 timber sales – Devilooze, Unparalleled, and Round Bell (ALT) to restrict vehicle access by the public. The purpose of these gates is to prevent target shooting, dumping, and long-term campers. These activities are detrimental in these areas due to proximity to trails and heavily traveled access roads to trailheads. The gates will be kept closed, but public may still access these areas on foot, bike, or horseback. Gate locations can be seen on the pre-operations reports for these sales.

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, additional maintenance, 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 provides durable rock for in-sale spurs and haul routes, which allows for year-round harvest opportunities. Rock quarry development, rock crushing, and/or purchasing rock is necessary to provide sufficient quantities of the road rock for planned road construction, road improvement, and road maintenance activities.

Quarry developments are planned for the following operations; however, these plans are subject to change as timber sale project work is laid out:

- Backwoods
- Point Belding
- Will C
- Double Parked (alt)
- Round Bell (alt)

Annually, the District requires between 2,000 to 4,000 cubic yards of crushed rock stockpiles for appraised road maintenance work. The District will continue to explore new rock sources and further development of existing rock pits in FY22.

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 may be necessary on the following sales:

- No surveys are needed.

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.

Reforestation activities will be completed by using experienced contractors. A portion of the activities will be completed by utilizing crews from South Fork Camp. These crews work on activities such as tree protection, mechanical hand release, and noxious weed control.

The reorganization of the State Forest Districts leveling the workforce between districts created an opportunity for Forest Grove to take on an additional workload. The Forest Grove reforestation staff will be assisting with the management of 1,059 acres in the Tillamook District. 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 seedlings are grown 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 ones 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 bed and then transplanted to a lower stocking bare root 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 that is used for growing the seedlings, estimated 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.

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 is 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 (Regeneration harvest units): 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 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 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 helps prevent damage to newly planted trees.

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.

Pruning

No pruning activities are planned for this AOP beyond western white pine for disease prevention of blister rust. Approximately 40 acres are anticipated. This work will be accomplished by utilizing South Fork Camp crews.

Stocking Surveys

The Reforestation 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.

Reforestation continues to work with Marketing, Forest Roads, and Recreation personnel to identify appropriate steps each unit can take to prevent the introduction and spread of invasive plants. Knotweed, Scotch broom, 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

Reforestation works with the Forest Roads personnel on the management of 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 chemical treatment needs for FY22. The project will be done by utilizing experienced contractors.

Recreation Management

Overview of Recreation Management

Recreation use has been taking place on the Tillamook State Forest and the Forest Grove District for more than 70 years and has been managed in varying degrees since the 1960s. Currently the direction for management of the Recreation program flows from the Northwest Oregon State Forest Management Plan (2010), the Tillamook State Forest Comprehensive Management Plan (1993), and the Recreation Action Plan 2000 (2001). Budget levels remain static and agency focus continues to be on maintaining existing infrastructure and opportunities

and developing additional program capacity. See Tables A-5, A-6 and A-7 in Appendix A for more information.

Facilities

The Recreation program plans to operate and maintain the following developed facilities on the Forest Grove Districts:

- 5 campgrounds
- 2 day use picnic areas
- 2 highway wayside interpretive sites
- 14 trailhead facilities
- 4 target shooting lanes

All developed facilities will be operated and maintained in good working order and will be kept clean and safe for public use. They will be managed to minimize user conflict and to avoid adversely impacting the resource.

Covid-19 has had a direct influence on the delivery of recreation opportunities and services on state forest land and will have influence on delivery of services and access and use of campground facilities in FY22.

Dispersed Use

Each year, a high amount of dispersed recreation use occurs across the Tillamook State Forest. Most of this use is associated with recreation activities such as hunting, camping, angling, sight-seeing, target shooting, swimming, and mushroom picking. Most of these activities take place at specific dispersed use sites. These activities are expected to continue in FY22 and will require varying degrees of Recreation program and district staff attention. Dispersed use sites will be monitored, maintained, and improved as resources allow to meet safety, sanitation, and resource protection objectives.

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
Facility Development	Kings Mountain Trailhead Expansion	Recreation staff / South Fork / Contractors	Project work involves construction of the Kings Mountain Trailhead expansion project.
Facility Improvement	Stagecoach Horse Camp Gates	Recreation staff / OHV Trail or Road Crew / South Fork	Project work involves fabrication and installation of two campground gates.
Facility Improvement	Reehers Camp Power	Contractor / Recreation staff	This project involves installing electric power to the camp host sites and the picnic shelter.
Facility Planning	Rogers Camp Trailhead Resurfacing	Recreation, District, and Roads Unit staff	Project involves planning and design work for gravel resurfacing of the trailhead parking area.
Facility Improvement	Browns Camp Dumpster Pad expansion	Recreation staff and South Fork	Project involves expansion of the day use area dumpster pad.
Facility Development	Drift Creek Trailhead	Recreation staff / Road Crew / South Fork	Project work involves construction of the trailhead that will support use of the Fear and Loaming gravity mountain bike trail and the future segment of the Wilson River Trail. Planning and design work is in progress as a FY21 project.
Facility Improvement Planning and Construction	Browns Camp Gates	Recreation staff / South Fork / Contractor	Project work involves planning work to determine feasibility of installing additional gates, gate placement and design, and fabrication and installation of two campground gates. Fabrication and construction may become a FY23 project. Project objective is to set up the site for year round access to the Browns Camp day use staging area and the Kids riding area.
Facility Improvement	Lyda Camp Kiosk	Recreation staff / South Fork	Project work involves fabrication and installation of a three panel kiosk.
Facility Improvement	Trailhead Site Signs	Recreation staff / South Fork	Project work includes fabrication and installation of sites signs to replace worn and damaged site signs at 4 to 6 trailhead facilities.

OHV Trails

The Recreation program will continue to place emphasis on maintenance and upgrade of existing trails. Project work will continue to focus on upgrading and improving the designated OHV trail network in an effort to better connect the trail system, protect forest resources, re-establish trails after timber harvest, move trail users off the mainline haul and public use roads, reduce trail congestion and the potential for conflict between trail users, improve user safety, improve maintenance efficiency, and reduce infrastructure investments and maintenance workload.

Due to trail maintenance needs, winter weather limitations, timber sale activity, fire season restrictions, and staff focus on the Santiam State Forest some project work from FY21 will extend into FY22. Overall OHV program projects and priorities for FY22 will be taking place in Diamond Mill, Jordan Creek, Trask, and Nicolai OHV areas of the Tillamook and Clatsop State Forests.

FY22 OHV trail projects on the Forest Grove District are identified and briefly described in Table 7 below.

Table 7. OHV Trail Projects

Project Type	Project Name	Project Mileage	Work Resources	Project Description
Trail System Planning	Tillamook State Forest and Clatsop State Forest OHV Trail System Plan Development	NA	Recreation Program Staff / OHV Community / Resource Specialists / District Staff.	Project involves work to update the OHV trail system plans for the Tillamook and Clatsop State Forests.
Trailbridge Replacement Planning	Military Trail Bridge #1	NA	OHV program staff / Operators / Resource Specialists	This project involves planning work to determine whether the bridge can be replaced with a culvert and design work for culvert installation. If the bridge can't be replaced with a culvert it will be replaced with a new bridge.
Infrastructure Assessment	Trail Bridge Inspections	3 Bridges	Contractor	Project involves completing inspections of 3 of the 14 OHV trail bridges on the Forest Grove District.

Non-motorized Trails

The Recreation program will continue to place emphasis on making improvements to the existing non-motorized trails on the Forest Grove District in an effort to address user safety, resource protection, investment protection, sustainability, and user accommodation issues and to reduce maintenance need. Due to trail and facility maintenance needs, South Fork and Recreation staff capacity, FY21 staff focus on the Santiam State Forest some project work from FY21 will be extend into FY22.

FY22 non-motorized trail projects on the Forest Grove District are identified and described in the following table (Table 8).

Table 8. Non-Motorized Trail Projects

Project Type	Project Name	Project Mileage	Work Resources	Project Description
Trail Development (Construction)	Wilson River Trail Segment D	4 to 5.5 miles	Contractor / Recreation Staff / South Fork / Volunteers	This project involves the construction of a 4 to 5.5 mile segment of Wilson River Trail Segment D.
Trail Bridge Replacement (Planning)	Gravelle Brothers Trail Bridge #13	NA	Recreation Staff / South Fork	Work involves coordination with ODF's State Forest Division Engineer and Aquatics Specialist and ODFW fish biologist to develop a bridge replacement plan. The current bridge is a 46 foot long log stringer bridge is approaching its lifespan and no longer meets ODF's trail bridge design standards. This project addresses user safety, visitor accommodation, trail system sustainability, and resource protection issues.
Trail Sign Fabrication	Non-motorized Trail Signs	NA	Recreation Staff / South Fork	This project involves fabrication of trail signs for the non-motorized trail network. Signs are being developed to replace damaged and aging signs and to address trail mileage changes resulting from recent additions to, and reroutes of, the trail system.
Infrastructure Assessment	Trail Bridge Inspections	10 Bridges	Contractor	Project involves completing inspections of 10 of the 41 non-motorized trail bridges.

Trail Maintenance (OHV and Non-motorized)

Maintenance of existing trails remains the Recreation programs highest trail program priority. Trails will be maintained as necessary to protect investment, address developing resource and safety issues, and to protect water quality. Trail maintenance activity includes the completion of trail condition assessments on all trails, development of maintenance strategies, and completion of maintenance work. Basic trail maintenance work typically involves cleaning water bars and rolling dips, cleaning out culverts, trail tread work, cleaning trail bridges, clearing downed trees, brushing, and sign replacement. Heavy trail maintenance work, which typically results from winter storms, includes repairing trail bridges, reestablishing trail tread in slide or washout areas, rebuilding stream ford crossings, clearing and logout work associated with heavy concentrations of downed trees, and rerouting trails due to slides, washouts, or safety issues.

The Recreation program expects to complete condition assessments and trail clearing maintenance on all trails on the Forest Grove District (117 miles OHV and 70 miles non-motorized). Trail user safety, investment protection, and resource protection maintenance will be completed as needed. Other basic trail maintenance work is completed on most trails every two or three years. Approximately 35% to 45% of the network on the Forest Grove District will receive basic trail maintenance attention in FY22.

Volunteer Program and Partnerships

The recruitment and use of volunteers is critical to the overall success of the Recreation program. The Recreation program currently manages a Volunteer Program that includes the following recreation oriented sub-programs:

Camp Host	Trail Maintenance and Construction Work Parties
Adopt a Trail	OHV Trail Equipment Volunteer Operator
Forest Clean-up	Trail Patrol

Covid-19 has influenced our ability to offer the same level of volunteer opportunity and engagement as we have offered in the past. Covid 19 will continue to have influence on delivery of this component of the Recreation Program. To the extent we can within the bounds of Covid safety protocols, in FY22, activities associated with the volunteer program will include the recruitment, selection, and management of campground hosts; planning and management of trail maintenance, trail development, and special volunteer projects; facilitation of Adopt a Trail program activities; and management of the Tillamook State Forest Volunteer Trail Patrol program.

The Recreation program will continue to look for opportunities to develop new partnerships and to enhance existing partnerships that will increase our collective capacity to meet program and project goals and objectives.

Event Management

The Recreation program permits organized sponsored OHV trail use events on state forest land. The OHV events consist of poker runs (fun runs), competitive timed motorcycle races, trials motorcycle competitions, four-wheel drive rallies, and competitive four-wheel drive runs. Non-motorized trail use events consist of equestrian poker rides, mountain bike races, forest road bicycle rides, running races, and archery events. These types of events are permitted less frequently. Non-motorized event requests will be evaluated to determine if the program has the capacity to support proposed event activities.

In FY22 the Recreation program expects to review, permit, and administer 6 to 10 motorized trail use events and two scheduled non-motorized trail use events on the Tillamook State Forest. Motorized events for FY22 were scheduled at a meeting in December 2020. Covid-19 will influence event sponsor and ODF ability to support event activity

Grants

The Recreation program expects to apply for and administer several grants in FY22 to support project and program activity.

The program will be administering the following grants to support the construction phase of the Kings Mountain Trailhead Expansion project.

- Land and Water Conservation Fund (Administration)
- Recreation Trails Program Grant (Administration)
- Tillamook County Transient Lodging Tax Grant (Administration)

The program will be applying for the following grant to support construction of Wilson River Trail Segment D.

- Recreation Trails Program Grant

In collaboration with our partners in the target shooting community, the Recreation program will be administering the following grant to support improvement of the North Fork Wolf Creek Target Shooting Lanes. This project is a carryover from FY21 due to grant cycle issues at ODFW.

- Oregon Department of Fish and Wildlife Shooting Range Grant Program

The Recreation program will also be partnering with clubs and organizations that will be submitting grant applications to advance Recreation program work on the Tillamook State Forest.

Target Shooting

The Recreation program, in collaboration with our partners in the target shooting community and District staff, will continue to work on implementing a target shooting management strategy that will work towards:

- Resolving the safety, sanitation, and environmental issues.
- Reducing the fire potential associated with target shooting.
- Developing public ownership and involvement in the development and implementation of the strategy.
- Maintaining safe and sustainable opportunities for recreational target shooting on the TSF.

In FY22, planning and development of additional target shooting lanes and closure of unsafe target shooting sites will flow from this work.

Unplanned Activities

The activities above represent project and program work items for the fiscal year. However, the agency and the Recreation program often receive requests from non-profit and commercial businesses to utilize the forest for their trail use events or business ventures. Any new requests beyond the above described workload will be reviewed and evaluated based on the following criteria to determine whether or not the request will be permitted:

- Safety
- Risk of environmental damage
- Risk of trail and facility impacts
- Conflict with other forest users
- Conflict with other forest management activity
- Contributions to social, environmental, and economic goals
- Contribution to forest management plan goals
- Risk of fire
- Impacts on law enforcement
- Staff workload
- Opportunity for new partnerships and increased program capacity

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 Oregon Coast Coho Salmon, Upper Willamette River Chinook, and Upper Willamette River Steelhead.

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 the streams will be evaluated during fish distribution surveys or during sale layout.

Restoration Goals and Identification Process: The overarching principles for fish habitat restoration are described in the Forest Management Plan. There are stream enhancement opportunities identified in association with some sales in this AOP. Before determining if these potential projects will go into a full planning process, more field review is needed. The ODF Aquatic and Riparian Specialist will be consulted to help identify these candidates and may consult with ODFW fish biologists as needed.

Potential Stream Projects may be associated with the following Timber Sales:

- Backwoods
- Devilooze
- Doty Mill
- Double Parked (ALT)
- Elkberg
- Point Belding
- Rabbit Tracks
- Unparalleled

Other Planned Projects to improve aquatic areas within the FY22 AOP:

- The vacating of 0.5 miles of road, including 3 perennial stream crossings with the Mainly Sain Timber Sale.
- The replacement of a bridge on South Lousignont Road. District personnel will work with Resource Specialists and a contracted Licensed Engineer on this project.
- The design for the replacement of a fish passible structure on Wildcat Mtn. Road near the 0.2 mile.
- The vacating of approximately 0.65 miles of road, including the removal of 10 perennial stream crossings in the Bell Mtn. Block.
- 33 miles of road improvement including installing disconnect culverts, installing additional cross drain culverts and to add mitigation where applicable to hydrologically disconnect the roads from streams as possible. Hydrologic connectivity of the haul routes for the FY22 AOP is measured at 10.6%, it is estimated the percent connected will be reduced to 9.7% thru road improvements and mitigation.
- Wetland enhancement at the Barney Wetland. Create an area of deep soil to establish shade producing vegetation.

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 Department of State Lands.

Land Exchange

There are no active land exchange projects for this AOP.

Law Enforcement and Public Safety

ODF and the Tillamook County Sheriff's Office (TCSO) partner to maintain 3 full time forest deputies that are funded through ATV grants and ODF dollars. Recreation Program and District staff work in partnership with the forest deputies, the TCSO, and the District staff to facilitate the law enforcement activity across the Tillamook State Forest. This partnership is managed out of the Tillamook District office

The forest deputies enforce state, federal, and forest recreation laws with an emphasis on ATV enforcement as they patrol the forest. Deputies also provide search and rescue services as needed. Fire laws pertinent to recreation use are enforced by the forest deputies, fire protection staff, and recreation staff. The forest deputies are essential to the success and overall management of the forest and their presence benefits all forest users.

Recreation program and District staff also work closely with the Washington County Sheriff's Office (WCSO) and Oregon State Patrol to support and facilitate law enforcement patrol, EMS, and search and rescue activities on the Tillamook State Forest in western Washington County.

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 three weeks. Historically firewood cutting has only been allowed outside the months of fire season.

Non-Timber Forest Products

Approximately 200 miscellaneous forest products permits are sold each year, mostly for salal and mushrooms, generating approximately \$20,000 in revenue.

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

The Forest Grove District will assist in a variety of research and monitoring projects in FY22. Examples include:

- ◆ Red alder research areas.
- ◆ White Pine Blister Rust resistance studies.
- ◆ OSU research areas (commercial thinning and wildlife studies).
- ◆ Commercial thinning and *Phellinus weirii* research areas.
- ◆ Commercial thinning and Swiss Needle Cast study areas.
- ◆ Riparian zone functions study areas.
- ◆ Green tree retention and seedling growth demonstration areas.
- ◆ OSU Intensive Forest Management study.

Recreation, Education, and Interpretation (REI) Program Planning – REI Program Wide

In FY22, REI program staff will working on the following planning efforts.

- Development of a strategic plan that will guide and shape broad direction for the program over the next 5 to 7 years.
- Support the State Forest Division's forest management plan work and HCP work and District AOP development and implementation.

Other Planning Operations

During FY22, the District will continue to conduct Hydrological Connectivity Surveys on the road systems as time allows. 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

Public Information and Involvement

Public information and involvement activities will include:

- Review and input regarding the FY22 Annual Operations Plan.
- Volunteer engagement in trail work parties, trail patrol, Solve cleanups, adopt a trail, adopt a project, camp host programs, and other aspects of the recreation program.

- OHV Trail System Plan Development.
- Recreation project planning and design.
- Outreach to underserved or underrepresented groups.
- Marketing of the State Forest Recreation Fund.
- Recreation, Education, and Interpretation Strategic Planning

Public Education

Recreation program staff will be involved in a variety of projects focused on informing and educating the public and interpreting the natural and cultural history of the Tillamook State Forest (TSF). Public Education activities will include:

- Maintenance of the ODF website, the Tillamook State Forest Blog, and recreation information phone line.
- Development, management, and maintenance of recreation facility and forest information board messaging.
- Update of Recreation program brochures.
- Engagement with partners on their website presence.
- Review and support of responsible target shooting messaging on social media prepared and managed by our partners in the recreational target shooting community.
- Ongoing updates for the Tillamook State Forest OHV Trail Map.

Administration

During FY22 the district will be transitioning to a new organization. There will be 18 permanent positions whose full-time function is to manage State Forest land on the District and 4 permanent positions who work part-time on management of State Forest land. In addition, the District will be supported by the NWOA REI Team and the NWOA Operations Team as well as the Division Planning and Coordination Team. All are responsible for implementing the FY22 Annual Operations Plan. The district positions are divided into 4 functional groups: Forest Management, Forest Roads, Reforestation, and Administration. See the attached organizational chart.

There is a Marketing Unit which responsible for all aspects of timber marketing. These activities include participating in the planning process, unit layout, assisting with road layout and design, timber cruising, timber sale appraisal, contract writing, contract administration, and coordinating with the REI, Planning, and Operations Teams.

The Forest Roads unit is responsible for all aspects of road management and land surveying. These activities include road design and layout, rock pit development, road maintenance, property line location, road construction and improvement appraisals, contract preparation, and road contract administration. The Forest Roads unit works with the Operations, REI, and Planning & Coordination Team in developing the AOP.

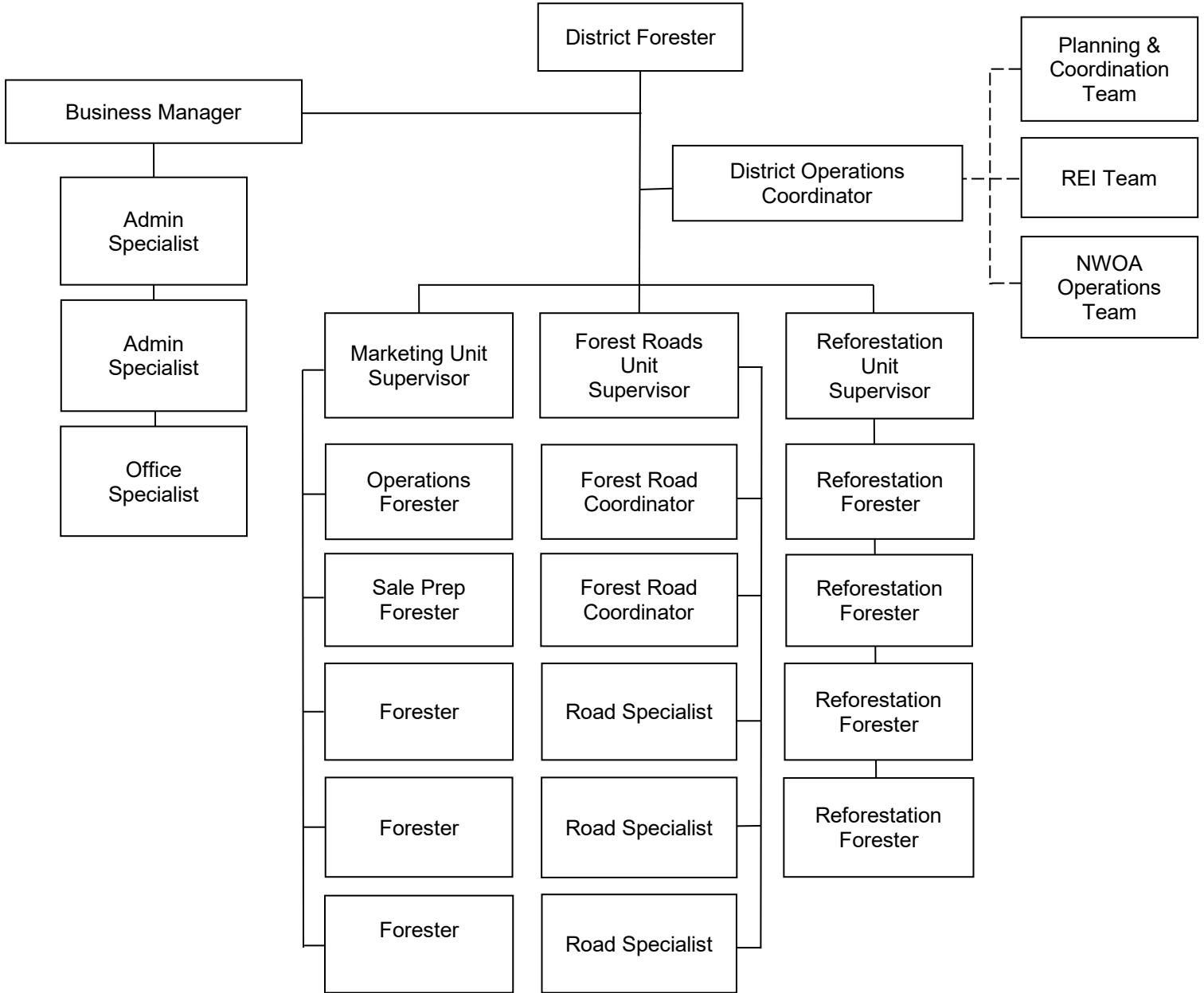
The Reforestation unit is responsible for all activities in forest plantations from the time the harvesting is complete until the new stand produces commercial timber. The activities of this unit include site preparation, trapping, tree planting, vegetation management, tree improvement, and pre-commercial thinning. The reforestation unit also coordinates South Fork

crews and administers contracts to complete these tasks. The Reforestation Unit will coordinate with the REI team as needed.

Administration consists of the District Forester, District Operations Coordinator, Office Manager, and Office Specialists. The District Forester and District Operations Coordinator provide policy direction, budget development, and oversight to the field units. The Office Manager, and Office Specialists provide clerical support to State Forest Management. These positions are responsible for initial public contact, distribution and filing of documents, and providing assistance at timber sale auctions. The Office Specialist is also responsible for issuing permits for firewood cutting, and special forest products.

Each of these units and teams are responsible for ensuring the management approaches, activities, and projects 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.

Forest Grove 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
6. Recreation Trail Management Summary
7. Recreation Grant Management Summary

B. Maps

1. Harvest Operations Vicinity Map
2. Recreation Projects Vicinity Map
3. Recreation Facilities 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. FY22 AOP Major Modification

G. District Implementation Plan Minor Modification – Landscape Design

Appendix A

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**
- **Table A-7: Recreation Grant Management – Financial Summary**

TIMBER HARVEST OPERATIONS - FINANCIAL SUMMARY

District: Forest Grove

Fiscal Year: 2022

Date: 04/19/2021

Primary Operation	Fund %		County	Sale Quarter	Net Acres		Volume (MMBF)			Value			
	BOF	CSL			Partial Cut	Clear-cut	Conifer	Hardwoods	Total	Gross	Projects	Net	
Backwoods	100%		Till	3		80	3.4		3.4	\$1,720,000	\$97,500	\$1,622,500	
Daily Edition	100%		Wash	4		108	4.3		4.3	\$2,052,000	\$39,100	\$2,012,900	
Devilooze	100%		Till	1		98	2.8		2.8	\$1,492,050	\$29,600	\$1,462,450	
Doty Mill	100%		Till	4		108	5.3		5.3	\$3,175,200	\$0	\$3,175,200	
Elkberg	100%		Wash	4		96	4.1		4.1	\$2,064,000	\$114,600	\$1,949,400	
Ingersoll PC	100%		Wash	1	96		0.8		0.8	\$288,000	\$0	\$288,000	
Karthenon	100%		Col	3		118	6.4		6.4	\$3,663,900	\$42,600	\$3,621,300	
Mainly Sain	100%		Wash	1		141	5.4		5.4	\$2,679,000	\$151,800	\$2,527,200	
Neverstill	100%		Wash	3		68	2.9		2.9	\$1,462,000	\$7,600	\$1,454,400	
Point Belding	100%		Till	4	309		5.9		5.9	\$2,495,175	\$280,600	\$2,214,575	
Rabbit Tracks	100%		Clat	2		120	6.2		6.2	\$3,120,000	\$432,500	\$2,687,500	
Unparalleled	100%		Till	2		124	5.3		5.3	\$2,799,300	\$167,300	\$2,632,000	
Valley View	100%		Wash	2		100	4.7		4.7	\$2,585,000	\$66,100	\$2,518,900	
Will C	100%		Till	2		90	3.2		3.2	\$1,575,000	\$267,700	\$1,307,300	
Sub-total:						405	1,251	60.8	0.0	60.8	\$31,170,625	\$1,697,000	\$29,473,625
Project WOC Sub-total:						0	0	0.0	0.0	0.0		\$810,000	
Total:						405	1,251	60.8	0.0	60.8	\$31,170,625	\$2,507,000	\$28,663,625

Alternate Operations

Double Parked	100%		Wash			155	7.0		7.0	\$3,836,250	\$696,500	\$3,139,750	
Hoggendas	100%		Till			112	4.6		4.6	\$2,066,400	\$181,500	\$1,884,900	
Larch Madness	100%		Till		72		1.1		1.1	\$432,000	\$0	\$432,000	
Nor Skogg	100%		Wash			107	4.6		4.6	\$2,185,475	\$189,700	\$1,995,775	
Round Bell	100%		Wash			109	3.3		3.3	\$1,716,750	\$192,500	\$1,524,250	
Two Windy	100%		Wash			132	5.3		5.3	\$2,508,000	\$81,000	\$2,427,000	
Total:						72	615	25.8	0	25.8	\$12,744,875	\$1,341,200	\$11,403,675

PRIMARY HARVEST OPERATIONS - FOREST RESOURCE SUMMARY

District: Forest Grove

Fiscal Year 2022

Date: 04/19/2021

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 ¹	Invasive Species	LYR/OFS Structures ²	Landcape 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 (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 ⁵	T&E Plants	Geotechnical Issues Needing Field Review	Recreation Sites	Cultural Resources	Scenic Resources	Other Resources or Issues
Backwoods	1	-	X	-	-	-	-	-	X	-	-	-	-	-	X	-	X	X	-	-	
Daily Edition	1	-	X	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	
Devilooze	1	-	X	-	-	X	-	-	X	X	-	-	-	-	X	-	-	X	-	-	
Doty Mill	1	-	X	-	-	-	-	-	X	X	-	-	-	-	X	-	X	-	-	-	
Ingersoll PC	1	-	X	-	-	-	-	-	-	X	-	-	-	-	X	-	-	-	-	-	
Karthenon	1	-	X	-	-	X	-	-	-	-	-	-	-	-	-	-	-	X	-	-	Adjacent to Camp Wilkerson
Mainly Sain	1,2,3	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	
Neverstill	1	-	X	-	-	-	-	X	-	-	-	-	-	-	-	-	-	-	-	-	
Point Belding	1	-	X	-	X	-	-	-	X	X	X	-	-	-	-	-	-	-	-	-	
Rabbit Tracks	1, 2	-	X	-	-	X	-	-	X	-	-	-	-	-	X	-	-	-	X	-	
Unparalleled	1, 2	-	X	-	-	X	-	-	X	X	-	-	-	-	X	-	-	X	-	X	
Valley View	1	-	X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Will C	1,2,3	-	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' indicates 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.

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	Landcape 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	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 ⁵	T&E Plants	Geotechnical Issues Needing Field Review	Recreation Sites	Cultural Resources	Scenic Resources	Other Resources or Issues
Double Parked	1,2	-	X	-	X	X	-	-	X	-	-	-	-	-	X	-	-	X	-	X	
Elkberg	1	-	X	-	-	-	-	-	-	X	-	-	-	-	-	-	X	-	-	-	
Hoggendas	1	-	X	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	
Larch Madness	1	-	X	-	-	-	-	-	-	-	-	X	-	-	X	-	-	X	-	-	
Nor Skogg	1	-	X	-	-	X	-	-	-	-	-	-	-	-	X	-	-	-	-	-	
Round Bell	1	-	X	-	-	-	-	X	-	X	-	-	-	-	X	-	-	X	X	-	
Two Windy	1,2	-	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 inconsultation 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.

FOREST ROADS SUMMARY

District: Forest Grove

Fiscal Year: 2022

Date: 04/19/2021

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					
Backwoods	0.00	\$0	1.27	\$97,500	\$0	\$97,500	\$1,720,000	5.7%	
Daily Edition	0.43	\$21,500	0.22	\$17,600	\$0	\$39,100	\$2,052,000	1.9%	
Devilooze	0.21	\$10,500	3.61	\$9,100	\$10,000	\$29,600	\$1,492,050	2.0%	
Doty Mill	0.00	\$0	0.00	\$0	\$0	\$0	\$3,175,200	0.0%	
Elkberg	1.08	\$80,800	0.45	\$33,800	\$0	\$114,600	\$2,064,000	5.6%	
Ingersoll PC	0.00	\$0	0.00	\$0	\$0	\$0	\$288,000	0.0%	
Karthenon	0.00	\$0	0.96	\$42,600	\$0	\$42,600	\$3,663,900	1.2%	
Mainly Sain	0.00	\$0	1.76	\$131,800	\$20,000	\$151,800	\$2,679,000	5.7%	
Neverstill	0.15	\$7,600	0.00	\$0	\$0	\$7,600	\$1,462,000	0.5%	
Point Belding	1.10	\$98,900	1.33	\$86,700	\$95,000	\$280,600	\$2,495,175	11.2%	
Rabbit Tracks	0.56	\$56,500	11.59	\$336,000	\$40,000	\$432,500	\$3,120,000	13.9%	
Unparalleled	1.42	\$71,100	4.50	\$81,200	\$15,000	\$167,300	\$2,799,300	6.0%	
Valley View	0.00	\$0	2.20	\$66,100	\$0	\$66,100	\$2,585,000	2.6%	
Will C	0.43	\$30,200	5.35	\$83,500	\$154,000	\$267,700	\$1,575,000	17.0%	
Sub-total	5.38	\$377,100	33.24	\$985,900	\$334,000	\$1,697,000	\$31,170,625	5.4%	
Sub-total WOC (see below)	0.0	\$0	0.00	\$400,000	\$410,000	\$810,000			
Totals	5.38	\$377,100	33.24	\$1,385,900	\$744,000	\$2,507,000	\$31,170,625	8.0%	

Alternate Operations

Double Parked	0.60	\$60,200	4.32	\$236,300	\$400,000	\$696,500	\$3,836,250	18.2%	
Hoggendas	0.35	\$30,000	4.03	\$151,500	\$0	\$181,500	\$2,066,400	8.8%	
Larch Madness	0.00	\$0	0.00	\$0	\$0	\$0	\$432,000	0.0%	
Nor Skogg	1.45	\$144,900	0.75	\$44,800	\$0	\$189,700	\$2,185,475	8.7%	
Round Bell	0.00	\$0	2.55	\$122,500	\$70,000	\$192,500	\$1,716,750	11.2%	
Two Windy	0.22	\$18,500	1.96	\$62,500	\$0	\$81,000	\$2,508,000	3.2%	
Total	2.62	\$253,600	13.60	\$617,600	\$470,000	\$1,341,200	\$12,744,875	10.5%	

Road Projects Not Associated with Harvest Operations in this AOP:	None
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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				
South Lousignont Road - Bridge Installation				\$400,000		\$400,000	FDF	
Wildcatfish Crossing - Bridge Design					\$30,000	\$30,000	FDF	
Bell Block Vacate					\$10,000	\$10,000	FDF	Vacating of 0.65 miles of road.
Salmonberry Road 0.5 mile Borrow Site Rehab					\$75,000	\$75,000	FDF	
Rogers Camp Resurfacing					\$35,000	\$35,000	FDF	
Fire Gate for Barney Block					\$10,000	\$10,000	FDF	Installation of 1 Fire Gate
Fire Gates for Rogers Block					\$70,000	\$70,000	FDF	Installation of 7 Fire Gates
Fire Gates for Salmonberry / Wheeler Block					\$60,000	\$60,000	FDF	Installation of 6 Fire Gates
Barney Wetland Enhancement					\$120,000	\$120,000	FDF	
Total	0.00	\$0	0.00	\$400,000	\$410,000	\$810,000		

REFORESTATION AND YOUNG STAND MANAGEMENT SUMMARY

District: Forest Grove

Fiscal Year: 2022

Date: 04/19/2021

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 Cost	1,500	\$215.00	\$322,500.00			\$0.00	1,500	\$322,500.00
Site Prep - Broadcast Burning	0	\$0.00	\$0.00			\$0.00	0	\$0.00
Site Prep - Piling Burning	900	\$7.50	\$6,750.00			\$0.00	900	\$6,750.00
Site Prep - Mechanical	252	\$200.00	\$50,400.00			\$0.00	252	\$50,400.00
Site Prep - Chemical - Aerial	1,086	\$65.00	\$70,590.00			\$0.00	1,086	\$70,590.00
Site Prep - Chemical - Ground	247	\$104.00	\$25,688.00			\$0.00	247	\$25,688.00
Initial Planting	1,333	\$170.00	\$226,610.00			\$0.00	1,333	\$226,610.00
Interplanting	200	\$135.00	\$27,000.00			\$0.00	200	\$27,000.00
Underplanting	0	\$0.00	\$0.00			\$0.00	0	\$0.00
Tree Protection - Barriers	875	\$36.48	\$31,920.00			\$0.00	875	\$31,920.00
Tree Protection - Direct Control	0	\$0.00	\$0.00			\$0.00	0	\$0.00
Release - Chemical - Aerial	0	\$0.00	\$0.00			\$0.00	0	\$0.00
Release - Chemical - Ground	350	\$104.00	\$36,400.00			\$0.00	350	\$36,400.00
Release - Manual	0	\$0.00	\$0.00			\$0.00	0	\$0.00
Precommercial Thinning	200	\$160.00	\$32,000.00			\$0.00	200	\$32,000.00
Pruning	50	\$0.00	\$0.00			\$0.00	50	\$0.00
*Stocking Surveys	2,800	\$0.00	\$0.00			\$0.00	2,800	\$0.00
Invasive Species	100	\$104.00	\$10,400.00			\$0.00	100	\$10,400.00
Roadside Spraying	100	\$200.00	\$20,000.00			\$0.00	100	\$20,000.00
*Phellinus Surveys	950	\$0.00	\$0.00			\$0.00	950	\$0.00
Totals	10,943	--	\$860,258.00	0	--	\$0.00	10,943	\$860,258.00

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

Projects Conducted by	Board of Forestry	Common School Forest Lands				District	Total Acres	Total Cost
		Average Cost*/Acre	BOF Cost	Acres Planned	Average Cost*/Acre			
Adults in Custody	Acres Planned	Average Cost*/Acre	BOF Cost	Acres Planned	Average Cost*/Acre	CSL Cost	Total Acres	Total Cost
Site Prep - Broadcast Burning			\$0.00			\$0.00	0	\$0.00
Site Prep - Piling Burning	200	\$8.50	\$1,700.00			\$0.00	200	\$1,700.00
Site Prep - Mechanical	0		\$0.00			\$0.00	0	\$0.00
Site Prep - Chemical - Aerial	0		\$0.00			\$0.00	0	\$0.00
Site Prep - Chemical - Ground	0		\$0.00			\$0.00	0	\$0.00
Initial Planting	0		\$0.00			\$0.00	0	\$0.00
Interplanting	0		\$0.00			\$0.00	0	\$0.00
Underplanting	0		\$0.00			\$0.00	0	\$0.00
Tree Protection - Barriers	875	\$73.80	\$64,575.00			\$0.00	875	\$64,575.00
Tree Protection - Direct Control	900	\$78.60	\$70,740.00			\$0.00	900	\$70,740.00
Release - Chemical - ground	0	\$0.00	\$0.00			\$0.00	0	\$0.00
Release - Manual	200	\$94.50	\$18,900.00			\$0.00	200	\$18,900.00
Precommercial Thinning	0		\$0.00			\$0.00	0	\$0.00
Pruning	0		\$0.00			\$0.00	0	\$0.00
Invasive Species	80	\$124.79	\$9,983.20			\$0.00	80	\$9,983.20
Other	0	\$0.00	\$0.00			\$0.00	0	\$0.00
Totals	2,055	--	\$164,198.20	0	--	\$0.00	2,055	\$164,198.20

RECREATION SITE MANAGEMENT SUMMARY

District: Forest Grove

Fiscal Year: 2022

Date : 04/19/2021

Project	Construction Cost (Funding)		Improvement Cost (Funding)		Operations/Maint. (Funding)		Total Costs	Comments
	ODF (\$)	Other (\$)	ODF (\$)	Other (\$)	ODF (\$)	Other (\$)		
Campgrounds								
Stagecoach Horsecamp			\$ 16,000		\$1,000		\$17,000	Vault Service (1000), Gates (16000)
Gales Creek Campground					\$9,000		\$9,000	Vaults (6000), Garbage (3000)
Reehers Camp			\$ 95,000		\$6,400		\$101,400	Vaults (4500), Garbage (1900), Power (95000).
Browns Camp				\$16,500		\$19,000	\$35,500	Dumpster Pad (500), Gates (16000), Vaults (9000), Garbage (10000) ATV Fund transfer dollars
Elk Creek Campground					\$8,800		\$8,800	Vault (4000), 2 portable toilets at the TH for 16 weeks (4800)
							\$0	
Designated Dispersed Campsites								
							\$0	
Little Browns Camp						\$5,800	\$5,800	Garbage Service 10 weeks (1000). 2 portable toilets for 4 months (4800). ATV Fund transfer dollars
							\$0	
Lyda Camp				\$6,000		\$4,800	\$10,800	2 portable toilets for 4 months (4800). New Kiosk (6000) ATV Fund transfer dollars
							\$0	
Day Use Areas								
See Campgrounds for day use areas and campground associated trailhead sites							\$0	
							\$0	

Project	Construction Cost (Funding)		Improvement Cost (Funding)		Operations/Maint. (Funding)		Total Costs	Comments
	ODF (\$)	Other (\$)	ODF (\$)	Other (\$)	ODF (\$)	Other (\$)		
Trailheads								
Kings Mountain	\$190,000				\$3,000		\$193,000	Vault Service (3500), Construction (190,000)This is match in support of grant funds
Summit Trailhead							\$0	
Rogers Camp Trailhead					\$2,000	\$2,000	\$4,000	Vault Service (4000)
Bell Camp Trailhead					\$400		\$400	Site Sign
Storey Burn Trailhead					\$400		\$400	Site Sign
Fear and Loaming Trailhead					\$400		\$400	Site sign
Drift Creek Trailhead					\$800		\$800	Site sign and information board.
Deyoe Creek Trailhead					\$400		\$400	Site sign
University Falls Trailhead					\$400		\$400	Site sign
Upper Raven Ridge Trailhead					\$400		\$400	Site sign
Lower Raven Ridge Trailhead					\$400		\$400	Site sign
Interpretive Sites								
Gales Creek Overlook							\$0	
Sunset Rest Area							\$0	
							\$0	
Other Operations								
Dumpsite Clean-up							\$3,000	
Volunteer Program					\$8,000		\$8,000	Recognition / Events / Radios /Supplies
Other Opeartions Expenses					\$55,000	\$5,000	\$60,000	Supplies and services for developed and dispersed facility operations - Well testing, county well reviews, well maintenance, fee envelopes, dust abatement, hazard tree removal, abandoned vehicle removal, tools and equipment, sign repair and replacement, invasive species and weed removal, general operations supplies, trail maps and brochures.
							\$0	
					District Total		\$397,800	
					Other Total		\$59,100	
					TOTAL		\$459,900	

RECREATION TRAIL MANAGEMENT SUMMARY

District: Forest Grove

Fiscal Year: 2022

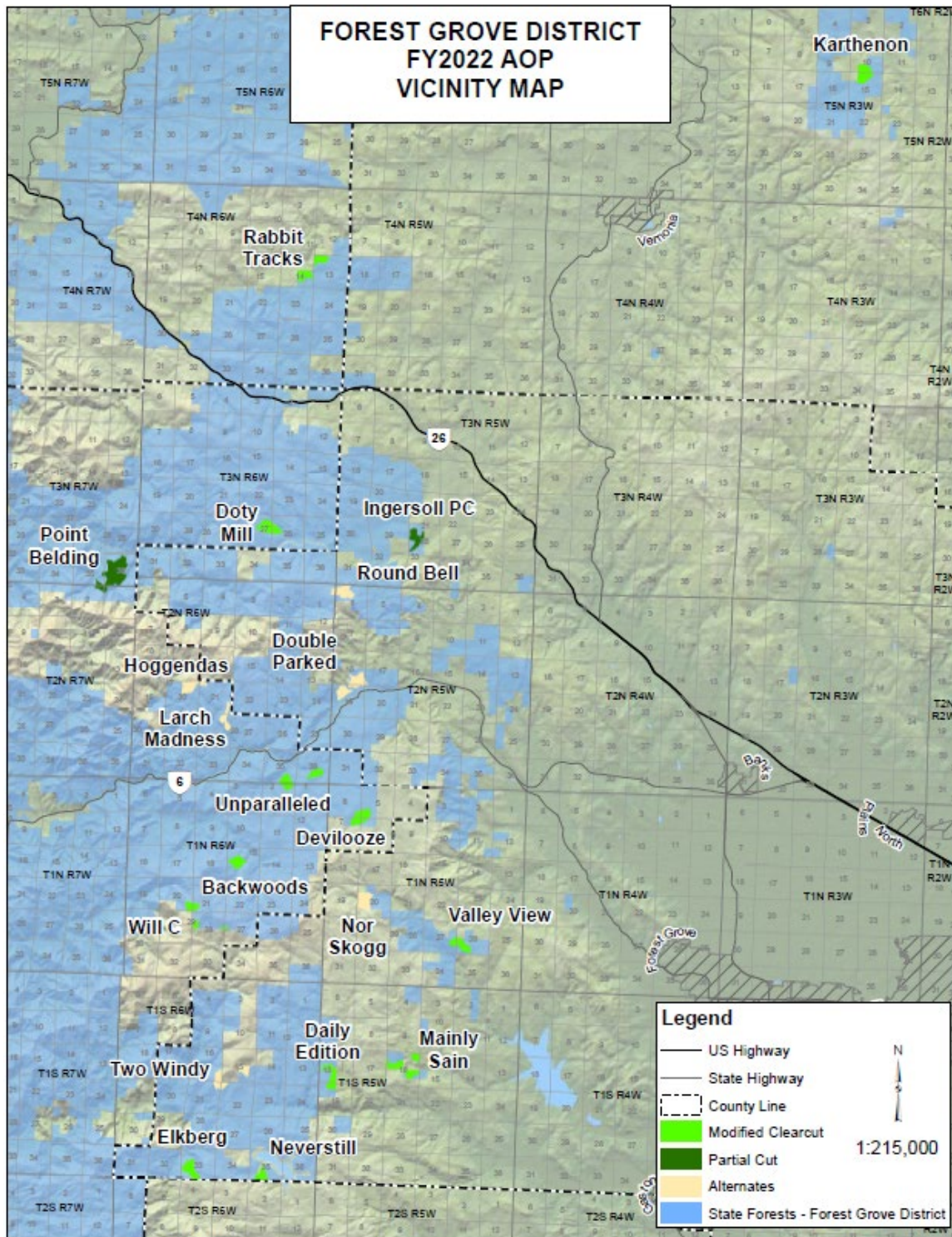
Date : 04/19/2021

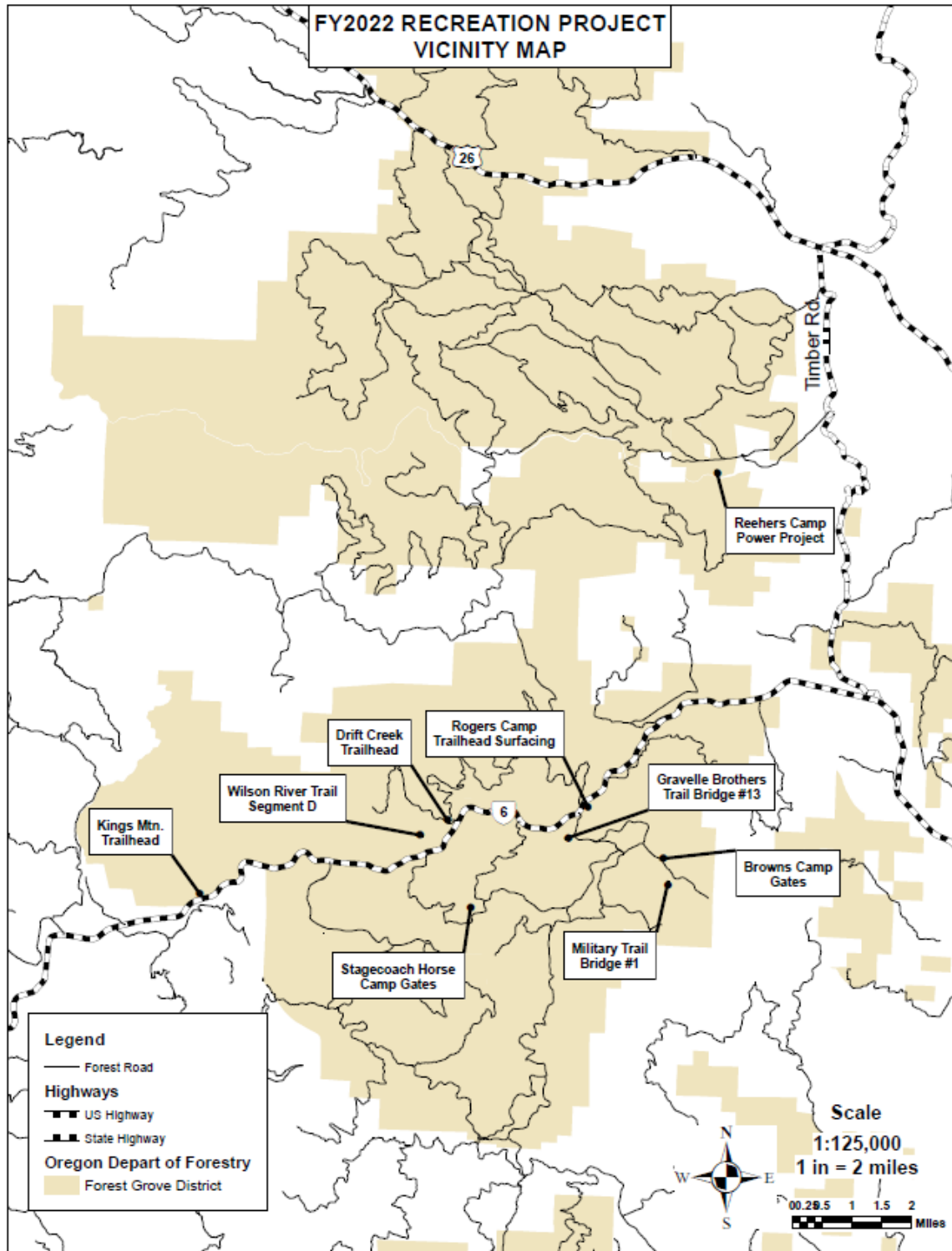
Project	Construction Projects			Improvement Projects			Operations & Maintenance Projects			Total Costs	Comments
	Miles	ODF (\$)	Other (\$)	Miles	ODF (\$)	Other (\$)	Miles	ODF (\$)	Other (\$)		
Non-Motorized											
Wilson River Trail Trail Segment D				5		\$175,000				\$175,000	Trail construction project. South Fork, Volunteers, and Contractor. Project work will extend into FY23.
Gravelle Brothers Trail Bridge #13										\$0	Planning and design project. Construction FY23
Bridge Inspections (10)									\$7,000	\$7,000	Contractor (700/Bridge)
Trail Maintenance							70.5		\$5,000	\$5,000	South Fork Crew, REI staff, & Volunteers, \$5000 material costs for repairs
Trail Sign Fabrication									\$500	\$500	South Fork Sign Shop
Motorized											
Military Trail Bridge #1										\$0	Bridge replacement planning project. OHV Trail Crew Construction FY23
OHV Trail System Planning TSF & CSF										\$0	OHV Program Staff
Trail Maintenance							117.0		\$2,000	\$2,000	OHV Trail Crew & Volunteers, \$2000 for infrastructure repairs.
Trail Sign Replacement									\$1,500	\$1,500	Contractor Fabrication. Recreation Program Staff Install. ATV Funds & Donations
										\$0	
Bridge Inspections (3)									\$2,100	\$2,100	Contractor (700/bridge). ATV Transfer Funds
									District Total	\$12,500	
									Other Total	\$180,600	
									TOTAL	\$193,100	

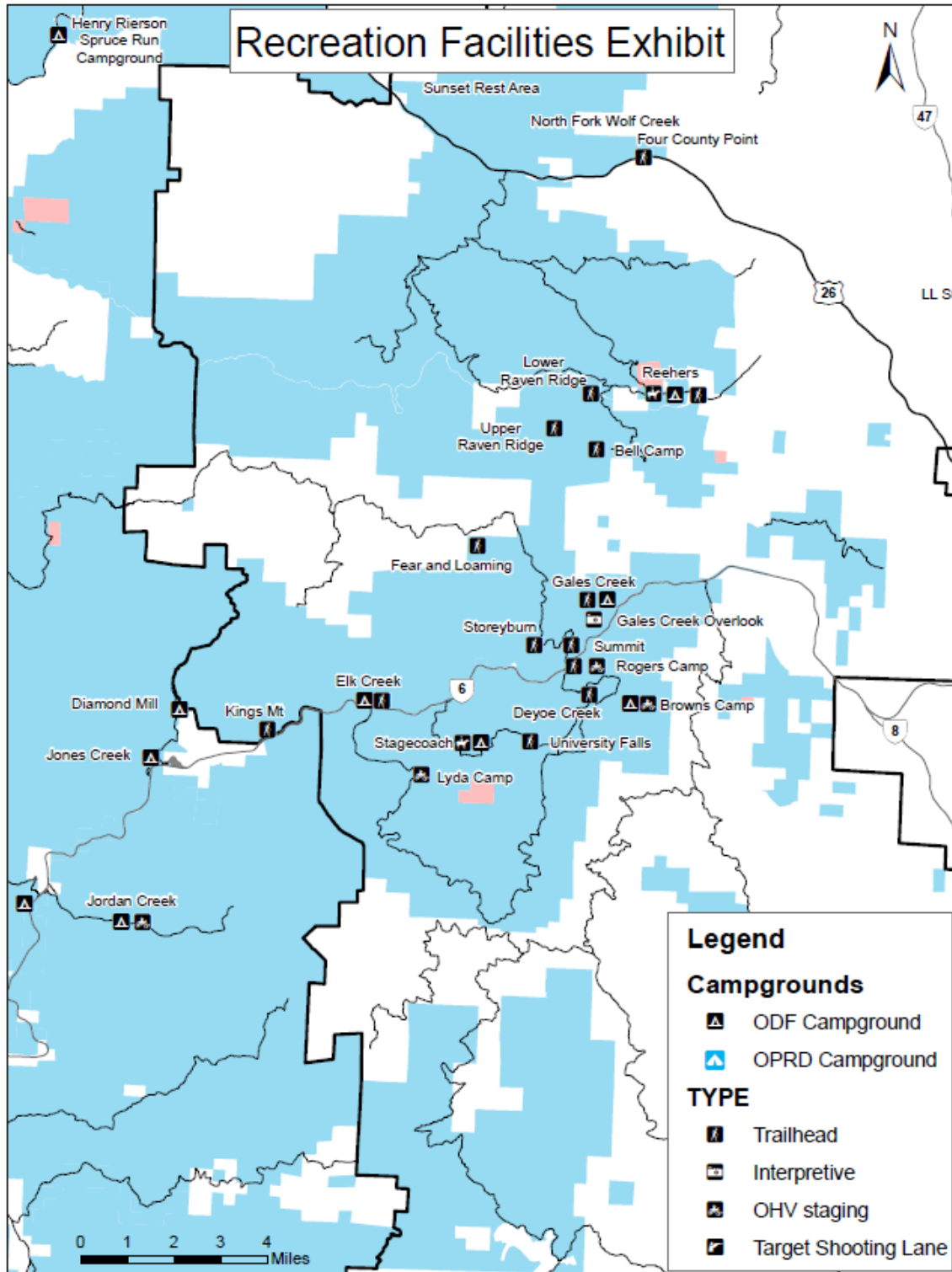
Appendix B

Vicinity Maps

- **Harvest Operations Vicinity Map**
- **Recreation Projects Vicinity Map**
- **Recreation Facilities Vicinity Map**







Appendix C

Consultations with Other State Agencies

Oregon Department of Fish and Wildlife (ODFW):

ODFW biologists attended a FY22 AOP Cooperators meeting, and were provided the Summary and Pre-Operations Reports for review.

ODFW identified several stream enhancement opportunities associated with sales in the FY22 AOP and some stream culverts that should be evaluated for fish passage if they have not been assessed already. Before determining if these potential enhancement projects will go into a full planning process, more field review is needed. The ODF Aquatic and Riparian Specialist will be consulted to help review these candidates to make sure that the streams will benefit from the proposed projects and may consult with ODFW fish biologists as needed. All culverts along haul routes for the proposed sales will be evaluated during sale preparation to ensure that they meet standards set in the ODF Roads Manual including fish passage.

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:

- Cabin and Trail: Rabbit Tracks
- Wagon Road: Round Bell (ALT)
- Trail: Will C, West C-Line Quarry Development

Appendix D

PUBLIC COMMENT PROCESS FOR THE FY22 ANNUAL OPERATIONS PLAN

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 7, 2021 through June 21, 2021.

The purpose of the Public Comment Period is to provide an opportunity for the public to review the AOP, 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.

No changes have been made to the AOP since the public review.

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

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>

Just zoom to the District you are interested in and click on any sale. A pop-up box should show up with a link to the Pre-Operations Report for the sale.

APPENDIX F

Forest Land Management Classification System (FLMCS) Modification Notification

No modifications are proposed with the FY2022 AOP.

Appendix G

Landscape Design – Forest Grove District Implementation Plan Minor Modification Notice

As described in the Forest Grove District IP, 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 Forest Grove District’s landscape design. The DFC landscape design for the Forest Grove 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 Forester concurrent with the Annual Operation Planning process.

The district is proposing to change 5 acres that have a current DFC of Layered to non-complex or “general” to create logical operational timber sale boundaries (Double Parked – Unit 1, Hoggendas). See map below.

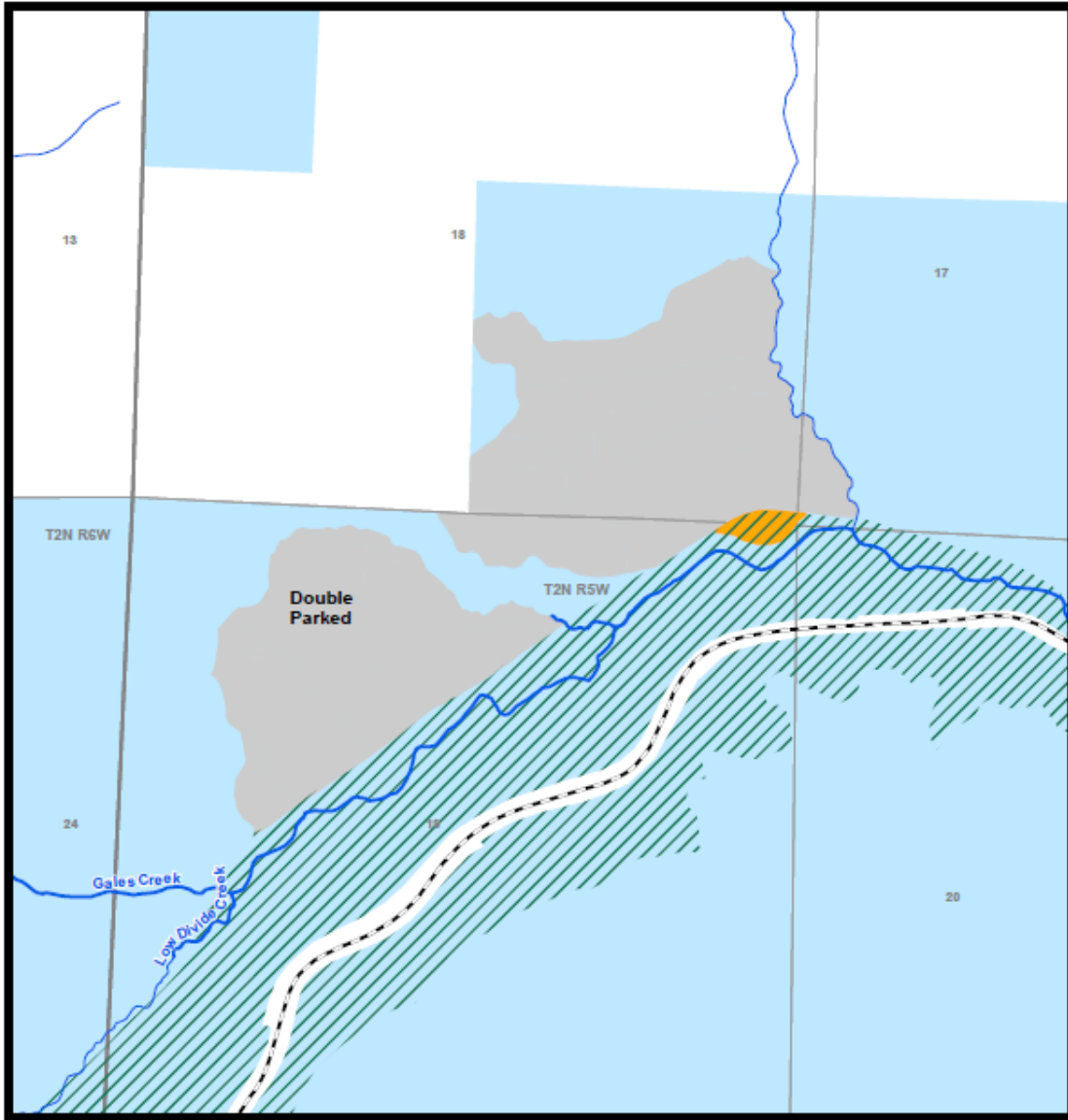
The removal of acres within the landscape design was reviewed by an ODF biologist and other resource specialists.

The designation of DFC complex on the Forest Grove District remains at 30%.

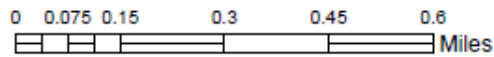
Summary of Minor Landscape Design Modification			
Acres Removed		Acres Added	
Desired Future Condition	Acres	Desired Future Condition	Acres
LYR	5.3	LYR	0
OFS	0	OFS	0
Total Acres Removed	5.3	Total Acres Added	0

Forest Grove District

Landscape Design - Desired Future Condition Revision



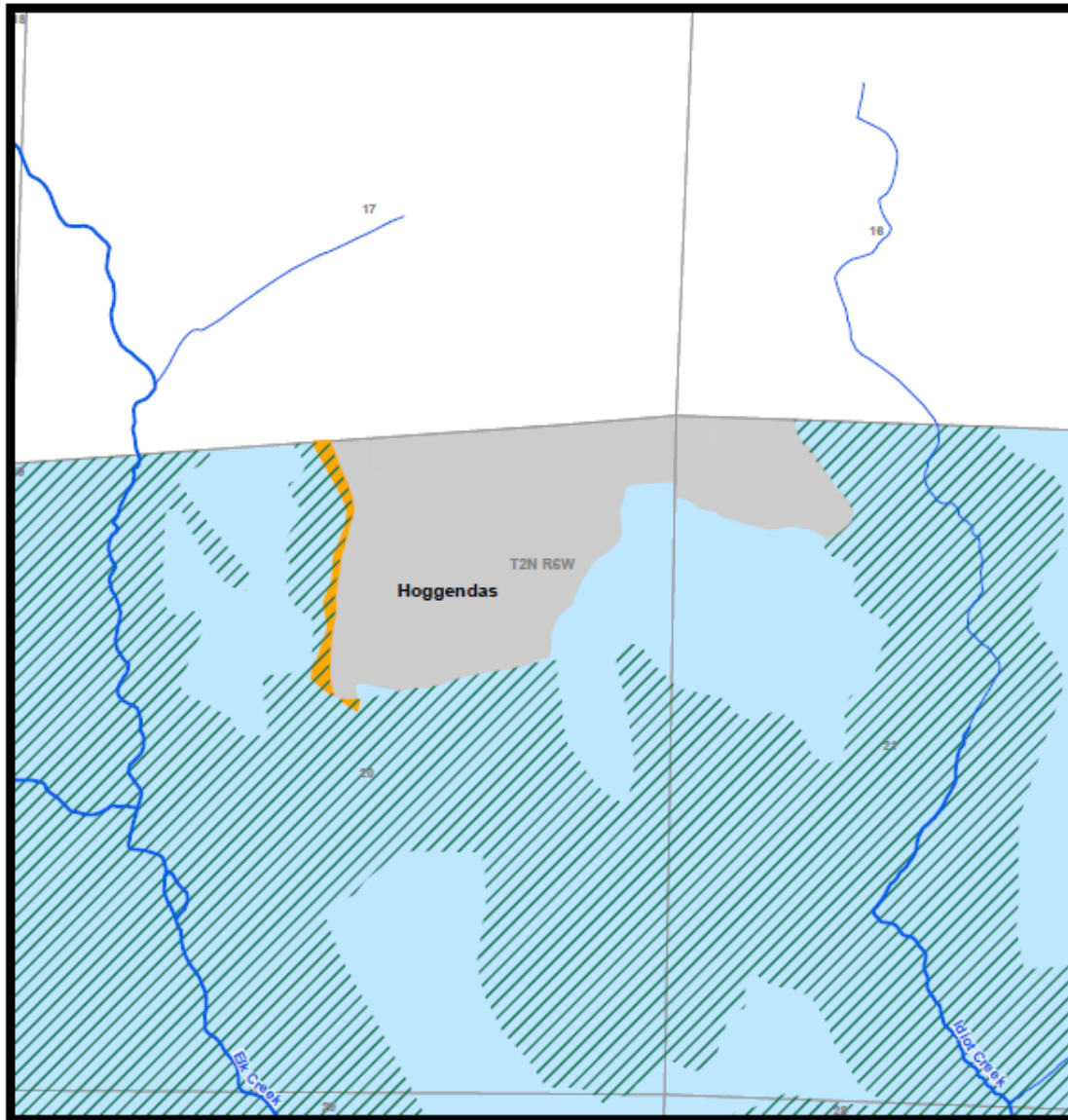
- Highways
- Large Stream
- Medium Stream
- Current DFC Complex
- Change From DFC Complex to Non-Complex
- Timber Sale
- State Forest Land



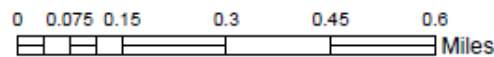
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03/04/2021

Forest Grove District

Landscape Design - Desired Future Condition Revision



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



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03/04/2021