

Memo

To: Andy White, NWOA Director

From: Kate Skinner, Tillamook District Forester

CC: Liz Dent, State Forest Division Chief
Brian Pew, State Forest Deputy Division Chief
Rob Nall, State Forests Operation Coordinator

Date: June 27, 2014

Re: Information Item – Approved Annual Operations Plan for Fiscal Year 2015

The 2015 State Forests Annual Operations Plan (AOP) for the Tillamook District is attached for your information. During my review of this plan, I have found that it conforms to the Oregon Forest Practices Act and is consistent with the Northwest Oregon State Forest Management Plan, the current District Implementation Plan, and the 2015 Annual Operations Planning Standards and Guidance memorandum. Consistent with the Divisions 2015 AOP guidance, the District has included a number of alternate sales, which were subjected to the same process of review and public comment as the regular sales.

The AOP guidance directs the districts to target a harvest volume level (47 MMBF) consistent with recent modeling efforts and associated district Model Solution Reviews.

Other considerations for approving the 2015 AOP include ensuring that: Road management will provide efficient access and roads are being managed with water quality considerations in mind; Public Safety and Landslide reviews are conducted by the Geotechnical Specialist; Reforestation and young stand management activities and investments are aligned with FMP objectives and budget considerations; and that Recreation facilities and trails are managed and

maintained for safety, positive experience and protecting other resources like water quality.

Partnerships with other organizations or agencies meet multiple objectives for the Division. During its preparation, this plan was reviewed by technical specialists from within the department and biologists from Oregon Department of Fish and Wildlife. Their written comments are included in Appendix 'D'. The draft Annual Operations Plan also underwent a 45-day public comment period. There were no sale specific public comments directed to the Tillamook District. The public involvement process is summarized in Appendix 'E' and summarized changes since the Public Comment Draft.

Approval of this plan does not constitute final approval of individual project details. Individual operations and projects 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. Modifications to these operations will conform to the process included in the Annual Operations Planning Directive. 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.

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

[http://egov.oregon.gov/ODF/STATE FOREST/Annual Operations Plans.shtml](http://egov.oregon.gov/ODF/STATE_FOREST/Annual_Operations_Plans.shtml)

APPROVED:


Kate Skinner, Tillamook District Forester

6/27/14
Date

TILLAMOOK DISTRICT



2015 ANNUAL OPERATIONS PLAN

TILLAMOOK DISTRICT

2015 ANNUAL OPERATIONS PLAN

OVERVIEW

This plan describes the activities and outcomes that Oregonians can expect to see on the western side of the Tillamook State Forest for 2015. We welcome your comments, and will use them to improve this plan within the scope of the Department's authority, in alignment with the longer term overarching plans, and bounded by budgets and staff resources.

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 large public forest has its challenges. In addition to the challenges of providing the opportunities described above, the forest is expected to be financially self-supporting. About two-thirds of the revenues from state forest timber sales go to local counties and other taxing districts, including schools. 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 improvement. Current financial constraints are currently limiting many activities and you will see this theme throughout the year's plan. We are striving to continue to provide the current opportunities, and are considering a few opportunities for change.

Every year in the Tillamook State 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.

Over the next two months, ODF will request review and comments on our plan from others, including Tillamook County Commissioners, the Forest Trust Land Advisory Committee (representing the counties that deeded land to ODF), the State Forests Advisory Committee (SFAC - composed of Oregonians representing many interests), Oregon Department of Fish and Wildlife, the US Fish and Wildlife Service, motorized and non-motorized recreation users, hunters, fishermen, and wildlife advocates, as well as Oregonians in general.

During this time, we want to hear your feedback, suggested revisions. In addition, any *thank you* messages to staff and volunteers are welcomed and appreciated. Thanks in advance for your review and engagement.



A short summary of activities planned for the coming year:

- Planting 1.1 million trees on 2,577 acres and conducting vegetation and animal management activities on an additional 1,950 acres to ensure the survival and growth of these plantations.
- Maintaining a 1,055 mile road network that provides access to timber harvest as well as various recreational opportunities.
- Conduct individual surveys for northern spotted owls over more than 20,000 acres.
- Evaluate over 15 miles of streams to determine flow duration and approximately 1 mile for the presence of fish habitat.
- Protecting streams and water resources through a series of buffers and seasonal restrictions activities.
- Stream improvement projects: An initial screen suggests that several streams near planned harvest units could benefit from large wood additions to the stream system. These sales will be evaluated by ODFW Fish Biologist and/or ODF Aquatic Specialist for potential projects during sale layout.
- Habitat development projects such as creating snags, retaining green trees in clearcut areas, and leaving down wood, all for wildlife benefits in harvest areas and future forests.
- Improving and maintaining roads to ensure ditch water is dispersed and filtered as much as possible, keeping runoff from entering streams.
- Review District roads to develop plans to block or vacate roads not needed for the district transportation plan.
- Beginning the planning cycle to harvest approximately 47 million board feet of timber volume, through modified clearcut and partial cut harvest, generating gross revenue estimated at \$9.4 Million. This harvest level is 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
 - 5 day use areas,
 - 1 highway wayside interpretive site
 - 3 trailhead facilities
 - 3 OHV staging areas
 - Multiple designated dispersed campsites
- 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.
- Maintaining, managing, and patrolling the motorized and non-motorized trail networks, striving to protect the trail investments, provide for user safety, address developing trail issues, and protect water quality.
- Supporting the important volunteer network that assists in forest management including the following programs:
 - Camp Hosts, Adopt a Trail and Trail Patrol
 - Forest Observers
 - Volunteer Trail Maintenance and Construction Work Parties
 - OHV Trail Equipment Volunteer Operator
- Supporting the pre-planned 17 organized motorized events and providing support for 1 non-motorized event Evaluate new proposals for fit with forest goals.
- Supporting the planning effort on the Salmonberry Rail and Trail project, the opportunity to convert the damaged Tillamook to Banks railroad line into a rail line for portions and a recreational trail throughout its length.
- Coordinating with Bonneville Power Administration on the power line rebuild operation for access and pole replacement in the Wilson River corridor during summer/fall 2014.
- Providing a firewood cutting program and miscellaneous forest products permits (salal, mushrooms, etc.) as done in 2014.
- Supporting ongoing research on the district, in partnership with research cooperatives and universities.

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TILLAMOOK DISTRICT

2015 ANNUAL OPERATIONS PLAN

INTRODUCTION

This annual operations plan (AOP) outlines state-owned forestland managed by the Tillamook District for Fiscal Year 2015 (FY15), which begins July 1, 2014 and ends June 30, 2015. 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 *Tillamook District Implementation Plan (IP)*. Please refer to the district IP 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 are listed within this introduction.

The proposed harvest operations are planned to be designed, engineered, and submitted for processing during the FY15 time period. Actual on-the-ground operations will likely not occur during FY15 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 FY2015.

A 45-day public comment period runs from March 17, 2014 through May 2, 2014. The District Forester will consider the comments received during this period and make any changes or modifications that determined necessary, prior to approving the AOP.

In addition to describing forest management activities for FY 2015, Appendix A of this AOP also describes *major changes*¹ being recommended to the State Forests' Forest Land Management Classification maps. At the close of the public comment period, the District Forester will forward these changes with any public comments to the Area Director and State Forester for review and approval.

Accomplishments of forest management activities that occurred under previous AOPs can be found in several reports, including the *State Forester's Annual*

¹ Major changes and the procedures for making these changes are described in OAR 629-035-0060

Report for the Association of Oregon Counties, the Common School Forest Lands Annual Report, and individual district annual reports (these reports also cover the accomplishments of the Fire Protection and Private Forests Programs). These reports are available through the local district office or online.²

FOREST MANAGEMENT OPERATIONS

Timber Harvest Operations

Overview of Timber Harvest Operations

The planned timber harvest operations are within the total acres objective in the Tillamook District IP. Activities in the AOP will allow for stands to be moved toward the Desired Future Condition and contribute revenue to the counties with the overall objective of **47 MMBF**.

In accordance with the guidance on the 2015 harvest levels³, the district has included 47.3 MMBF of timber harvest in this Annual Operations Plan (Table A-1).

The FY15 sale plan is estimated to generate gross revenues of approximately \$9,393,025 and net revenues of \$7,368,023. It is estimated that active management will result in producing approximately 39.8 million board feet of conifer volume, 7.5 million board feet of hardwood volume. In addition to the above revenue and volume, some sales are expected to have pulp removed from sale areas. The amount and value of pulp is difficult to predict during planning process but will likely occur in areas of regeneration harvest on steep slopes and whole tree yarding systems. Refer to the attached Financial Summary table for more detail on volumes and values.

Table 1 compares the proposed acres by harvest type⁴ in this AOP to the harvest acre ranges specified in the IP. Total planned acres in this AOP are 3,027 net acres (approximately 1.2% of the district's total acreage) which achieves the annual volume objective. Harvest activities in this AOP consist of 24% partial cuts and 76% regeneration harvest, by harvest acres. The anticipated harvest acres, volume, and revenue for each proposed operation in this AOP are listed in the "Harvest

² The State Forests' individual district annual reports are available on the Oregon Dept. of Forestry website under "Publications." You can access here: <http://www.oregon.gov/odf/Pages/pubs/publications.aspx>

³ Oregon State Forests Guidance 2015 Annual Operations Planning Guidance dated July 8, 2013.

⁴ The definitions of the harvest types used to describe timber harvesting on State Forests can be found on the [State Forests website](#) under Forest Management and Planning. Briefly, a Modified Clearcut is the most common of three type of Regeneration Harvest (or clearcut) that may occur on State Forests. The defining characteristics of Modified Clearcuts are that they meet the structural component standards of the FMP (green tree, snag, and down wood).

Operations – Financial Summary” table in Appendix B-1, while a vicinity map of these harvest operations can be found in Appendix C.

Note that the acres detailed throughout the report express net acres, unless otherwise stated. Net acres are based on orthophotos and GIS and exclude roads, non-required thinning areas, stream buffers, other buffers and green tree retention areas.

The district has included three alternate operations in this Annual Operations Plan for public review. These alternate operations may be used to replace regular sales that cannot be completed as planned.

Table 1. Annual Operations Plan objectives compared to annual objectives identified in the Tillamook District Implementation Plan. All values are acres, except for Volume.

Silvicultural Activity	IP Annual Objective		2015 AOP Objective
	Low	High	
Partial Cut Harvest	850	3,450	741*
Regeneration Harvest	800	3,150	2,240
Reforestation (Initial Planting)			2,077
Pre-commercial Thinning			0
Fertilization			0

*The number of partial cut acres is slightly below the minimum set in the Tillamook District IP for an acreage range for partial cut and will be addressed in a minor modification to the Tillamook District IP for 2015 and possibly 2016 in anticipation of reduced number of partial cut opportunities for this and next year.

The district has shifted harvest activities for the next several years away from older stands/stands with a Desired Future Condition (DFC) of Complex (Layered - LYR or Older Forest Structure – OFS), which are managed through partial cuts. This is to allow time for updated guidance to be developed for managing in stands associated with T&E species and habitat.

Regeneration harvests can be used to realize volume growth from conifer and hardwood stands, or to improve forest health by harvesting Douglas-fir stands with severe impacts of Swiss needle cast (SNC), or to harvest stands with low growth either from poor stocking or overly dense stands with high stocking and poor live crown ratios. Each stand is evaluated on its current growth compared to anticipated growth, the benefits of density management (if available), and the Desired Future Condition (DFC) of the stand.

Growth analysis measurements have been taken on Douglas-fir stands across the district to evaluate the SNC impact on volume growth. This stand growth information has been used to evaluate the growth of the adjacent like stands and determine the appropriate harvest prescription.

Some smaller additional operations targeting infrastructure maintenance will also produce timber volume for the district may be included in this AOP. These sales will be less than \$100,000 in value and comply with all policies and plans.

Structural Habitat Components

Green Tree, Snag and Down Wood Strategies

The Forest Management Plan discusses goals for green tree, snag, and down wood at a landscape level and per AOP. The Pre-Operations Reports discuss specific strategies for each operation and harvest unit. A harvest unit includes the sale area(s) and the adjacent buffers and green tree retention areas, with unit boundaries extending to the streams.

The landscape goals will be evaluated by basins (5th field watershed) and sub-basins (6th field watershed – In the hydrologic unit hierarchy, this is the smallest delineation) across the district. Some of the harvests, treating slow-growth from SNC and off-site seed, are in stands of younger age classes and may require deferring snag and down wood creation in order to achieve the required size classes.

The timber sales in the 2015 AOP will be developed in alignment with Policy Bulletin SFB 13-02, “Improving Cost Efficient and Effective Implementation of State Forest Management Plans”, to create efficient harvest units. Leave trees for snags and green trees will be grouped in riparian areas in many sales as allowed by FMP strategies. Where stands have larger average diameters, snags will be created. The configuration of leave trees in other regeneration harvests within a sub-basin or drainage will be taken into consideration when determining the leave tree arrangement within a sale, with the intention of having various configurations of leave trees within a basin.

Down Wood will continue to be created through bucking practices, leaving felled snags in the unit and tops on ground yarding sides. The 2010 Implementation monitoring report shows the Tillamook District clear cuts average 700ft³ of down wood in decay class 1 and 2 through normal cable harvesting operations and bucking practices.

Landscape Design

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

The District’s vision for future development of complex and general stands on the landscape was revised in the 2009 Tillamook District Implementation Plan. The Landscape Design is composed of stands occupying 40% of the district and the

stands are to be managed for DFC – Complex structure, either Layered (LYR) or Older Forest Structure (OFS). The stands in this Landscape Design that are designated as OFS structure (20% of the district), were identified in the modeling process as having the potential to move most quickly toward complex structure; becoming a complex stand in 20-40 years. This aligned with the Board of Forestry’s Performance Measure 6; “Increase the percent of the landscape in complex structure to at least 17 to 20 percent over the next two decades.” Another 20% of the district’s stands were designated for LYR structure. These are stands in locations where complex structure is desirable and can be accomplished over a timeline between 40 and 100 years.

The district will implement silvicultural treatments that are consistent with the mapped DFC, which take into account stand health and the ability of the present stand to achieve the DFC designation. Stands with a DFC of complex, which presently contain dominate trees and other structure that allows them to be managed to a complex structure will be managed in that direction. These silvicultural prescriptions will generally be partial cuts, designed to increase the structural complexity of the existing stand. In areas where the present stand is unable to be managed toward complex structure in a timely manner (hardwood stand, SNC Douglas-fir stands, and very dense conifer stands) the stand will be harvested and a new mixed species stand established to create a future complex stand.

This AOP contains two proposed sales, High N Dry and Ax Ridge, where part of a sale area contains a stand with a DFC of Layered and a prescription for modified clearcut. A third sale, Bling Ridge, has DFC – LYR extending out from riparian areas. These sales are primarily sales of mixed hardwood and Douglas-fir, where the Douglas-fir has moderate SNC and the hardwoods are adjacent to the riparian areas. After reviews by foresters and resource specialists, it was determined that a regeneration harvest would be the most effective management prescription to move the stand toward the designated DFC. A component of large Douglas-fir and other conifer species will be reserved, if they are present in the area being managed for complex structure and a new fully stocked mixed conifer stand will be established at these sites.

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

The Tillamook District Landscape Design is defined in the 2009 IP as consisting of 40% of the district designated for future complex structure. (Design configuration and determination is described in Landscape Design Overview, page 37.) The current Landscape Design covers 100,639 acres, approximately 400 acres above 40% of the district. This AOP proposes removing 225 acres from the Landscape Design to provide better operational boundaries on five timber sales and changes 7 acres from OFS to LYR to better define the

characteristics of these stand which are being managed to develop complex structure. The reduction in these areas still maintains 40% of district in a complex Landscape Design. The stands identified in the DFC – Layered are mostly in stands at the bottom of slopes. These areas will be reduced to make them operationally feasible and keep the design within the parameters identified in the IP and FMP.

In addition, boundaries of the landscape design areas will be adjusted or redrawn along the sale boundaries on seven areas of four timber sales. One sale area is being removed from DFC-LYR and moved to General Stewardship to more closely balance the Landscape Design at 40% DFC – Complex and 60% General Stewardship. These changes maintain the total area designated for development into complex structure, consistent with the IP and NW FMP.

Table 2. Minor changes to the Landscape Design.

Operation/Unit	Modification	Acres Added	Acres Removed
Between Wolves	Change LYR to GEN		17
Bling Ridge	Change LYR to GEN		35
Feldshaw	Change LYR to GEN		20
	Change OFS to GEN		2
High N Dry	Change OFS to LYR	7 to LYR	7 from OFS
	Change LYR to GEN		34
	Change OFS to GEN		15
Schetky Aneu	Change LYR to GEN		102
Total Change		7	232

Harvest Operations within Terrestrial Anchor Sites and Aquatic Anchor

The 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) 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 complex habitat and to promote long-term improvements to habitat conditions through management. Management within TAS is also to move stands toward the attainment of complex structure more quickly than would occur without management. All

areas that were designated as TAS were designated in areas where most of the stands 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 located around streams important to fish in most of the AA basins.

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

Since the adoption of the TAS in 2011 with the 2012 AOP, the Tillamook District has managed in the Ripple Creek TAS with the 2014 AOP. There are no sales planned in TASs for the 2015 AOP.

Table 3. Summary of Harvest Operation within TAS

Terrestrial Anchor Site (TAS)	Current AOP (FY 2015) Planned Harvest		Cumulative Harvest (FY 2012 AOP to Present)	
	Clearcut	Partial Cut	Clearcut	Partial Cut
Entire District (AOP) (252,344 acres)	2,240	741	6,445	3,270
% of Acres	0.9%	0.3%	2.6%	1.3%
Bastard Creek (5,021 acres) % of Acres				
Ripple Creek (3,831 acres) % of Acres				559 14.6%
Miami (6,396 acres) % of Acres				
Hembre (2,981 acres) % of Acres				
Boundary (2,138 acres) % of Acres				
All TAS (20,367 acres)	0	0	0	559
% of Acres	0.0%	0.0%	0.0%	2.7%

The Aquatic Anchor (AA) strategies in the Species of Concern policy replaced the Salmon Anchor Habitat (SAH) basin strategy in the 2014 AOP. The harvest rate for each basin is shown below along with the harvest rate for the entire district (see Table 4). As a result of the deferral of operations in what was the SAH basins and now are the AA basins, there are significant opportunities for harvest in these areas that will achieve multiple FMP goals. As timber sales are sold and harvested there will be acreage updates to the Cumulative Harvest column from the acres reported in the AOP to the actual acres harvested.

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

Aquatic Anchors (AA)	Current AOP (FY 2015) Planned Harvest		Cumulative Harvest 2014 AOP to Present	
	Clearcut	Partial Cut	Clearcut	Partial Cut
Entire District (AOP)	2,240	741	4,421	1,691
(252,344 acres) % of Acres	0.9%	0.3%	1.8%	0.7%
Ben Smith Creek	198	56	0	0
(3,602 acres) % of Acres	5.5%	1.6%	5.5%	1.6%
Cedar Creek	554	0	745	0
(7,214 acres) % of Acres	7.6%	0.0%	10.3%	0.0%
Coal Creek	0	0	0	0
(1,237 acres) % of Acres	0.0%	0.0%	0.0%	0.0%
Cook Creek	223	10	870	249
(18,286 acres) % of Acres	1.2%	0.1%	4.8%	1.3%
East Fork S Fork Trask	0	0	238	100
(15,627 acres) % of Acres	0.0%	0.0%	1.5%	0.6%
Elkhorn	0	0	0	0
(3,860 acres) % of Acres	0.0%	0.0%	0.0%	0.0%
Foley Creek	0	0	0	0
(4,403 acres) % of Acres	0.0%	0.0%	0.0%	0.0%
Little N Fork Wilson	120	0	120	0
(10,310 acres) % of Acres	1.2%	0.0%	1.2%	0.0%
Miami		0	181	0
(13,910 acres) % of Acres	0.0%	0.0%	1.3%	0.0%
Middle Kilchis	0	0	313	0
(14,155 acres) % of Acres	0.0%	0.0%	2.2%	0.0%
S Fork Salmonberry		0		593
(2,813 acres) % of Acres	0.0%	0.0%	0.0%	21.1%
All Aquatic Anchors	1,095	66	2,596	998
(95,417 acres) % of Acres	1.1%	0.1%	2.7%	1.0%

Summary of Timber Harvest Operations by Basin

In the following section, the commercial forest management operations planned for FY15 will be summarized in the context of the 11 management basins (5th field) on the Tillamook District. ODF and ODFW resource specialists reviewed the FY15 operations plan and provided input. This section is a summary of the operations by basin (North to South) and is not meant to completely describe the planned operation. Refer to Appendix B maps for more detail of each operation.

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

Basin	2015 AOP	
	Partial Cut	Clearcut
N. Fork Nehalem	0	0
Lower Nehalem	10	657
Short Sands	0	0
Miami	0	0
Kilchis	0	0
Tillamook Bay	0	0
Wilson	731	1354
Tillamook River	0	0
Trask	0	229
Nestucca	0	0
Little Nestucca	0	0

North Fork Nehalem Basin

There are no harvest operations planned in this basin for FY15.

Lower Nehalem Basin

High N Dry – This sale consists of seven areas; totaling 667 net acres, 657 acres of modified clearcut and 10 acres of heavy partial cut. The sale is in mixed hardwood-conifer stands, 58 year-old. The sale areas are on both sides of the ridge of between Lost Creek and Dry Creek. Dry Creek is in the Cook Creek basin, an Aquatic Anchor (AA). Areas 1 through 4 are in the Lost Creek basin and Areas 5, 6 and 7 (218 acres) are in Dry Creek.

The sale areas are in 58 year-old stands of Douglas-fir and red alder with scattered hemlock and spruce. Areas 1 and 2 are predominately red alder stands and Areas 3 through 6 are mixed Douglas-fir and alder. Area 7 is a 10 acre stand of Douglas-fir and alder with a minor amount of hemlock and western red cedar.

Areas 1-4 and 6 are mostly in General Stewardship. There are edges in DFC – Layered and OFS in Areas 1-5. Most of the DFC will be removed from Areas 2, 3 and

4, and some from Area 5. (See Table 2. Minor Landscape Design changes) Approximately 5 acres in Areas 1 and 2, along Lost Creek, approximately 7 acres in the upper Westwood Creek drainage in Area 4, and approximately 46 acres of Area 5 will remain in the Desired Future Condition (DFC) of Layered (LYR) because of its location on the landscape. The present stand of Douglas-fir and alder is not a good candidate to create a complex structure so a component of the present stand will be kept and a new mixed conifer stand will be established. Area 7 has a DFC of OFS.

The prescription for Areas 1-6 will be modified clearcuts, designed to realize harvest volume and establish new mixed conifer stands for either future volume production or for complex stand development. The harvest prescription for Area 7 will be a moderate partial cut to open up the stand and initiate understory growth to encourage layering.

Over 5 miles of new road will be constructed to access the south side of the Lost Creek drainage. Access was developed from Lost Creek Road along a mid-slope line, away from Lost Creek, crossing one stream above fish use. Approximately 2 miles of spur roads will be blocked after successful reforestation of the sale areas.

The sale areas are also within an area known to contain a plant species listed in the district IP as requiring protection. *Filipendula occidentalis*, Queen-of-the-Forest, a Candidate plant species has been identified as growing in the vicinity of the sale area. This plant is associated with riparian areas, rocky headwalls and outcrops, and stream riparian areas. Most if not all of these areas are protect by stream and HLHL buffers.

Approximately 7 acres of Area 4 and all of Areas 5, 6, and 7 are in the Dry Creek drainage in the Cook Creek basin, an Aquatic Anchor.

Red Shack (Alternate) – This sale consists of two areas totaling 237 net acres of modified clearcut. Area 1 is at the end of the ridge between Cook Creek and the East Fork Cook Creek and Area 2 is above the East Fork Cook Creek. This sale is in the Cook Creek Aquatic Anchor.

The sale areas are made up of red alder and Douglas-fir stands. Area 1 is 40 years old and dominated by red alder. Area 2 has a majority of Douglas-fir in the 59 year-old stand. The designation for most of Area 1 and Area 2 is General Stewardship. Area 1 also contains 35 acres of Desired Future Condition (DFC) – LYR and Area 2 contains 30 acres of DFC – LYR. The hardwood dominated condition in this part of the stands, adjacent to the riparian area, cannot be grown into Layered stands.

The prescription for these two areas is modified clearcut. The volume from the stands will be harvested and new mixed conifer stands will be established on the sale areas. The new mixed conifer stands will be capable of being managed for a Layered condition.

Access to Area 1 will be along a new road constructed down a steep narrow ridgeline.

The district cultural resource layer shows resource sites along the haul route, Cook Creek Road.

The sale areas are also within an area known to contain a plant species listed in the district IP as requiring protection. *Filipendula occidentalis*, Queen-of-the-Forest, a Candidate plant species has been identified as growing in the vicinity of the sale area. This plant is associated with riparian areas, rocky headwalls and outcrops, and stream riparian areas. Most if not all of these areas are protect by stream and HLHL buffers.

Short Sands Basin

There are no harvest operations planned in this basin for FY15.

Miami Basin

There are no harvest operations planned in this basin for FY15.

Kilchis Basin

There are no harvest operations planned in this basin for FY15.

Tillamook Bay Basin

There are no harvest operations planned in this basin for FY15.

Wilson Basin

Ax Ridge – The sale consists of three areas totaling 302 net acres; 65 acres of partial cut and 237 acres of modified clearcut. The sale is in a Douglas-fir – red alder stand which is 61 years old. The alder was sprayed in the 1970s and has damage to the boles, which caused them to develop multiple tops. The Douglas-fir shows signs of Swiss needle cast and has small live crown ratios.

The Desired Future Condition (DFC) for Area 1 is Older Forest Structure (OFS). The majority of Areas 2 and 3 is in General stewardship except for 11 acres in the northern part of Area 2 designated as Layered (LYR). Areas 2 and 3 are adjacent to land deeded to the State by Weyerhaeuser and containing deed restrictions. A road will be constructed through this area in the vicinity of a legacy road to access the

northern part of Areas 1 and 2. This will be a temporary road which is to be closed after reforestation is completed.

The sale areas are adjacent to Highway 6, the Wilson River Highway, and most of the areas are within drainages classified as having an intermediate or substantial risk to public safety because of the existence of High Landslide Hazard Locations (HLHLs) within draws which drain into areas where the public are present during the winter/ during times of heavy rains which can trigger landslides according to the Forest Practices Act (FPA). These areas were evaluated by the NW Area Geotechnical Specialist and HLHLs were identified and buffered from the sale areas, allowing the remainder of the areas to be harvested.

Area 1 is a Douglas-fir stand with scattered alder and a minor component of Sitka spruce. The prescription for Area 1 is a moderate partial cut to manage the stand toward an OFS condition. Bridge Creek is the eastern boundary of Area 1, protected by a large buffer area. Bridge Creek contains a stone walkway built by the WPA and identified in the ODF Cultural Resource data. This area is outside of the harvest area and will be protected.

Area 2 is predominately an alder stand with scattered conifer. The northern 11 acres has a DFC of LYR. The red alder stand in this area cannot be managed to a complex structure so the alder will be clearcut with the rest of the sale area and a mixed conifer stand will be established. In this area it will be managed for a LYR stand while the remaining sale area will be managed for timber production. A portion of the northwest corner of Area 2 will require downhill logging to the temporary road. Approximately 2 acres of the Weyerhaeuser deed land will be harvested and to access this area and replanted. The temporary access road will be within the scenic buffer along Highway 6 for approximately 500 feet. The road will meet FPA and NW FMP requirements of working in the scenic buffer, a Level 1 Visual Classification. The cable landing for the downhill harvest may also be within the scenic buffer to assure a safe landing area. This will be on the interior of the buffer and will meet FPA requirement.

Area 3 is a Douglas-fir stand with alder in the draws and scattered throughout. A prescription of modified clearcut is planned for this area. Patches of HLHLs identified as landslide risk area identified by the NW Area Geotechnical Specialist along with windfirm buffers will be reserved from harvest. The sale area is adjacent to private property on the west and southwest sides. The west property line is established but a survey will be needed in the southwest corner to establish the property line. Several domestic water systems have been identified outside of the sale areas. The streams and points of dispersion will be protected according to FPA and NW FMP requirements.

Areas 2 and 3 have a visual classification of Level 2, moderate sensitivity, because this area is visible from Hwy 6. The green trees for Areas 2 and 3 will be clumped in the draws and in the HLHLs. Some minor species will be reserved and scattered

along with trees reserved to create snags – two per acre greater than 15” DBH. In Area 2 healthy conifer will be reserved in the area designated for future Layered condition. In all the areas the harvest is expected to create the 600-900 ft³ of down wood.

Between Wolves - The sale consists of two areas totaling 200 net acres of modified clearcut. The sale area was burned in several of the Tillamook fires and was planted with Douglas-fir between 1955 and 1957. The stands are 50-55 years of age, mixed species of Douglas-fir and red alder. The Douglas-fir has slowed in height and diameter growth partly due to SNC and the alder was aurally sprayed in the 1970s. In 2007 the alder received additional damage during wind and ice storms. The areas have had no prior stand management. The Desired Future Condition (DFC) for this sale is General stewardship (See Table 2. Minor changes to the Landscape Design.)

The planned prescription for the sale is a modified clearcut. The merchantable red alder and Douglas-fir will be harvested. An average of two snags per acre will be created since the cruise shows over 20 trees per acre are 17 inches dbh or larger. The harvest is expected to create the 600-900 ft³ of down wood. An average of 5 trees per acre will be left for green tree retention. Other species of conifer will be reserved. Most, if not all, green trees will be in buffers, Inner Gorges, or on HLHLs within or adjacent to the sale areas.

The southern boundary of the sale areas is adjacent to previous modified clearcut sales. The sales have met green-up and adjacent clearcut harvests are allowed under the FPA.

This sale is within the Cedar Creek Aquatic Anchor. It contains steep slopes and an area identified as Operationally Limited. These areas are currently in buffers and will be evaluated by the Area Geotechnical Specialist. These areas will either remain buffered or removed from the Operationally Limited designation and harvested.

There are several OHV trails within the sale boundary. One is along an abandoned road that will be opened for sale access and two others are between the road and the ridgeline and travel the ridgeline. The trails will be evaluated by the Recreation Unit to determine the future use and best location.

Bling Ridge – The sale consists of four areas totaling 429 net acres of clearcut. The stand is a 52 year-old Douglas-fir stand with scattered red alder. The Desired Future Condition (DFC) for this sale is mostly General stewardship with minor amounts of DFC – Layered (LYR) adjacent to the riparian areas. The boundary of the Landscape Design will be modified to remove most of the LYR designation from the operational area. Some areas adjacent to riparian areas will remain in DFC - LYR (See Table 2. Minor changes to the Landscape Design)

The prescription for this area is a modified clearcut; the Douglas-fir and red alder will be harvested for volume and new stands of mixed conifer will be established for

future stands. Snags and down wood will be created during the harvest operations for this sale area. Most, if not all, green trees will be within the Type N stream buffers.

An alternate sale in the 2014 AOP, Deer Fence, is anticipated to be prepared to complete the 2014 sale plan. This area is just west of Area 4 and accessed by Deer Fence Road. A buffer of green trees 300 feet in width will be maintained between Area 4 and the Deer Fence sale area.

Areas 2, 3, and 4 are within the Cedar Creek Aquatic Anchor basin. Area 1 is on a tributary of the West Fork North Fork Wilson River which contains Coho salmon habitat. This stream is a potential candidate for a large wood placement project in conjunction with the harvest. ODFW Fish Biologists will work with ODF staff Aquatic Specialist to determine the appropriate project for this site.

The Area Geotechnical Specialist will be consulted during sale preparation. Areas 2 and 4 will need further consultation with the NW Area Geotechnical Specialist during sale preparation.

OHV trails are located within the sale areas. Area 1 contains several OHV trails. Areas 2, 3, and 4 contain roads that are used as trails in the OHV designated trail system. Jones Creek Road is the access for Areas 2 and 3 and is a 4-wheel drive trail.

ODF cultural resource layer show old cabins, possibly fire patrol cabins, were once along Jones Creek and Diamond Mill roads. Foresters will look for evidence of the cabins during field work for the sale.

Area 4 was part of the COPE study, a research project in the early 1990s evaluating thinning densities and bird and mammal responses to different densities of thinning. The research was completed 10 years ago and the COPE research project was concluded.

Feldshaw – This sale consists of one area totaling 120 net acres. The stand is a 50 year-old Douglas-fir stand with scattered red alder. The Desired Future Condition (DFC) for this sale is mostly General stewardship with minor amounts of DFC – Layered (LYR) and Older Forest Structure (OFS) adjacent to the riparian areas. The boundary of the Landscape Design will be modified to remove the LYR and OFS designation from the operational area. The sale is within the Little North Fork Wilson River basin, an Aquatic Anchor.

The prescription for this area is a modified clearcut. Because of the small diameter of the stand, additional green trees will be left for future recruitment of snags and down wood for this sale area. Most, if not all, green trees will be within the many Type N stream buffers.

The Gilmore – This sale consists of four areas totaling 665 net acres; three areas of partial cut totaling 610 acres and one area of retention cut totaling 55 acres. The stand is a 55 year-old Douglas-fir stand with scattered red alder. The Desired Future Condition (DFC) for this sale is a mix of Layered and Older Forest Structure. The prescription for the majority of this area is a moderate partial cut. Part of the area was commercially thinned in the 1990s; the remainder has had no stand density management.

Area 1 is on the east side of the sale and above the North Fork Wilson. Because of the small diameter of the stand and the lack of previous density management the live crown ratios are only 20-30%. The present stand is not a good candidate for managing for a Complex structure. The prescription for this area is a retention cut; leaving a minimum of 40 ft² in the upland and an SDI% of 25% on areas within 100 feet of the high water mark of the North Fork Wilson River. Larger trees that can provide shade and screening will be left adjacent to the dispersed camping sites along the North Fork Road. Additional larger conifer trees with 40% or more live crown will be marked as leave trees, structure in the future stand and for future recruitment of snags and down wood. The ODF Aquatic Specialist has reviewed this area and will work with foresters during sale preparation to design a leave tree arrangement to accommodate Recreation, operations, and Aquatic needs.

Area 2 will have moderate partial cut prescription to encourage growth and allow light to the forest floor. Areas 3 and 4 will have heavy thinning prescriptions, thinning the stands to SDI of 20%. The goal is to allow growing space for a second cohort. These stands will be managed for future complex structure.

Several dispersed campsites are along the North Fork Wilson River and the West Fork of the North Fork Wilson River, adjacent to the sale areas. The sale areas are adjacent to recreation areas and several motorized trails are within the sale area. The haul route for the sale passes by the Jones Creek Campground and many trails cross the haul route between the sale and Highway 6.

Morris Creek is a Coho salmon stream and is adjacent to the north east boundary of the sale. This stream was evaluated by the ODF Aquatic Specialist and ODFW Fish Biologist and it was determined that this would not be a good candidate for large wood placement because of the stream gradient and active channel width.

S'Moore – This sale consists of four areas totaling 367 net acres; 56 acres of partial cut and three areas totaling 311 acres of clearcut. The stands are in their early 60s and are Douglas-fir stand with scattered red alder. Some stands also contain some minor amounts of hemlock. The Desired Future Condition (DFC) for Area 1 is Layered and the remaining three areas are in General stewardship.

Area 1 was partial cut in the early 1990s and is a predominately Douglas-fir stand at the lower end of Ben Smith Creek. The prescription for this stand is a moderate

partial cut. Since this is a second entry patches may be identified for heavy partial cut to vary the density and encourage more layering in the stand.

Areas 2, 3, and 4 are Douglas-fir and red alder stands. These stands are in General stewardship. Areas 2 and 3 have had density management in the form of a moderate partial cut in parts of the stand. Area 4 was the control area for a research project known as the COPE research study. It has had no density management. The research project was completed in 2005 and there are no plans to revisit this area. The prescription for these areas area modified clearcuts. Snags will be created and down wood will be created through bucking practices during harvest operations. Most, if not all, green trees will be within the Type N stream buffers.

ALT SMOORE (Alternate) – This sale consists of three area totaling 262 net acres of clearcut. The stands are 60 year-old Douglas-fir stand with scattered red alder.

The Desired Future Condition (DFC) for Area 1 of the sale is Layered. This area is in the visual corridor of the Wilson River Highway and it is in the Ben Smith Creek Aquatic Anchor basin. Area 1 totals 62 acres and is at the top of ridge at the edge of the basin. The visual impact from harvests on this area will be minimal. Portions of the stand have been thinned in the late 1990s and little structure has developed. A clearcut harvest with larger trees retained for structure is planned. Hemlock and noble fir will be planted along with Douglas-fir to create a healthy stand of mixed conifer which will be managed for a future layered stand. Areas 2 and 3 are in General stewardship and are in the Jordan Creek basin. The prescription for these areas is a modified clearcut. The areas will be harvested for volume and replanted into mixed conifer stands. Snags and down wood will be created to meet the NW FMP goals. Most, if not all, green trees will be within the Type N stream buffers.

OHV trails are within the sale areas and the OHV Coordinator has reviewed the trails. Some trails may be rerouted to prevent or reduce resource damage.

Areas 2 and 3 are adjacent to the upper end of Jordan Creek, a Type F stream. The streams have been reviewed by ODFW and the ODF Aquatic Specialist.

Tillamook River Basin

There are no harvest operations planned in this basin for FY15.

Trask Basin

Schetky Aneu– This sale consists of two areas totaling 229 net acres of modified clearcut. The stands are 58-59 years-old consisting of plantation Douglas-fir and red alder in varying amounts. Area 1 is in General Stewardship. Area 2 will be changed to General Stewardship from a Desired Future Condition of Layered. The stand is a simple Douglas-fir/ hardwood mix in the Tillamook Burn. This stand is being removed

from the acres in excess of the designed 40% complex structure goal in the Tillamook Implementation Plan revised in 2009. (See Table 2.)

Areas 1 and 2 will be harvested for volume and managed for General Stewardship. Snags and down wood will be created during the harvest operations. The green trees will be retained in the many Type N buffers within the sale areas.

The sale is accessed from the North Fork Trask Road, a road with seasonal restrictions because of its location along the North Fork Trask. The sale is also at a high elevation and will be restricted by snow during most winters. A seasonal restriction may be placed on the sale to reduce risk of damage to resources and cost of road maintenance.

There are recently discovered non-designated OHV trails in the sale areas. These trails will be evaluated by the OHV Recreation Coordinator and the foresters during sale preparation to determine which to keep and which to vacate.

The sale areas contain potential debris flow streams and Inner gorge areas along streams that will be buffered. The sale will require consultation with the NW Area Geotechnical Specialist during sale preparation. The sale was reviewed with ODFW for possible enhancement projects.

Doghouse (Alternate) – This sale consists of one area totaling 117 net acres of modified clearcut. The stands in the sale area are located at the upper end of the South Fork Trask. The stand is a 45 year-old plantation of Douglas-fir and with scattered alder trees. All the sale areas have a DFC of General stewardship.

The stand was commercially thinned in 2002 and has *phellinus* root rot and moderate symptoms of Swiss needlecast, which has slowed stand growth. The prescription for Areas 1 and 2 is modified clearcut to harvest the stand for volume and start a new mixed conifer stand. Additional green trees may be reserved, if needed, on the sale area for future snag recruitment. Presently snags are planned to be created during the sale operation. Down wood will be created through bucking practices. Most, if not all, green trees will be within the Type N buffers.

Nestucca Basin

There are no harvest operations planned in this basin for FY15.

Little Nestucca Basin

There are no harvest operations planned in this basin for FY15.

Forest Roads Management

Overview

The Tillamook District road system consists of approximately 976 miles of rocked roads, 79 miles of unsurfaced spur roads, and 275 miles of blocked roads in a self-maintaining state. Roads constructed and improved in this AOP will provide access for silvicultural activities, recreation users, and fire protection. Guidance for Level III Transportation Plans developed under this AOP will include the ODF *Forest Roads Manual (July 2000)* and the *Northwest Oregon State Forests Management Plan (April 2010)*.

The FY 2015 AOP includes approximately 22.4 miles of new road construction and abandoned road reconstruction and 27.1 miles of road improvement. In addition, 9.8 miles of road will be closed or vacated resulting in a net gain of 12.6 miles to the road system. Refer to summary tables in Appendix B (Table A-4, Forest Roads Summary) for more information.

A majority of the 2015 AOP timber sales will occur in the Wilson River Basin. Stockpiles in the basin will continue to be replenished to allow for adequate road maintenance rock. The S'Moore timber sale will install a new culvert on Moore Creek to improve fish passage. Also, the High N Dry timber sale will require development of new quarries to rock the reconstructed spurs as well as Lost Creek Road.

Road maintenance in the East Beaver Creek management block will continue in FY 2015. Maintenance will include sidecast pullback, ditching, culvert installation and road rocking. Also, initial layout will begin on a new road to connect existing ODF roads in the upper reaches of East Beaver Creek basin to BSM Road. The new road will allow for road maintenance, land management, and fire protection on BLM and ODF lands.

Road Construction

The majority of roadwork in this AOP is new road construction. Approximately 14.1 miles of new rocked roads will be constructed and 8.3 miles of dirt roads. Most new construction roads are classified as spur roads. These roads are often short terminal roads to access ridge tops and facilitate harvesting operations. Road construction on steep slopes or through high landslide hazard locations will be reviewed by the Area geotechnical specialist. Roads will be designed to the minimum width necessary to accommodate the planned management activity. Improvement of abandoned roads from the Tillamook Burn salvage operations will be considered new construction when there are trees larger than 5 inches in diameter growing in the road bed.

Road Improvement

Road improvement may consist of road surfacing, road widening, side cast pullback, and drainage structures upgrades. Road improvement on the Tillamook District includes improvement of existing roads and improvement of abandoned roads. Existing roads have been improved and maintained over the years through timber sales or the district road crew. Work on abandoned roads from the Tillamook Burn salvage operations will be considered road improvement when a defined roadbed is present and overgrown with trees less than 5 inches in diameter. Abandoned roads often require sidecast pullback, culvert installation, and resurfacing but the roadbed is defined and minimal equipment work is needed.

All roads are reviewed during sale recon and prep for needed drainage upgrades. Work for drainage structure improvements are added to contract requirements and appraisals. This work might include measurements for larger culverts, replacing failing culverts or adding culverts (cross drains) to the road to disconnect ditch water from entering live streams. The cross drains will direct water onto the forest floor away from live streams. Where cross drains cannot be installed due to landslide hazards, unstable slopes, or rocky cutbanks settling ponds are utilized or outsloped roads with ditch-outs to move water off road surface.

Road Blocking and Vacating

Unsurfaced roads will be waterbarred during wet season and will be reviewed for blocking or vacating at the end of the sale. Road blocking will be accomplished by pulling culverts, waterbarring, blocking access, and leaving the road in a self maintaining state. Road vacating will remove culverts, provide dispersed drainage, lessen erosion potential, and remove unstable side-cast. The *Forest Roads Manual* guidance for road vacating will be followed for this work. Abandoned roads from the Tillamook Burn salvage operations in the vicinity of timber sales will be evaluated for road vacating.

Road Access Management

At the end of timber sales, all roads will be re-evaluated to ensure alignment with district's overall transportation system needs for future sales, reforestation and young stand management, resource considerations, and other use such as fire fighting. Roads may be retained, blocked, or vacated based on this evaluation. Road may be left open for a longer period of time to provide access for tree planting operations. After a plantation is free to grow, roads may be closed by the district road crew or through timber sale project work.

North Coast Travel Management Area

The North Coast Travel Management Area (TMA) on the Tillamook State Forest is located on the north end of the forest in the God's Valley area. Tillamook District has partnered with ODFW since 2002 on this project. The TMA regulates vehicle travel on spur roads during archery and the general deer and elk seasons to provide "walk in" hunting opportunities, increase bull/buck escapement, and reduce road damage. Sign maintenance and public contact in the TMA is performed by volunteer and district staff. Enforcement of the TMA is provided by Oregon State Police and County Deputies on a limited basis. Maps of TMA areas are available at ODF and ODFW offices.

Oregon Hunters Association Gate Program

Every September through November, during hunting season, road closures occur in the Trask and Wilson basins to provide the public with "walk-in" hunting and help with bull/buck escapement. Since 2005, ODF has partnered with the Oregon Hunters Association (Tillamook Chapter) and ODFW to implement the OHA Gate Program. The program uses 12 metal gates to restrict vehicle access to selected spur road systems from September 1st through November 30th each year. Gates locations are reviewed each year and moved to new locations as harvest units grow up and are able to provide cover.

Road Maintenance

Timber sale purchasers maintain timber sale access roads and haul routes. The Tillamook District Road Crew will maintain roads not covered under timber sale contracts. Road maintenance activities are divided into five basic categories; drainage, surface maintenance, cut and fill slopes, erosion control and vegetation control. Culverts, catch basins and ditches will be cleaned as necessary to ensure proper drainage. Road surfaces will be graded to maintain a smooth, stable running surface and surface drainage. Cut slope ravel will be removed from ditches and unstable fill slope material will be removed to prevent failure. Erosion and sediment control structures, such as culvert downspouts, riprap, dissipaters, sediment fencing, straw bales, bio-bags, sediment ponds and bio-filtration swales will be maintained or repaired as necessary to ensure their proper function.

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. The district anticipates chemically treating 170 miles of roadside vegetation to remove brush and retain grasses. Roadside brushing will be included in timber sale project work where vegetation is too large for effective chemical control.

Land Surveying

FY 2015 priority will be to survey property lines associated with the Ax Ridge and S'Moore timber sales. A secondary priority will be to maintain and restore property corners and survey property lines associated with alternative timber sales. Surveying work will be accomplished through service contracts with licensed professional land surveyors. Opportunities for cost share surveys and boundary agreements with adjoining federal and private landowners will be pursued where the state will have a current or future need.

Young Stand Management

A range of silvicultural tools will be employed to achieve the long-term goals of structure-based management and integrated resource management as outlined in the Forest Management Plan. The district's strategy is to use silvicultural tools – aligned with the current restricted budget, to establish and maintain diverse stands of well-adapted natural species throughout the landscape to meet these goals. These tools include site preparation, planting, animal damage control, vegetation management, tree protection, and pre-commercial thinning.

The types and anticipated amounts of reforestation and stand management activities that will occur in FY15 are described below and shown in the Young Stand Management Table (Appendix B, Table A-5). 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 sold harvest units are completed and on updated assessments and surveys that will occur during and after the 2014 growing season. Current budget constraints limit young stand management mostly to those activities that are essential to the establishment of new stands.

The district will also conduct stocking and survival surveys in young stands and plantations. The surveys are used to determine stocking levels, needs for tree planting, release or pre-commercial thinning. Low-level photo flights in late summer are also used to evaluate upcoming planting units.

Site Preparation

Prescribed Fire (Slash Burning): All burning on the Tillamook District is within accordance to the State Forest Prescribed Burn Policy in order to ensure the safety of employees engaged in burn activities; minimize risk for the Department, its assets, and adjacent landowners; protect environmental resources; and provide a “realistic” scenario for conducting annual fire crew training.

As part of the Northwest Oregon Forest Protection Association, the Tillamook District is using prescribed burns to burn large landing piles in the fall, which helps reduce fuel loading and down slope hazards, and to open ground for planting.

The Tillamook District is currently coordinating with the Forest Grove District and Astoria District to conduct a 30 - 50 acre broadcast burn for fire training purposes. The unit is planned to be burned during the early summer and the cost for this exercise is funded by the district Protection budget.

Mechanical (Slash Piling): None Planned

Chemical Site Preparation: The site preparation objective is to control brush species to allow stand establishment and maintain 2-3 years of free-to-grow status. The current estimate is 1,700 acres. The actual site preparation plan will be prepared in late spring when harvest units and brush development is better known. Most chemical site preparation is completed by helicopter spraying.

Planting

Initial Planting: The planting objective is to establish mixed conifer stands at 436 trees per acre on all clearcut areas, both modified clearcuts and retention cuts. Initial plant species will consist of western hemlock, noble fir, and Douglas-fir. Douglas-fir will be included in planting units outside of the areas of severe Swiss needle cast. The target at age 10 is a mixed conifer stand with a minor hardwood component. These stands generally have the most potential to develop into complex stands, are the most resistant to pest and environmental impacts and retain the most future options. The current estimate is 2,077 acres of initial planting (over 900,000 seedlings). South Fork work camp will be responsible for planting approximately 1,000 acres.

Interplanting: The interplanting objective is to raise conifer stocking in young plantations that are below acceptable levels or below Forest Practices Requirements to a minimum of 200 trees per acre and the State Forest Division goal of establishment and maintenance of healthy, well stocked stands. The current estimate is 500 acres. Actual plans will be made after stocking surveys in the fall.

This district is addressing interplants in several units. The interplants are necessary because of heavy elk browse in some plantations and in other plantations poor seedling quality over the past several seasons has resulted in lower survival rates. To improve seedling quality the Division is working to change the seedling procurement process to spread the risk between multiple growers and allow more direct negotiations for the purchase of trees.

Underplanting: No stands have been identified for Underplanting during FY15.

Natural Regeneration: Units or portions of units will be assessed prior to planting. Natural regeneration will be considered primarily in western hemlock stands that

have been salvaged from wind storms or where small gaps and holes less than 2 acres have been created in partial cut units. Natural regeneration of red alder, Sitka spruce and other minor species is used to provide diversity in all harvest units.

Vegetation Management

The release objective is to attain or maintain free to grow status for current conifer or mixed conifer/hardwood plantations by controlling brush species, primarily salmonberry. Release assists with accelerating stand establishment and tree growth for development of complex structures.

Manual: The current estimate is 100 acres. The actual plan will be developed in early spring when brush is more developed and actual needs can be assessed.

Chemical: The current estimate is 150 acres. The actual plan will be developed in late spring or early summer when brush is more developed and actual needs can be assessed.

Damage Hunts: The district has experience heavy elk browse on many of the plantations, at significant cost and loss of growth. ODF is in the process of obtaining permission for Damage and/or Emergency Hunts from ODFW to reduce these losses. The final decision on when and where these hunts would take place is dependent on stocking and survival surveys. The goal of these hunts is to reduce damage to seedlings and move the large herds out of the new plantations during the critical winter months, with an additional benefit of providing some additional hunting opportunities to the hunting community.

Tree Protection

The objective is to reduce browse by elk, deer, and rodents allowing trees to attain full height growth potential.

Barriers: No new installations of tree protection barriers are planned for this year. Crews will perform maintenance on existing tree protection areas.

Direct Control: Trapping mountain beaver prior to planting a harvest unit significantly reduces damage from these animals. The current estimate for trapping in FY15 is 2,000 acres. South Fork work camp will be responsible for trapping 1,000 acres.

Pre-commercial Thinning

The PCT objective is to reduce the density in overstocked conifer stands to maintain good individual tree growth rates with good live crown ratios. In mixed species

stands with Douglas-fir heavily impacted by Swiss needle cast, species other than Douglas-fir will be favored. No acres are scheduled for PCT in FY15.

Fertilization

None planned.

Recreation Management

Overview of Recreation Management

There is a 60 year history of recreation use on the Tillamook State Forest that continues today. Recreation use includes hunting, fishing, target shooting, OHV riding, mountain biking, hiking, equestrian use, mineral collection, and sight-seeing. River access for white water kayaking and canoeing continues to grow while anglers increasingly use walk-in access for remote bank fishing opportunities. Anglers launch drift boats and pontoon boats from developed sites like Stones Road Boat Ramp, Peninsula, or other Oregon Department of Fish and Wildlife boat ramps. Use levels for all activities continue to increase while resources and budget remain flat.

Currently direction for management is directed by the State Forest Division Bulletin, *"Near Term Direction for Recreation Management and Investment on State Forests"*, September 2011. The recreation management activities planned for FY15 are based on a flat budget consistent with 2014 levels. Tillamook District will work to protect the existing infrastructure, provide for public safety and sanitation, and mitigate damage to natural resources.

At present the district manages 3 fee campgrounds, 3 OHV staging areas, 6 day-use sites, 89 designated dispersed sites, 20.1 miles of non-motorized trail, 326 miles of designated OHV trails, plus multiple rustic trailhead facilities that provide access to motorized and non-motorized trail network.

ODF receives, All Terrain Vehicle (ATV) fund dollars administered by Oregon State Parks because of legislative action on a biennial basis. The purpose of the fund transfer is to assist ODF with the management of the off highway vehicle programs on the Clatsop and Tillamook State Forests. On the Tillamook District, the Oregon State Parks ATV funds support 1 NRS1 OHV Coordinator and associated Service and Supply such as vehicle costs, trail maintenance, staging facility maintenance, and OHV event administration.

Recreation Planning

At this time long range recreation planning is on hold pending the results of the Alternative Forest Management Planning effort. Short range FY 2015 planning work includes:

- Review FY 2016 proposed timber sale shape and provide comments and recommendations to avoid or mitigate impacts on recreation trails and facilities.
- OHV Trail Planning – conduct conceptual planning and field reconnaissance for Hembre Ridge bypass trail.
- Explore RTP grant funding for OHV equipment
- Explore creating larger family size campsites east of Jones Creek Campground.
- Develop site plans for upgrading selected dispersed sites on Foss Road between Nehalem Falls Campground and Morrison Eddy.
- Participation with workgroup to address OAR's for recreation management, policy and Special Use Permits including a fee schedule.
- Continue to provide input and comments to Salmonberry Corridor Master Planning as needed.
- Review & comment on BLM long range recreation planning as needed.
- Apply for a RTP grant in fall for two trail bridges (18' & 20') on Coal Creek Trail. The trail crossed a small seasonal stream on a slick 12' plank that is a public safety concern. The second crossing fords a tributary to Coal Creek and could become a sedimentation problem as use increases.
- Coordinating with the Oregon Hunter Association to develop volunteer projects to be completed during this AOP period. Also working with OHA on projects that include converting the field at the Nehalem Guard Station into meadow (near Foss Rd.), maintain the Beaver Creek meadow, and planting forage seed on dirt spurs after being blocked.

Non Designated Dispersed Camping Sites

Tillamook District will continue evaluation of non-designated camping sites forest wide. Considerations include: Impact to natural resources, proximity to streams, fire hazard potential, and public safety. The district has 89 designated dispersed

campsites. Designated sites are signed and have a metal fire grate for campfires. Campfires are allowed during fire season in designated sites only.

OHV Trail Inventory

As needed and as time and priorities allow trail inventory will be conducted throughout the FY 2015. The focus will be on inventorying trails that have been re-routed and user created trails that have been reported by staff.

The information gathered will update and improve the data layer in the district's Geographic Information System, and will be used to make both short and long term decisions for trail maintenance, designation, and overall transportation planning. Trails that negatively impact soil stability and water quality will be considered for temporary or permanent closure depending on the recommendations of specialists and availability of staff and equipment resources to mitigate the problem.

Facilities (Campgrounds, Day Use Areas, Trail Heads, etc.)

Facilities Improvements

- Additional fencing will be installed at Jones Creek Campground to prevent trampling, site expansion, and trail creation.
- CXT Restrooms painting – Seal roofs, paint interior wall and floors
- Keenig Creek well – professional evaluation and testing to determine if well is viable.
- Upgrade dispersed sites in Jordan Creek Basin, including rocking, boulder placement, site pull back.
- Designate two campsites on Kilchis Lookout Road that have been rocked with project monies.

Facilities Maintenance

Regular facility maintenance includes protecting assets, infrastructure, and providing for public safety and sanitation. Activities include painting, wood preservation, janitorial work, graffiti and moss removal, dust abatement, trash pickup, septic pumping, hazard tree removal, parking lot gravel, and updating information boards.

The following is a list of the facilities to be maintained during the FY 2015 operation period.

- Diamond Mill OHV Campground - Open year round.
- Jones Creek Campground - Open Memorial Day Weekend through September 15th.
- Footbridge Trailhead – Day Use Area – Open year round
- Cedar Butte Trailhead - Open year round
- Keenig Creek Campground & Trailhead – Open year round.
- Sprague Wayside – Open year round
- Nehalem Falls Campground – Open Memorial Day Weekend through September 15th.
- Jordan Creek Off Highway Vehicle Staging Area - Open Memorial Day through September 15th.
- Hollywood OHV Staging Area - Open year round
- Edwards Creek OHV Learners Area – Open year round
- Peninsula Day Use Area & Boat Launch – Open year round
- Stones Road Boat Ramp – Open year round
- 89 designated dispersed campsites though-out forest
- Lake Tahoe dispersed camping area- Open year round
- Coal Creek Trailhead – Open year round
-

Trails (Non-Motorized and Motorized)

Through FY 2015, the Tillamook district will maintain designated motorized and non- motorized trails to the highest standard possible. In addition to regular maintenance, winter storm events cause damage that requires more extensive trail repair including bridge damage, slides, slumps, sloughs, and large tree blow down.

Equestrian use of the Wilson River trail will continue to be accommodated on a seasonal basis from July 15^h to September 30th from Jones Creek Trailhead to Elk Creek Campground. Equestrian staging area will be open Users will be responsible for providing water for their stock and packing out manure.

Non- Motorized Trail Construction

- Bridge Creek Trail will be upgraded including the installation of retaining walls, drainage features, and gravel to harden the tread.
- The district is exploring an opportunity to partner with Bonneville Power Administration (BPA) to build 1900' of trail to access utility poles on the north side of the Wilson River that has no road access.
- Construction of rocked stream ford on Wilson River Trail on Type N, seasonal stream on Wolf Creek to Cedar Butte Road section.

Non-Motorized Trail Maintenance

The priority will remain on trail and bridge maintenance of designated trails. A total of 14.3 miles of trail maintenance is. Annual trail work includes bridge inspection, brushing, grade repair, and removal of wind throw. The work will be done by South Fork inmate crews and volunteer support as available.

Sections of trail to be maintained FY 2015:

- Wilson River Trail–Diamond Mill to Keenig Creek Trailhead section – 10.5 miles
- Cedar Butte Trail – 0.75 mile
- Peninsula Trail – 0.8 mile
- Nehalem Falls Trail – 0.5 mile
- Outback Trail - 0.4 mile
- Coal Creek Trail - 1.4 miles

Motorized Trail Construction

New motorized trail construction in FY 2015 on the Tillamook District will be limited to short re-routes needed to mitigate resource problems or public safety issues. Below are few examples of why re-routes may occur:

- address erosion where heavy use has created trenching in the trail tread
- create more curves to trails to reduce speeds and increase rider safety
- move use away from main roads to reduce conflicts between riders and vehicles.
- address resource impacts
- no new trails will be created

Motorized Trails Maintenance

For FY 2015 the priority will remain on:

- Designated trail maintenance
- Natural resource protection
- Bridge maintenance
- Trail signing (focus on ODF or volunteer improved trails in Trask Basin)

Work may include rocking, rolling grade dips, bridge repair, bridge construction and culvert installation. Seasonal closure of specific trails is may be necessary to preserve the sustainability of the trail during the wet season. Temporary closure of trails will occur due to forest operations. These closures are for the safety of the recreating public. For trail or road closure information refer to the Tillamook District website.

See table below for more project detail:

Table 6. Motorized trail system projects.

Trail Project listed by priority	Project Trail Mileage	Resources to Accomplish Work	Description of work
Blue Bus ATV/MC relocate and bridges	¼ mile	ODF OHV operators and equipment/ Contract or	Objective: Avoid fish bearing streams Bridges will be funded by ATV grant to OMRA.
Cob Master re-route	1.5 miles	ODF OHV operators and equipment	Construct re-route of trail away from road constructed for N. Morris Timber sale. Eliminate road riding
East Fork Mongos #93 trail work MC	0.7 miles approx.	ODF OHV operators and equipment	Trail tread work, hardening with rock, and minor re routes to encourage sustainability and prevent sedimentation
Trail # 42 Hembre Lookout Trail re-route to Cedar Creek	0.3 miles	Volunteers & ODF OHV operators and equipment	Reroute trail away from Hembre rock pit. Rock pit is being expanded creating a hazardous situation for trail riders. Trail to rerouted to the south to Clear Cr. Rd.
Trail 104, Radio Silence	1.9 miles	Volunteers & ODF OHV operators and equipment	Re route trial now that timber sale is complete. Trail needs to be moved off road grade & away from seasonal stream crossings.
Toll Rd. Bypass OHV trail –South Fork Trash to Streampot junction	6.2 miles	Volunteers/ OHV Equipment Operators	Brush clearing, improve water control features, widen trail corridor to accommodate ATV's
Reroute Georges Trail	1 mile	ST240, volunteers	Close existing sections of trail away from creek, upgrade stream crossings, pull old culverts

Hunting and Fishing

Tillamook District is within the Trask and Wilson Wildlife Management Units for hunting opportunities. The main activity is deer and elk hunting with both rifle and bow. Other hunting occurs for upland game bird (grouse and quail), bear, cougar, furbearers bobcat, predators such as coyotes, and rabbits. In 2013 it's estimated from ODFW tag sales that over 7,000 hunters participated in deer and elk season on the Tillamook State Forest.

Harvest operations open up areas for big game habitat and access remains open across the forest.

Angling is also very popular on the large rivers such as Wilson, Trask, Nehalem, and Kilchis. Angling for fall and spring Chinook, winter and summer steelhead, Coho salmon, chum salmon, and coastal cutthroat trout occurs in all river basins feeding the Nehalem, Tillamook, and Nestucca rivers. Rainbow trout are found in mountain lakes. Anglers in freshwater, which include bays and rivers, expend about 14 million dollars in travel generated expenditures annually.

The forest provides many opportunities for walk-in areas as well as to drive to popular sites. The work in this AOP will continue to support and maintain those

access opportunities as well as working with ODFW to maintain and improve boat slides.

The Tillamook District will also partner with the Oregon Hunter's Association (Tillamook Chapter) on specific projects including the Elk Forage Pilot Project Plan. This involves converting the field at the Nehalem Guard Station (Foss Rd.) into meadow by removing brush (including invasive species) and replanting with appropriate grass seed provided by ODFW. Other projects include forage seeding on dirt spurs after being blocked (completion of timber sales) and mowing the Beaver Creek meadow (near Nehalem River). These efforts are intended to provide alternate forage areas for deer and elk to help mitigate browse on plantations.

The Tillamook District will continue to partner with OHA on seasonal gate closures. See the Forest Roads and Access Management sections for more information on Travel Management Areas and Gate Closures (walk-in opportunities).

Other Management Activities

Special Use Permit Administration

The Tillamook District Recreation Unit will process and administer permits for recreation related special uses of State Forest Lands. Special uses include commercial and non-commercial activities such as guide services, filming for advertisements, and trail running events

Organized Event Administration

For FY 2015 Tillamook District will administer or review permits for 17 motorized events on the Tillamook State Forest. Events include poker runs, races, 4WD runs, dual sport runs, and observed motorcycle trials. There is one planned commercial non-motorized event I for a 15k and 55 K trail run on the Wilson River Trail.

Tillamook District Volunteer Activities

In FY 2015 the Tillamook District will administer a wide variety of volunteer activities including motorized trail work parties, SOLVE trash clean ups, trail work parties on the Coal Creek Trails, and the vitally important Camp Host Program.

The Tillamook District will seek to renew community interest the Forest Observers volunteer program. The intent is for Forest Observers to patrol forest roads and report trash dumps, abandon property, and suspicious activity to ODF staff and Tillamook County Deputies.

Activity	# of Volunteers	Estimate Hours
Camp Host	Up to 12 volunteers for 4 month camping season	Hosts volunteer for one to two month stays and are on duty 5 days/week for approximately 12 hours/day for 4 months Estimate 1920 volunteer hours
Coal Creek Non-motorized trails	Estimate 5-10 people per work day	Hoping for at least 5 people/4 hours x 2 outings= 40 hours
Motorized trails	Estimate 10 people per day	Motorized Trail Work Days Estimate 400 – 500 hours per year
Recruit Cascade Parasailers to adopt parasail launch site at “Top of the World”	3- 5 people	Hoping for at least 5 people/4 hours x 2 outings per year= 40 hours
Hunting Opportunity Improvement	Estimate 5-10 people per work day	Hoping for at least 5 people/4 hours x 2 outings= 40 hours

Law Enforcement

ODF will continue to contract with Tillamook County Sheriff’s Office for 3 full-time deputies. The Tillamook County Sheriff’s Office funds 40% of the program with grant funds from the Oregon ATV Fund. The remaining 60% (see Summary Table, Appendix B) is provided by Oregon Department of Forestry.

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 county deputies, fire protection, and recreation staff.

Other Tillamook District Recreation Unit Business

- Coordinate removal of abandoned vehicles and property, clean up dumpsites, and respond to other social impacts on forest resources.
- Provide support for interpretive and educational programs at Tillamook Forest Center, local schools, and at other ODF districts as staffing allows.
- Act as liaison with other natural resource agencies (Oregon Parks & Recreation Department, Oregon Department of Fish & Wildlife, Tillamook County Parks, Bureau of Land Management, Tillamook Estuaries

Partnership, Tillamook Bay Watershed Council and nonprofit organizations such as Stop Oregon Litter and Vandalism).

Land Exchange

No land exchanges are planned during the FY15. The district will continue to work on identifying parcels to acquire and exchange. The district does not have an approved land exchange plan.

Other Integrated Forest Management Operations

Noxious Weeds and Invasive Plants

The district has been developing a plan for identifying and tracking invasive plants and noxious weeds. The district is a member of the North Coast Cooperative Weed Management Area along with other landowners, managers, and conservation groups (federal, state, and county). The Oregon Department of Agriculture (ODA) has facilitated the establishment of weed management cooperatives for the purpose of coordinating efforts to address invasive weeds on a large scale. The district contributes to the database kept in Salem and annually staff shares information with ODA for contribution to the WeedMapper. WeedMapper is a database which includes information about weeds and locations of noxious weeds throughout Oregon as collected by other contributing federal, state, and local agencies. The district is also a member of the local county partnership PRISM (Partnership for Regional Invasive Species Management).

The district is currently tracking and treating knotweed, Scotch broom and false brome. There are also common invasive species, such as tansy ragwort, Scotch broom, Himalaya blackberry, and Canada thistle, along road sides and haul routes or in small concentrated patches throughout the forest. The location of these species has not been tracked and documented in the past.

Most noxious weeds or invasive plants are along roads and have spread into plantations. The main sources for the weeds are car tires, equipment moved in and out of district, and where soil disturbance occurs. The district specifies 100% weed-free grass seed be used and the use of certified weed-free straw for mulch instead of hay for project work on roads. Equestrian users will be encouraged to use weed-free hay for feeding stock on State Forest Land.

Firewood

The District has an ongoing firewood cutting program, which includes both commercial and individual wood cutting permits.

Personal 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 Tillamook District issues personal firewood cutting permits for the entire district **except** for areas shown on maps attached to permits. The individual woodcutting permits are sold by area, with the district divided into four (4) unique areas, which excludes active and sold timber sales, recreation sites, and planned operations. There is no guarantee that units or travel routes will be posted in the field. Property lines are frequently unmarked and ODF firewood permits are only valid on State Forests land.

In FY13, 830 personal woodcutting permits were sold. The demand for firewood permits in FY15 is anticipated to be equal to or greater than past years.

Commercial woodcutting sales are for more specific areas and are also used to remove trees adjacent to roads, clean up landings, and salvage windthrow in concentrated areas where down wood levels are above FMP targets. In FY13 three commercial woodcutting permits were sold.

Miscellaneous Forest Products

Commercial permits will be issued for moss, bear grass, salal, ferns, vine maple, and alder saplings. In FY13 Tillamook district sold 91 miscellaneous forest product permits. This approximate amount is anticipated for FY15.

Planning (and Information Systems)

The Tillamook District will use a variety of tools, data sources, and other information for the continuing planning and implementation of the AOP. These consist of computer programs (ArcMap, SuperACE, GPS programs, etc), inventories (Road Inventories and Stand Level Inventories (SLI), surveys (T&E, fish habitat, perennial streams), and field reconnaissance. These will also be used to assist in setting resource goals for the district, and to monitor progress in achieving those goals.

During the FY15, the district will be undertaking the following projects in order to update existing data and acquire new information.

District modeling

The district has continued to update and improve information which identifies resources and physical features on the district. This information is important to decision making and for future modeling runs. The district is in the process of reviewing the most current model run, evaluating the process to make sure the NW FMP and district IP rules and directions were applied to the landscape. This information will inform discussions on Alternate Management Plans.

Stand Level Inventory and Other Vegetation Inventories

There are currently 5,908 SLI stands on the Tillamook district, totaling 252,345 acres. Of these stands 5100 are considered suitable measurable stands representing 237,000 acres of suitable measurable stands in the district. "Measurable stands" are the inventory stands remaining after the Inventory Specialist has removed stands they have deemed to be too dangerous to contract out for cruising because of the following reasons; rocky, steep, bad access.

Currently the district has 1,188 inventory stands measured on the Tillamook District, which represents 23.3% of measurable stands or 20.0% of district stands. The measured stands represent 90,530 acres or 36% of State Forest land in the Tillamook District. New SLI data collection is anticipated for FY15. The contract for inventory measurement will be managed through the Salem office.

Wildlife Surveys

Marbled Murrelet Surveys

The district normally conducts a marbled murrelet survey program in order to comply with federal and state Endangered Species Acts and to contribute to Forest Management Plan goals. Survey requirements are determined in accordance with ODF Policy & Guidance. Different strategies are being applied to two different zones in the north coast. Operational surveys, as described in the October 2012 ODF Policy Guidance are being applied to sales within the Operational Survey Zone. The Operational Survey Zone is referred to as the North Coast Survey Zone in the current policy and is the zone closest to the coast where all known occupied sites are located. East of the Operational Survey Zone is the Systematic Survey Zone, where high quality potential murrelet habitat is being surveyed systematically and operational surveys are not being conducted. All surveys are conducted according to the Pacific Seabird Group protocol (2003).

No sales in the 2015 AOP contained suitable habitat or were adjacent to suitable habitat for marbled murrelets, therefore no marbled murrelet surveys will be conducted in this fiscal year for timber sales.

Northern Spotted Owl Surveys

In FY15 the district will continue its northern spotted owl survey program in order to comply with ODF’s responsibilities under the State Endangered Species Act. The survey method utilized by ODF is the *Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls*. This protocol was originally dated March 1991 and was most recently revised in January 2012 and endorsed by the USFWS. The district determines survey requirement for planned timber sales with potential habitat according to the ODF Policy Guidance: Northern Spotted Owl Surveying on State Forest Lands.

See the table below for a summary of required timber sale surveys for northern spotted owls and marbled murrelets for FY15 sales. There will be 29 sales surveyed for northern spotted owls in FY15, for current, previous and future sale plans, to complete protocol surveys. There will also be additional surveys for spot checks for 8 active timber sales and for district monitoring purposes on 10 northern spotted owl activity centers. No marbled murrelet surveys will be conducted on the Tillamook District in FY15.

Table 7. Summary of Surveys for Threatened and Endangered Species

Operation	Species ¹ (NSO/MM)	Survey Years ²	BA ³ Required	Special Considerations
Ax Ridge	NSO	2013, 2014	--	
Between Wolves	NSO	2013, 2014	--	
Bling Ridge	NSO	2013, 2014	--	
Feldshaw	NSO	2013, 2014	--	
The Gilmore	NSO	2013, 2014	--	
High N Dry	NSO	2013, 2014	--	
Schetky Aneu	NSO	2013, 2014	--	
S'Moore	NSO	2013, 2014	--	
Doghouse (Alt)	NSO	2013, 2014	--	
Red Shack (Alt)	NSO	2013, 2014	--	

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

² Years that surveys have been completed or are planned.

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

Contractors complete all surveys and develop final reports for ODF. For both marbled murrelets and northern spotted owls, end of year (survey season) reviews will be done to discuss survey results. This end of season meeting is an opportunity

to meet with surveyors to discuss findings and determine future survey needs and/or needed modifications to proposed operations.

T&E Plants

The proposed harvest operations were screened against the database from the Oregon Biodiversity Information Center - OBIC (previously known as the Oregon Natural Heritage Database) and other known locations on the district to identify potential conflicts with plant species listed in the district IP as requiring protection measures. These include Threatened or Endangered plants along with Candidate and Special Concern plants identified in the district IP.

No Threatened or Endangered plant species were identified in the vicinity of the FY15 timber sales. A Candidate plant listed in the Tillamook Implementation Plan was identified as being within the vicinity of two timber sales in the FY15 sale plan using the OBIC database.

Filipendula occidentalis, Queen-of-the-Forest, a Candidate plant, was identified in the Cook Creek drainage in 1981. A range was established for the plant and High N Dry and Red Shack (Alternate) sales fall inside the range identified. No plants have been found on the sale areas. Queen-of-the-Forest is usually found in riparian areas, especially shaded moist stream banks and NW FMP buffers will incorporate most if not all of the plant's habitat.

Aquatic and Riparian Resources

Aquatic and Riparian Conditions: Major streams that drain these forest lands on the Tillamook District are: the Nehalem, North Fork Nehalem, Miami, Kilchis, Wilson, Trask, Tillamook, Nestucca and Little Nestucca Rivers, which flow directly into the Pacific Ocean. These major watershed basins define the basin planning areas in the section entitled "Summary of Timber Harvest Operations by Basin".

There are also several shallow lakes on state forest lands, the largest of which is Lake Tahoe. Beaver ponds and other wetlands are scattered throughout the district. The Tillamook Water Commission (City of Tillamook) and the Beaver Water District are in the southwest corner of the district encompassing about 3,600 acres of state forest land.

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. Aquatic Anchors have been established in 11

watersheds in which additional aquatic conservation measures are applied. The Aquatic Anchors include: Coal Creek, Cook Creek, South Fork Salmonberry, Foley Creek, Miami River, Middle Kilchis River, Little North Fork Wilson River, Cedar Creek, Ben Smith, Elkhorn Creek, and East Fork of the South Fork Trask River.

Restoration Goals and Identification Process: The overarching principles for fish habitat restoration are described in the Forest Management Plan. Landscape and site-specific strategies will improve levels of aquatic function in the short term to meet the immediate habitat needs of depressed species and place aquatic habitats on a trajectory toward desired conditions. At the same time actions are carried out to restore the ecological processes and functions that create and maintain self-sustaining habitats over the long term. Restoration strategies include completing assessments to identify limiting factors and identify, design, and implement projects to remedy identified problems. Projects should mimic natural process, use multidisciplinary approach, and consider site-specific as well as watershed scale processes and disturbance regimes. Projects will be designed to re-establish natural physical and biological processes. The overarching approach to habitat restoration is described in the NW FMP (page 4-67 through 4-68) and summarized below:

- Eliminate human-induced conditions on the forest that may contribute to aquatic habitat deficiencies, or that may limit the timely recovery of desired aquatic habitat conditions.
- Promote aquatic habitat conditions that will support the short-term survival needs of depressed salmonids, in order to reduce the potential for further declines in these populations.
- Attain properly functioning aquatic habitat conditions in a timely manner.
- Encourage forest conditions that will support the ecological processes necessary to naturally create and maintain complex aquatic habitats on a self-sustaining basis.

The types of projects in order of priority are: (1) Fish Passage, (2) Road Decommission or Hydrologic Disconnection, (3) In-stream Habitat Projects, (4) Alternative Plans to Manage Riparian Areas, and (5) Beaver Relocation.

Projects can be implemented opportunistically (when operating near streams that would benefit from restoration efforts) or with a more complex and typically larger scale approach both of which will be evaluated for ecological benefits. For the Tillamook District the goals are to:

- Implement 2-5 larger scale projects over a 10-year period if resources and partners are available.
- Implement 2-3 opportunistic projects per year if resources and partners are available.
- Contribute to fish passage improvement and hydrologic disconnection.

Watershed Analyses have been complete for the Trask, Miami, and Wilson basins along with watershed analysis recommendations and Action Plans developed from the analysis to identify areas recommended for improvement. The program is taking the opportunity to review the work completed to this point on State Forests before beginning new watershed analysis projects. In addition the Oregon Department of Fish and Wildlife completed Fish Habitat Assessments and summarized the findings by district (ODFW 2005-2006).

Limiting factors have largely been identified in the ODFW conservation strategy, the 2005 State of Oregon Coastal Coho Assessment (OCCA) (State of Oregon 2005), and ODF watershed analyses. Common limiting factors include: a lack of large wood in streams, increased fine sediment in riffles, a lack of complex pool habitat, and a need for more off-channel habitat. The task during this AOP is to identify, design, and implement projects to address the limiting factors either through opportunistic projects (e.g. harvest units adjacent to streams that meet certain criteria) or through larger, multi-collaborator, diversely funded projects .

There are stream enhancement projects identified in association with sales in this sale plan.

- Fish passable culvert installation on Moore Creek on East Ben Smith Road with the S'Moore timber sale.
- Ben Smith Creek is a good candidate for a stream enhancement project, which may be available with the S'Moore sale and is being evaluated by the ODF Aquatic Specialist.
- Review potential for stream enhancement project on a tributary creek to the West Fork North Fork of the Wilson River. The Bling timber sale will be adjacent to the creek and may be used to facilitate in-stream wood placement.

Watershed Council Partnerships: Tillamook District participates in multiple Watershed Councils. The main councils are Lower Nehalem, Tillamook Bay, and Nestucca/Neskowin. District staff attends meetings throughout the year at Lower Nehalem Watershed Council, provides presentations when requested and participates in workgroups and committees when appropriate.

During FY 2015, the Tillamook District will partner with Tillamook Estuaries Partnership (TEP) on a feasibility study to replace three culverts on Patterson Creek (Bay City) that are currently barriers to fish passage.

District staff are participating in the Tillamook-Nestucca Fish Passage. The group has set a goal of establishing fish passage on 95% of the historic available habitat in the Tillamook-Nestucca Sub-basin across multiple landowners. Staff serve on both the executive and technical teams associated with this project.

District staff also participates in monthly meetings and presents information to council members as requested or is appropriate.

District staff occasionally attends meetings with the Nestucca/Neskowin Watershed Council. The district ownership is very small in the Nestucca Basin and there have not been any recent opportunities to partner on projects.

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. Fish distribution information varies across the district. Many streams have been surveyed with electro fishing techniques that established the upper extent of fish use. However many very small streams have not yet been surveyed for fish presence. These streams will be evaluated with either an electro-fishing method (through contractual arrangements with private consultants or support from ODFW) or with a Physical Habitat Survey (ODF State Forests Policy Bulletin, February 10, 2009. Determining the Upper Extent of Fish Use and Managing Related Data.) The physical methodology was developed in conjunction with Oregon Department of Fish and Wildlife.

Research and Monitoring

The Tillamook District will be involved in a variety of research and monitoring projects in FY15. Study sites and plots will be maintained on the district. District employees may participate in these projects. The following sections provide brief summaries of current research.

Swiss Needle Cast Cooperative Studies: (ODF Districts and SNCC)

- Pre-commercial thinning plot measurements and disease assessments
- Permanent plot measurements and disease assessment
- Bravo plot disease assessments

Swiss Needle Cast and Commercial Thinning: (OSU, ODF Districts)

Proposed research will address 1) growth trends following thinning of older stands with varying levels of Swiss needle cast damage, 2) interactive effects of Swiss needle cast with intensity of thinning, and 3) possible interactions between thinning, disease severity, and seed source (where data is available). The approach includes a combination of a retrospective study of stand growth since thinning with permanent monitoring plots to track future growth. The study will require a minimum of 10-year duration to establish trends in stand development after thinning.

Stand Structure Development/Coarse Filter Monitoring

The objective of this study is to examine how stand structure conditions are changing as a result of management prescriptions and to determine whether post-harvest stand structure conditions are developing as anticipated. The stand structure pathways we will be monitoring are stands in the Northwest Oregon Area districts

projected to become Understory (UDS), Layered (LYR) and Older Forest Structures (OFS). Currently, only stands in the 2002 to 2004 Annual Operations Plans will be measured. Each stand that will be measured must have a completed harvest. The resulting residual stand characteristics will be the baseline for all future stand development that we will be monitoring. It will continue as a long-term study for decades in order to better describe the process of stand structure development.

Information from this study will also be used as part of the Coarse Filter Monitoring project aimed at defining relationships between stand structure characteristics and native wildlife habitat. The Coarse Filter Monitoring project assesses whether the biological needs of structure dependent species are being met in relation to habitat structure elements recorded during a stand structure survey.

Intensive Watershed Monitoring: (ODF, Weyco, OSU, BLM)

ODF State Forests Monitoring Program is working on a project in the Trask River to evaluate if upland, riparian, and aquatic management strategies are effectively achieving goals for riparian and aquatic resources. The goal of the Trask River Watershed Study is to understand how aquatic systems, particularly small headwater stream, respond to harvest and if harvest effects are transferred to downstream fish bearing reaches. The overall objectives are to determine:

- The effects forest harvest have on the physical, chemical and biological characteristics of small headwater streams;
- The extent to which alterations in stream conditions caused by harvest along headwater channels influence the physical, chemical and biological characteristics of downstream fish bearing streams.

A Manipulative Study of the Effects of Forest Herbicide Use on Biodiversity and Ecosystem Processes-Intensive Forest Management Study: (ODF Districts, OSU, NCASI, and Forest Industry)

The long-term goal of the research is to develop and disseminate information on ways to manage forested landscapes for biodiversity conservation while sustaining high-levels of timber production. Using multiple bird species as indicators, the manipulative study tests for the effect of intensive forest management on bird populations and timber production. The primary focus is the response of bird populations to vegetation structure and composition (ie., indirect effects of herbicide). Key studies:

- Effect of intensive forestry (herbicide applications) on avian diversity, abundance and demography
- Effects of herbicide applications on biomass and functional groups of arthropods
- Effects of herbicide applications on ungulate browse and food webs in early seral plantations

There are 8 study blocks with four 25 acre treatment areas in each – a control and three intensities of herbicide treatments (a light intermediate treatment, a heavy intermediate treatment, and an intensive treatment).

T&E Surveys: (ODF, Contractors)

See the above section on fish and wildlife for more detail of surveys for spotted owls and marbled murrelets.

Northern Spotted Owls On-going Monitoring: (ODF, Contractors)

On-going monitoring is occurring of known sites of Northern spotted owls. The objective of these surveys is to determine continued occupancy of the site and movement within designated owl over time.

Marbled Murrelet Systematic Surveys: (ODF, Contractors)

Systematic surveys on the highest potential habitat sites in the area identified as the Systematic Survey Zone may be conducted in the district during FY15. The objective of these surveys is to survey areas which have not been previously surveyed to determine if marbled murrelets have started to use the potential habitat further inland. The Systematic Survey Zone⁵ is defined as “all of the Forest Grove District and portions of the Astoria and Tillamook Districts that are east of the North Coast Survey Zone.” Surveys in these areas over the last two decades have resulted in no detections.

Other Planning Operations

Wood Accounting and Log Tracking (WALT)

In FY15 State Forest will continue development of the new business Enterprise System to track timber sale volume and value from the beginning of the planning process through the end of the timber sale. The Tillamook District has assisted with the design and testing of all phases of the project. In FY15 Tillamook District personnel will continue to work on the design, review, and testing of Contractor, the contract creation feature of the program. 2015 AOP timber sales have been created in the Geo-Planner function of the program. The Contractor function of the program will not be available until FY16 although log tracking may be functional in late FY15.

Board of Forestry

The Board of Forestry has created a subcommittee to review Alternative Forest Management Plans for State Forest Lands in the Northwest Area. District workload will consist of reviewing proposed plans and provide feedback to the subcommittee. If harvest models are run with the different plan scenarios, district personnel will review model outputs and provide feedback to staff and the Board of Forestry.

⁵ ODF Marbled Murrelet Operations Policy, August 28, 2013, 1.1.6.20

Public Information and Education

The district will maintain supporting information for the Implementation Plan, Land Management Classification System, and Annual Operations Plans for public review. Public involvement will include public review and input on the FY15 Annual Operations Plan. District personnel will participate in public education opportunities such as assisting the Tillamook Forest Education and Interpretation program, watershed council meetings, recreation planning meetings, school field trips and other public events as the opportunity arises. The district will continue to meet with concerned citizens or groups when they have specific questions.

The Tillamook Forest Center is in operation at its location on Cedar Creek Flat, near mile post 22 on the Wilson River Highway. Typical activities on-site during this time will include: routine maintenance of the building and grounds; guided and self-guided public use of the trails including many school groups; access to the river by interpretive trails; continued but minor management activities in the demonstration forest. The Center is expected to host more than 50,000 people per year, generating a large amount of automobile traffic at the site. The Smith Homestead Day Use Area, located ½ mile east of the Center, will also host many school groups, family activities, and other visitors. The Tillamook Forest Center will be closed from the Monday after Thanksgiving in November 2014 through the end of February 2015 because of budget reductions.

Administration

There are 30 permanent positions whose full-time function is to manage State Forest land on the Tillamook District and five (5) permanent positions who work part-time on management of State Forest land. All are responsible for implementing the 2015 Annual Operations Plan. These positions are divided into five functional groups: Forest Management, Engineering, Reforestation, Recreation, and Administration. See the attached organizational chart.

There are two forest management units (Planning and Timber Contracts) responsible for all aspects of timber marketing. These activities include planning, unit layout, assisting with road layout and design, timber cruising, timber sale appraisal, contract writing, and contract administration. The Planning unit prepares the Annual Operations Plan and the Pre-Operations Reports for the individual sales in the AOP and administers contracts for T&E surveys and cruising. The Planning unit is also responsible for identifying candidates for future sale plans five to ten years into the future and other planning efforts like land exchange and transportation planning. The Timber Contracts unit completes field work and contract preparation as well as

administers all of the timber sale contracts for the district. The Contracts Unit also manages commercial firewood sales and special low volume timber sales.

The engineering unit is responsible for all aspects of road engineering 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 engineering unit works with the planning unit in developing the AOP.

The reforestation unit is responsible for all activities in forest plantations from the time the harvesting is complete through pre-commercial thinning. 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 recreation unit is responsible for implementation of the *Tillamook State Forest Recreation Action Plan* and operation of the overall recreation program including facility maintenance. Program elements include the operation and maintenance of campgrounds, day use areas, trailheads, staging areas, motorized and non-motorized trails, boat ramps, event management, South Fork crew coordination, law enforcement coordination, volunteer recruitment and management, and contract administration. The recreation unit also reviews planned timber sales and provides input into the Pre-Operations Reports on individual timber sales and works closely with the forest management units for trail protection during road and harvest operations or trail rehabilitation after operations.

Administration consists of the District Forester, Assistant District Forester, Office Manager, Purchasing Specialist, and two Office Specialists. The District Forester and Assistant District Forester provide policy direction, budget development, and oversight to the field units.

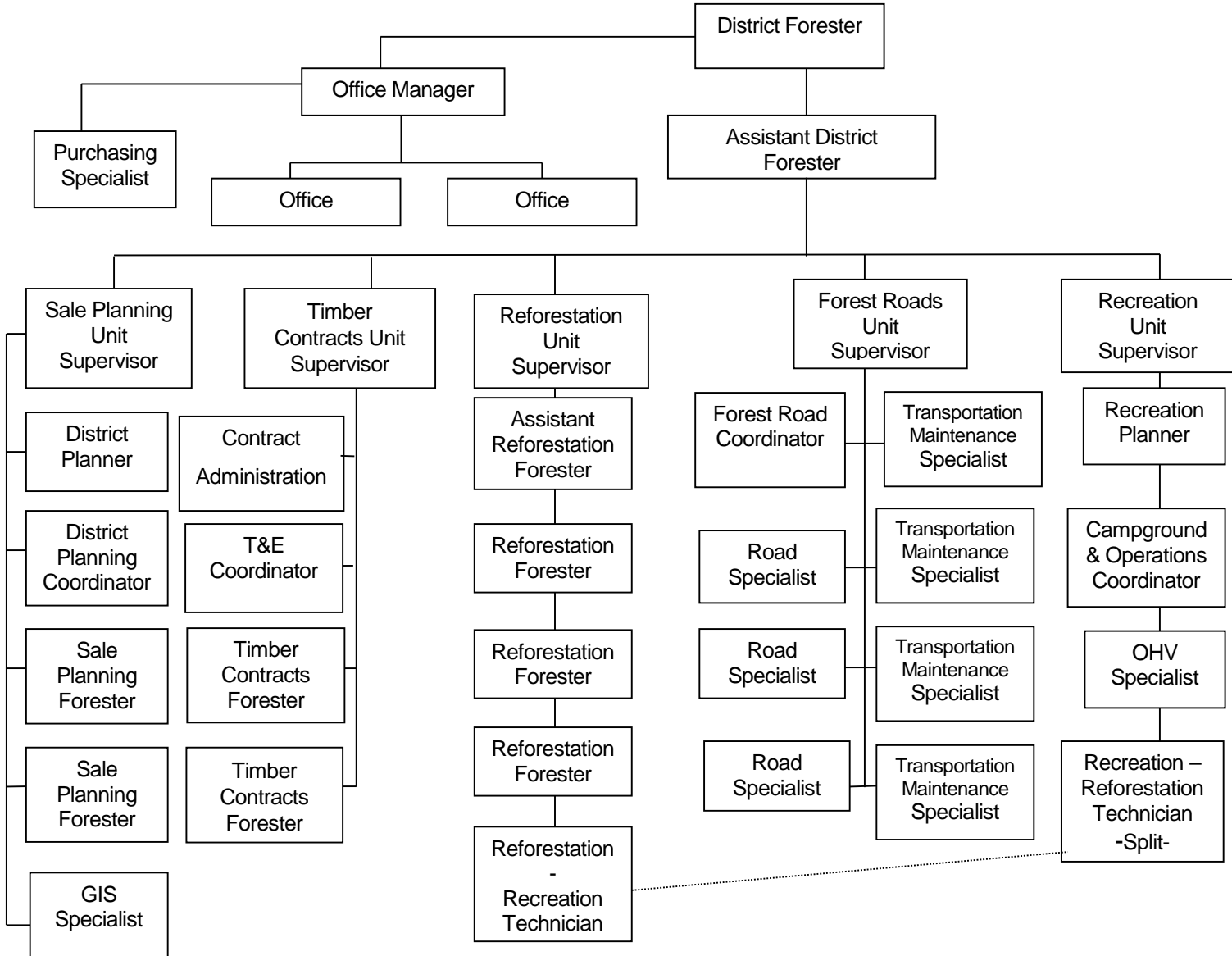
The Office Manager, Purchasing Specialist, and Office Specialists provide clerical support to State Forest Management. These positions are responsible for initial public contact, distribution and filing of documents, and providing assistance at timber sale auctions. The Office Specialist is also responsible for issuing permits for firewood cutting, and special forest products.

The GIS Specialist works with all of the above units but is managed through the planning unit. The GIS Specialist assists the units with creating GIS displays for timber sale layout, contracts, and planning documents. The GIS manager also completes maintenance and timely updates to the GIS database and provides overall IT support.

Each of these units is 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 from the development of the AOP to the final sale administration for consistency within and between units to meet common goals.

Tillamook District Organization Chart



APPENDICES

A. Forest Land Management Classification Changes

This appendix describes major changes to the State Forests' Forest Land Management Classification maps, including maps of the specific changes.

B. Summary Tables

- a. Harvest Operations – Financial Summary
- b. Harvest Operations – Forest Resource Summary
- c. Harvest Operations – Stand Structure Summary
- d. Forest Road Management Summary
- e. Reforestation and Young Stand Management Summary
- f. Recreation Management Summary

C. Maps

- a. Harvest Operations Vicinity Map
- b. Maps of DFC Changes

D. Consultations with Other State Agencies

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

E. Public Involvement

This appendix describes the results of the public involvement process of this AOP and will be added prior to its approval.

F. Pre-Operations Reports

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



Oregon

John A. Kitzhaber, MD, Governor

Department of Forestry

State Forester's Office
2600 State Street
Salem, OR 97310-1336
503-945-7200
FAX 503-945-7212
www.oregon.gov/ODF

To: Liz Dent, State Forest Division Chief
From: Doug Decker, State Forester
Date: June 25, 2014



"STEWARDSHIP IN FORESTRY"

Subject: Implementation of the Revised Forest Land Management Classification Rule on State Forests

This memo addresses approval of the implementation of the revised Forest Land Management Classification System (FLMCS) rule, including the new High Value Conservation Areas and Special Use classifications, on State Forest lands managed by the following districts: Astoria, Coos, Forest Grove, North Cascade, Southwest Oregon, Tillamook, West Oregon, and Western Lane.

On June 5, 2013, the Oregon Board of Forestry adopted a revision to the FLMCS rule (OAR 629-035-0055) that added the classifications of High Value Conservation Area and Special Use while removing the Special Stewardship Classification. The purpose of this rule revision was to increase the visibility of the important conservation strategies that were already occurring on State Forests.

It was clear that implementation of this rule revision would result in a major change to the FLMCS maps/data and would be required to be available for public comment for 30-days (OAR 629-035-0060). Upon approval of the rule revision, the districts were directed to begin the task of updating the FLMCS data with the goal of having draft maps available for a public comment process that would occur concurrently with the normal 45-day public comment period for the Annual Operations Plans.


The public comment period occurred between March 17 and May 2, 2014 and included three open houses that focused on the implementation of the revised FLMCS rules, especially the location and purpose of High Value Conservation Areas. The open house were held early in the public comment period at the Forest Grove, Astoria, and Tillamook district offices. In response to the public comment period, the Division received:

- Eight letters/emails
- Approximately 1,700 form letter type emails
- Fifteen comments generated through an on-line survey

Almost all of the comments were generally supportive of the implementation of the FLMCS. Many of the comments included a request that the Department improve the durability of the High Value Conservation Areas; this issue is currently being addressed through the Alternative Forest Management Plan Project.

Several individuals indicated that old growth should be classified as High Value Conservation Areas. After reviewing the management strategies for old growth in the Northwest Oregon, Southwest Oregon, and Elliott State Forest Management Plans, I have found that old growth stands (as defined in those plans) qualifies for classification as High Value Conservation Areas under the Unique, Threatened, or Endangered Plants subclass. I have directed the districts to include existing old growth stands as High Value Conservation Areas in their final FLMCS designations.

After reviewing the draft FLMC maps/data, the public input, the recommendations from the District Foresters and Area Directors, and consistent with OAR 629-035-0060 (2), I am approving the revised FLMCS for Astoria, Coos, Forest Grove, North Cascade, Southwest Oregon, Tillamook, West Oregon, and Western Lane Districts.



Doug Decker
State Forester

6.25.14

Date

APPENDIX A

Forest Land Management Classification Changes

The Forest Land Management Classification (FLMCS) is a method of describing the management emphasis of parcels of state forest land. The management emphasis identifies the extent to which a parcel of land can be managed for a variety of forest resources. It also identifies when a particular forest resource may need a more focused approach in its management, or possibly an exclusive priority in its management.

The framework of the FLMCS places all state forest land within one of four land management classifications. The classifications are: (1) General Stewardship, (2) Focused Stewardship, (3) Special Use, and (4) High Value Conservation Area. Subclasses are assigned for the specific forest resources that require a Focused Stewardship, Special Use or High Value Conservation Area Classification.

A major modification of the FLMCS is defined as one that cumulatively exceeds 500 acres within one year. When changes in excess of 500 acres are proposed, a 45 day public comment period is held to allow review and suggestions. The Forest Grove District is holding a public comment period on changes in the FLMCS in conjunction with the FY 2015 AOP comment period. At the close of the public comment period, the Department will consider the public comments and make final decisions on the proposed changes. The District Forester will forward the draft final changes along with any public comments to the NWO Area Director and the State Forester for review and final approval.

The current FLMCS for the Tillamook District was established in early 2009. In 2013 following a public comment period, the Board of Forestry modified the process to add a new classification called High Value Conservation. As a result of this significant change to the FLMCS, the District took this opportunity to re-evaluate all the classifications within the district. Most other updates were from correcting stream buffers and updating NSO and MM habitat. Changes were also made to Operationally Limited as areas are field verified.

The following tables from the Tillamook District Implementation Plan, 2009 have been modified to reflect these changes:

Table 2. Tillamook District Acres, by Stewardship Class and Fund

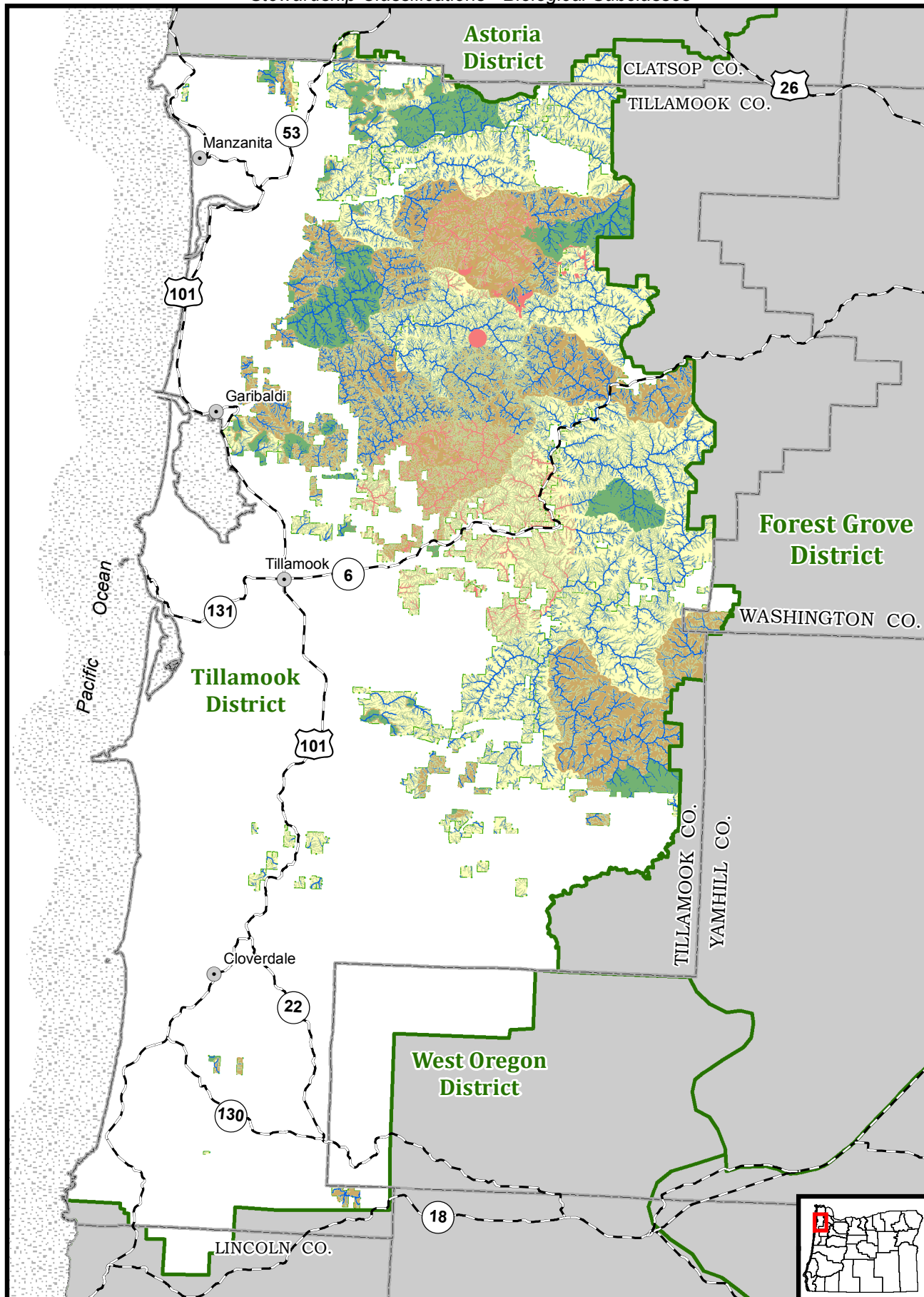
Classification	BOF	CSL	Total Acres
	Acres	Acres	Acres
Focused Stewardship	267,724	7,734	275,458
Special Use	55,558	1,294	56,852
High Value Conservation Areas	62,782	1,504	64,286
General Stewardship	40,414	557	40,971

APPENDIX A

Table 3. Tillamook District Acres, by Focused and Special Stewardship Subclasses

	Focused Stewardship	Special Use	High Value Conservation Area
Administrative Sites	0	6	0
Aquatic and Riparian Habitat	94,682	0	32,005
Cultural Resources	270	16	0
Deeds	3,999	1,856	0
Domestic Water Use	3,788	0	0
Easements	0	0	0
Energy and Minerals	0	98	0
Operationally Limited	0	53,107	0
Plants	0	0	6,749
Recreation	8,050	391	0
Research /Monitoring	4,670	61	0
Transmission	0	967	0
Visual	34,611	350	0
Wildlife	125,389	0	25,533

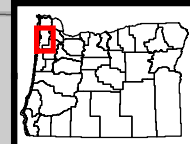
Tillamook District Stewardship Classifications - Biological Subclasses



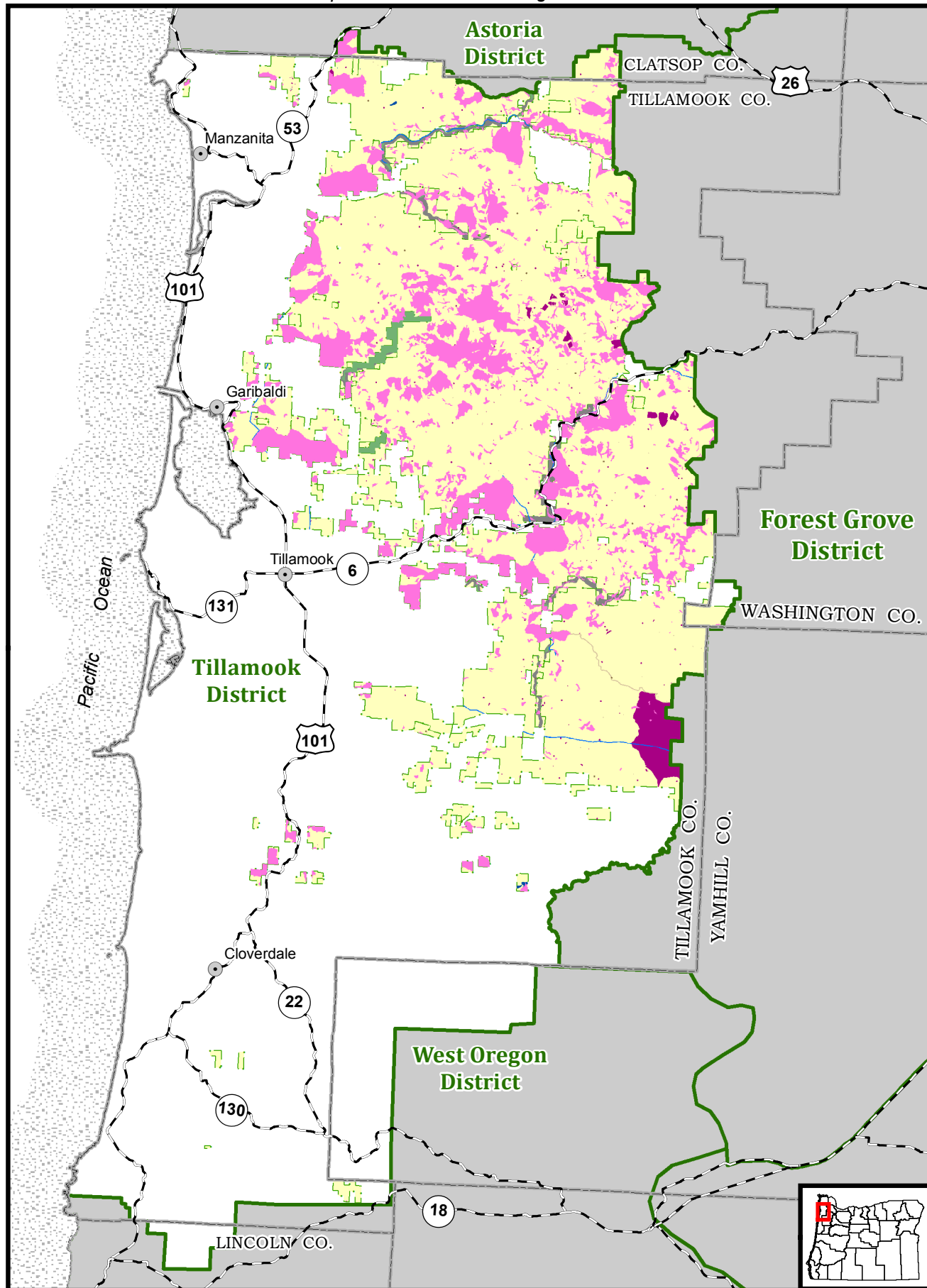
- | | |
|-------------------------------------|------------------------------|
| Adjacent District | ODF ownership |
| High Value Conservation Area | Focused Stewardship |
| Aquatic and Riparian Habitat | Aquatic and Riparian Habitat |
| Plants | Wildlife Habitat |
| Wildlife Habitat | |



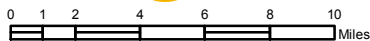
Tillamook District GIS
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05/15/2014



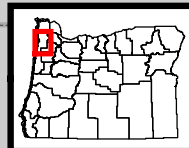
Tillamook District Stewardship Classifications - Management Subclasses



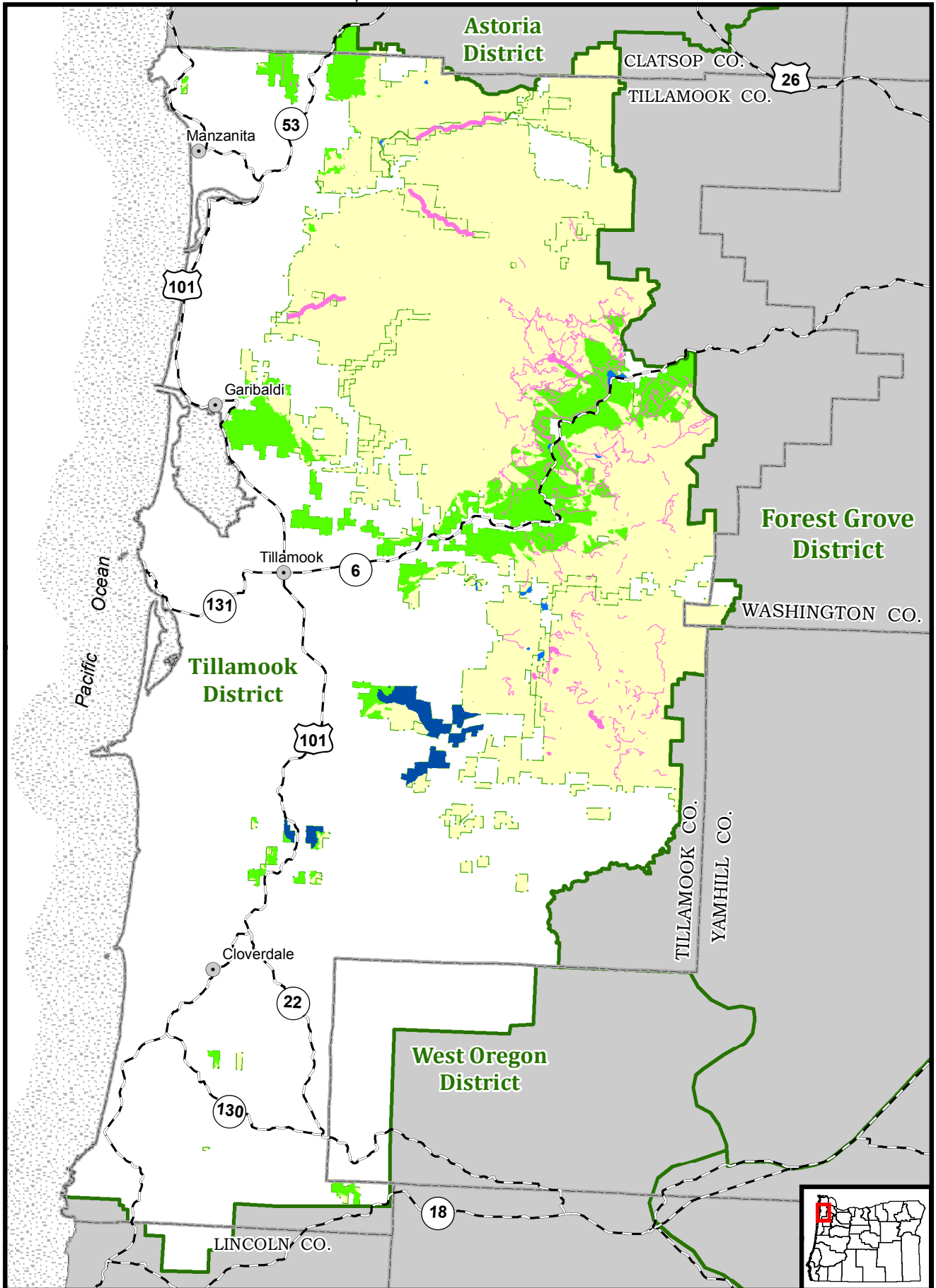
- | | | |
|-----------------------|----------------------------|----------------------|
| Special Use | Focused Stewardship | ODF ownership |
| Administrative Sites | Research/Monitoring | Adjacent District |
| Cultural Resources | Deeds | Cultural Resources |
| Deeds | Energy and Minerals | |
| Operationally Limited | Research/Monitoring | |
| Transmission | | |



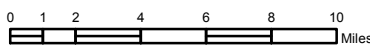
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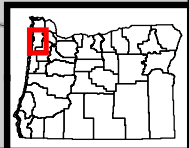
Tillamook District Stewardship Classifications - Social Subclasses



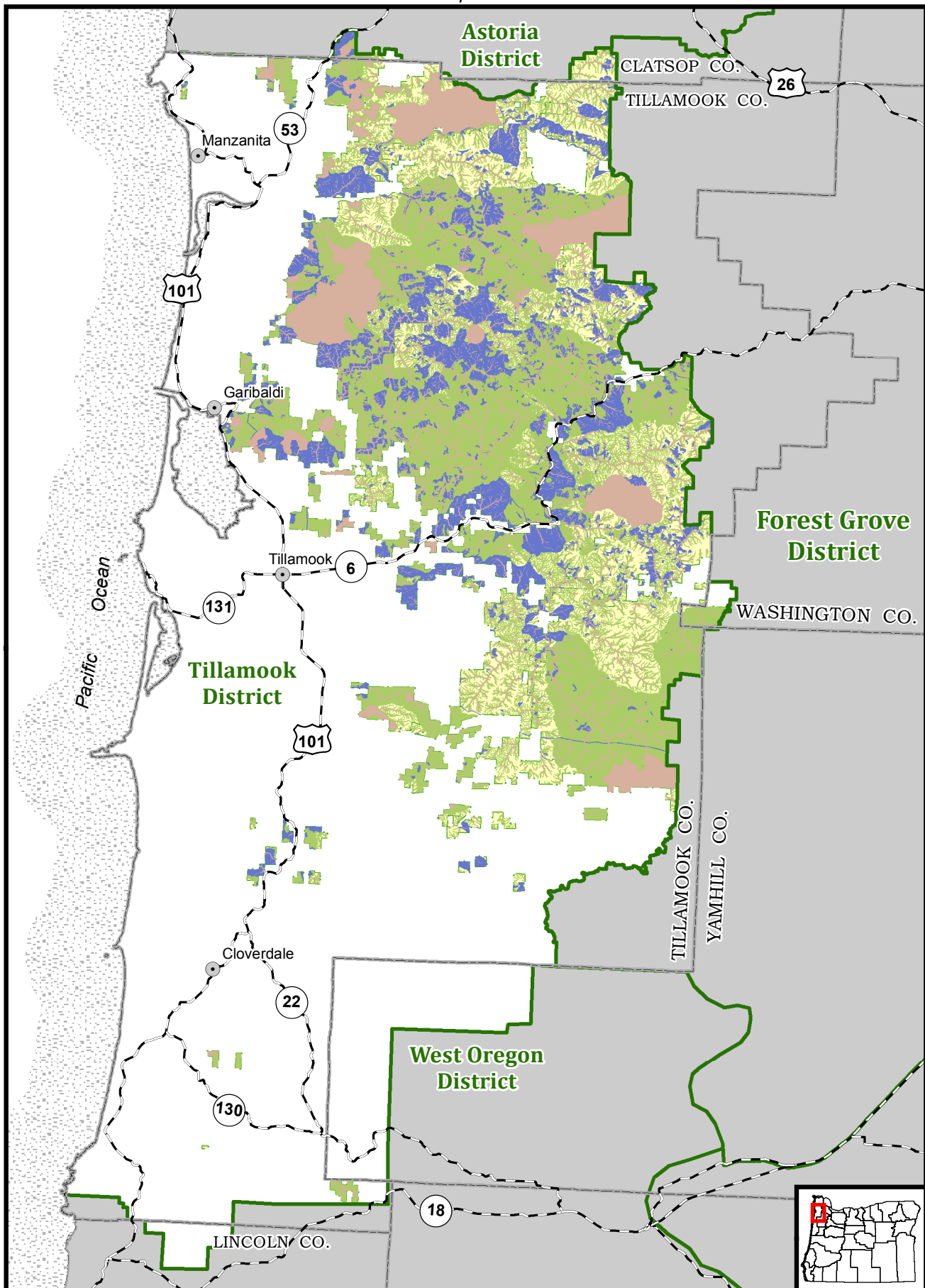
- | | |
|--------------------|----------------------------|
| Adjacent District | ODF ownership |
| Special Use | Focused Stewardship |
| Recreation | Visual |
| Visual | Recreation |
| | Domestic Water Use |



Tillamook District GIS
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05/15/2014



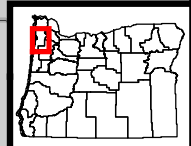
Tillamook District Stewardship Classifications



- High Value Conservation Area
- Special Use
- Focused Stewardship
- General Stewardship
- Adjacent District



Tillamook District GIS
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05/15/2014



APPENDIX B

TIMBER HARVEST OPERATIONS - FINANCIAL SUMMARY

District: Tillamook

Fiscal Year: 2015

Date: 06/23/2014

FINAL

Primary Operation	Fund %		County	Sale Quarter	Net Acres		Volume (MMBF)			Value		
	BOF	CSL			Partial Cut	Clear-cut	Con-ifer	Hard-woods	Total	Gross	Projects	Net
Ax Ridge	100%	0%	Tillamook	3	65	237	4.8	2.2	7.0	\$1,400,000	\$373,600	\$1,026,400
Between Wolves	100%	0%	Tillamook	2		200	3.2	0.6	3.8	\$723,600	\$285,340	\$438,260
Bling Ridge	100%	0%	Tillamook	1		429	7.4	0.3	7.7	\$1,630,400	\$133,082	\$1,497,318
Feldshaw	100%	0%	Tillamook	4		120	1.8	0.2	2.0	\$389,400	\$57,050	\$332,350
The Gilmore	100%	0%	Tillamook	2	610	55	4.1	0.6	4.7	\$895,175	\$174,518	\$720,657
High N Dry	100%	0%	Tillamook	3	10	657	8.5	3.2	11.7	\$2,113,310	\$565,050	\$1,548,260
Schetky Aneu	100%	0%	Tillamook	2		229	2.9	0.2	3.1	\$611,100	\$292,344	\$318,756
S'Moore	100%	0%	Tillamook	4	56	313	6.8	0.2	7.0	\$1,557,400	\$144,019	\$1,413,381
Total:					741	2,240	39.5	7.5	47.0	\$9,320,385	\$2,025,003	\$7,295,382

Alternate Operations

S'Moore ALT	100%	0%	Tillamook	ALT		262	4.9	0.4	5.3	\$1,162,725	\$32,883	\$1,129,842
Doghouse	100%	0%	Tillamook	ALT		117	1.5	0.1	1.6	\$321,750	\$17,073	\$304,677
Red Shack	100%	0%	Tillamook	ALT		237	2.3	1.4	3.7	\$692,525	\$115,380	\$577,145

10.6

APPENDIX B

PRIMARY HARVEST OPERATIONS - FOREST RESOURCE SUMMARY

District:

Tillamook

Fiscal Year 2015

Date: 02/28/2014

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

Primary Harvest Operations	Unit (Optional)	Forest Health Issues ¹	Invasive Species	LYR/OFS Structures ²	Landscape Design LYR/OFS ³	Install/Replace Culverts on Fish Bearing / Perennial Streams	Harvesting within 100' of Fish Bearing Stream	Domestic Water Source	Potential Stream Habitat Improvement ⁴	Within Aquatic Anchor	Within Terrestrial Anchor	Operating within a NSO Provincial Circle	Within 1/4 mile of MIMMA	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
Ax Ridge	232	x	x		x	x								x		x		x	x	Bridge Creek rock work adjacent to area
Ax Ridge	234	x	x		x									x					x	
Ax Ridge	235	x	x					x						x		x			x	Property line survey needed
Between Wolves	112									x				x			x			OHV trails w/in sale & Permaent plot
Between Wolves	113									x				x			x			OHV trails within sale
Bling Ridge	316	x	x						x					x			x			
Bling Ridge	317	x	x		x					x				x		x	x	x		Old cabin sites in Cultural Res. Layer
Bling Ridge	416	x	x							x				x			x	x		Old cabin sites in Cultural Res. Layer
Bling Ridge	409	x	x		x					x				x		x	x			
Feldshaw	75	x								x				x						
The Gilmore	313				x									x			x			Property line
The Gilmore	314				x									x			x			
The Gilmore	315				x									x			x			
The Gilmore	415				x		x							x			x			
High N Dry	84				x									x		x	x			
High N Dry	196													x						
High N Dry	200													x						
High N Dry	310				x									x		x				
High N Dry	311									x				x						
High N Dry	312				x					x				x		x				
Schetky Aneu	283	x							x					x						Seasonal restrictions on haul route
Schetky Aneu	329	x												x		x				Seasonal restrictions on haul route

APPENDIX B

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	Within 1/4 mile of MMMA	T&E Fish Adjacent to Harvest Unit / Haul Route ⁵	T&E Plants	Geotechnical Issues Needing Field Review	Recreation Sites	Cultural Resources	Scenic Resources	Other Resources or Issues
S'Moore	32		x		x	x			x	x				x			x	x	x	Moore Ck culvert replaced, Class 2 scenic
S'Moore	33		x						x	x				x			x		x	OHV trails
S'Moore	296		x											x			x			OHV trails
S'Moore	327		x							x				x		x	x			Old COPE study area
* Plantation Douglas-fir in the Burn areas has SNC - usually moderate symptoms which translates into reduced growth.																				

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

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

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

⁴ The final decision on these projects will occur during sale preparation and 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. The Pre-Operation Report identifies whether

APPENDIX B

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	Within 1/4 mile of MIMMA	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	
S'Moore Alt	98		x		x					x				x							
S'Moore Alt	411		x											x		x					
S'Moore Alt	413		x											x		x					Permanent plot in sale area
Doghouse	333	x	x											x							
Red Shack	201		x		x					x				x				x			Cultural Res identified along haul route
Red Shack	202		x		x					x				x				x			Cultural Res identified along haul route

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

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

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

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

⁵ This table lists harvest operations (units or log haul routes) that are adjacent to streams that are known to contain T&E fish. The Pre-Operation Report identifies whether T&E fish are present in the basin.

APPENDIX B

TIMBER HARVEST OPERATIONS - FOREST STRUCTURE SUMMARY

District: Tillamook

Fiscal Year 2015

Date: 06/23/2014

Current Structure	
	Total
REG	
CSC	
UDS	2,971
LYR	10
OFS	
Total	2,981

Post Harvest Structure				
REG	CSC	UDS	LYR	OFS
2,185		730	56	
			10	
2,185	0	730	66	0

Desired Future Condition		
GEN	LYR	OFS
1,939	723	309
	10	
1,939	733	309

APPENDIX B

FOREST ROADS SUMMARY

District: Tillamook

Fiscal Year: 2015

Date: 06/23/2014

Operation	Construction		Improvement		Other Projects	Total Project Costs	Gross Value of Operation	Total Cost as a percent of Gross Value	Comments
	Miles	Cost	Miles	Cost					
Ax Ridge	5.3	\$311,212	1.6	\$62,388	\$0	\$373,600	\$1,400,000	26.7%	
Between Wolves	1.9	\$160,000	2.7	\$125,340	\$0	\$285,340	\$723,600	39.4%	
Bling Ridge	1.6	\$35,229	6.4	\$97,853	\$0	\$133,082	\$1,630,400	8.2%	
Feldshaw	0.8	\$57,050	0.0	\$0	\$0	\$57,050	\$389,400	14.7%	
The Gilmore	3.1	\$161,109	0.0	\$0	\$13,409	\$174,518	\$895,175	19.5%	11 miles Road maint
High N Dry	3.6	\$330,668	10.2	\$234,382	\$0	\$565,050	\$2,113,310	26.7%	
Schetky Aneu	2.6	\$220,523	5.3	\$71,821	\$0	\$292,344	\$611,100	47.8%	
S'Moore	3.5	\$112,621	0.9	\$1,398	\$30,000	\$144,019	\$1,557,400	9.2%	Replace culvert Moore Ck - Improve Hwy 6 jct
Total	22.4	\$1,388,413	27.1	\$593,181	\$43,409	\$2,025,003	\$9,320,385	21.7%	

Alternate Operations

Doghouse	0.2	\$9,371	0.3	\$6,700	\$1,002	\$17,073	\$321,750	5.3%	0.7 miles Road maint
Red Shack	1.3	\$83,686	5.1	\$31,694	\$0	\$115,380	\$692,525	16.7%	
S'Moore ALT	1.2	\$28,782	2.7	\$4,101	\$0	\$32,883	\$1,162,725	2.8%	
						\$0			
						\$0			
						\$0			

Road Projects Not Funded by Harvest Operations

Operation	Construction		Improvement		Other Projects	Total Project	Funding	Comments
	Miles	Cost	Miles	Cost				
Roadside Spray					\$22,000	\$22,000	FDF	Approximately 170 miles
Upper East Beaver Creek Access					\$47,000	\$47,000	BLM Grant	Connect BSM Road to Upper East Beaver Roads. Provides fire access.
						\$0		
						\$0		
						\$0		
						\$0		

APPENDIX B

APPENDIX B

REFORESTATION AND YOUNG STAND MANAGEMENT SUMMARY

District: Tillamook

Fiscal Year: 2015

Date: 02/18/2014

ODF Funded Activities Management Activity	Board of Forestry			Common School Forest Lands			District	
	Acres Planned	Average Cost*/Acre	BOF Cost	Acres Planned	Average Cost*/Acre	CSL Cost	Total Acres	Total Cost
Initial Planting	2,077	\$300.00	\$623,100.00			\$0.00	2,077	\$623,100.00
Interplanting	500	\$200.00	\$100,000.00			\$0.00	500	\$100,000.00
Underplanting			\$0.00			\$0.00	0	\$0.00
Tree Protection-Barriers			\$0.00			\$0.00	0	\$0.00
Tree Protection-Direct Control	2,000	\$40.00	\$80,000.00			\$0.00	2,000	\$80,000.00
Site Prep-Chemical- Aerial	1,675	\$40.00	\$67,000.00			\$0.00	1,675	\$67,000.00
Site Prep-Chemical- Hand	25	\$80.00	\$2,000.00			\$0.00	25	\$2,000.00
Site Prep -Slash Burning			\$0.00			\$0.00	0	\$0.00
Site Prep -Mechanical			\$0.00			\$0.00	0	\$0.00
Fertilization			\$0.00			\$0.00	0	\$0.00
Noxious weeds			\$0.00			\$0.00	0	\$0.00
Release-Chemical- Aerial	100	\$35.00	\$3,500.00			\$0.00	100	\$3,500.00
Release,-Chemical-Hand	50	\$90.00	\$4,500.00			\$0.00	50	\$4,500.00
Release-Mechanical-Hand	100	\$120.00	\$12,000.00			\$0.00	100	\$12,000.00
Precommercial Thinning			\$0.00			\$0.00	0	\$0.00
Pruning			\$0.00			\$0.00	0	\$0.00
Other			\$0.00			\$0.00	0	\$0.00
Totals	6,527	--	\$892,100.00	0	--	\$0.00	6,527	\$892,100.00

*Planting costs include all costs including seedlings

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

APPENDIX B

RECREATION MANAGEMENT SUMMARY

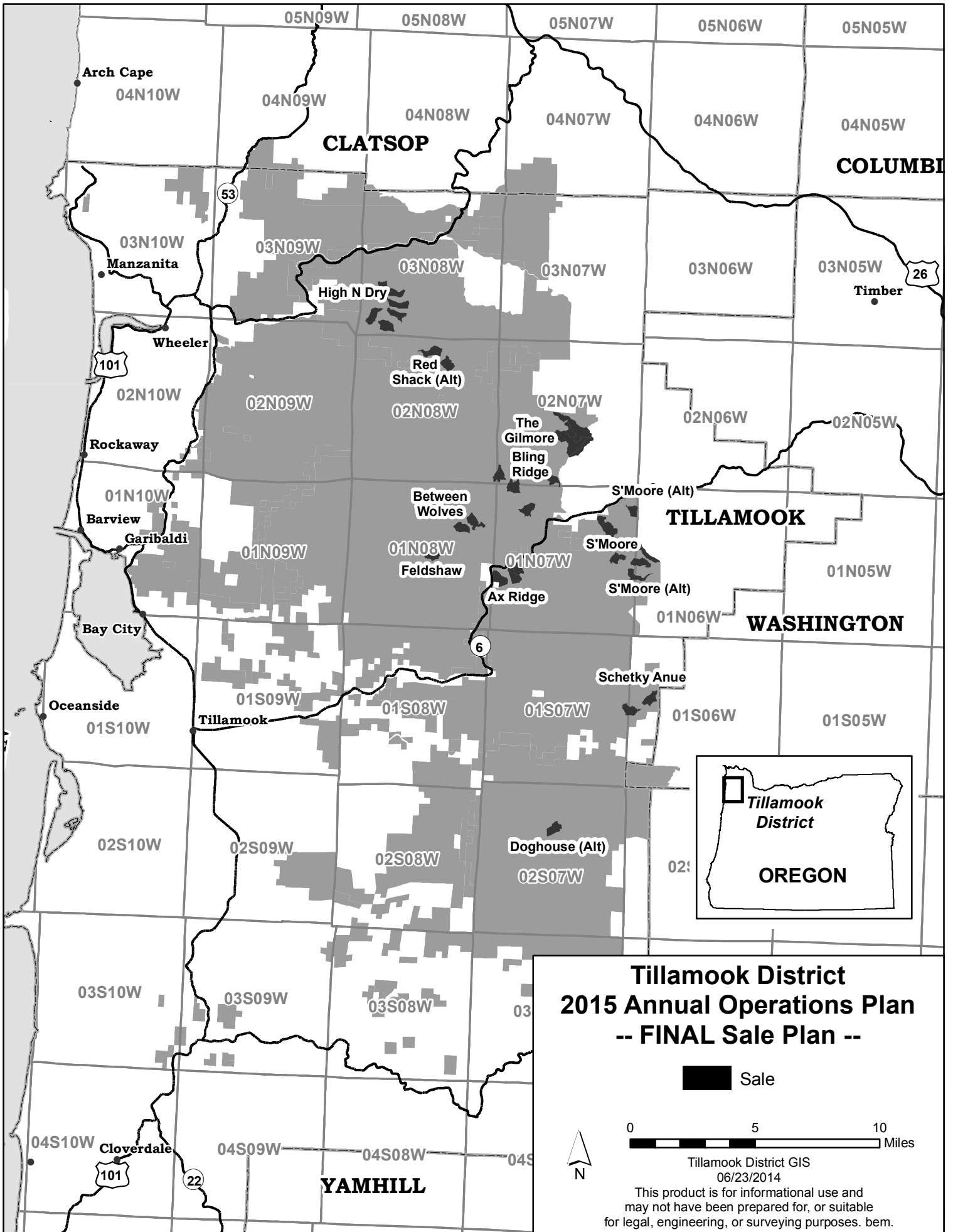
District: Tillamook

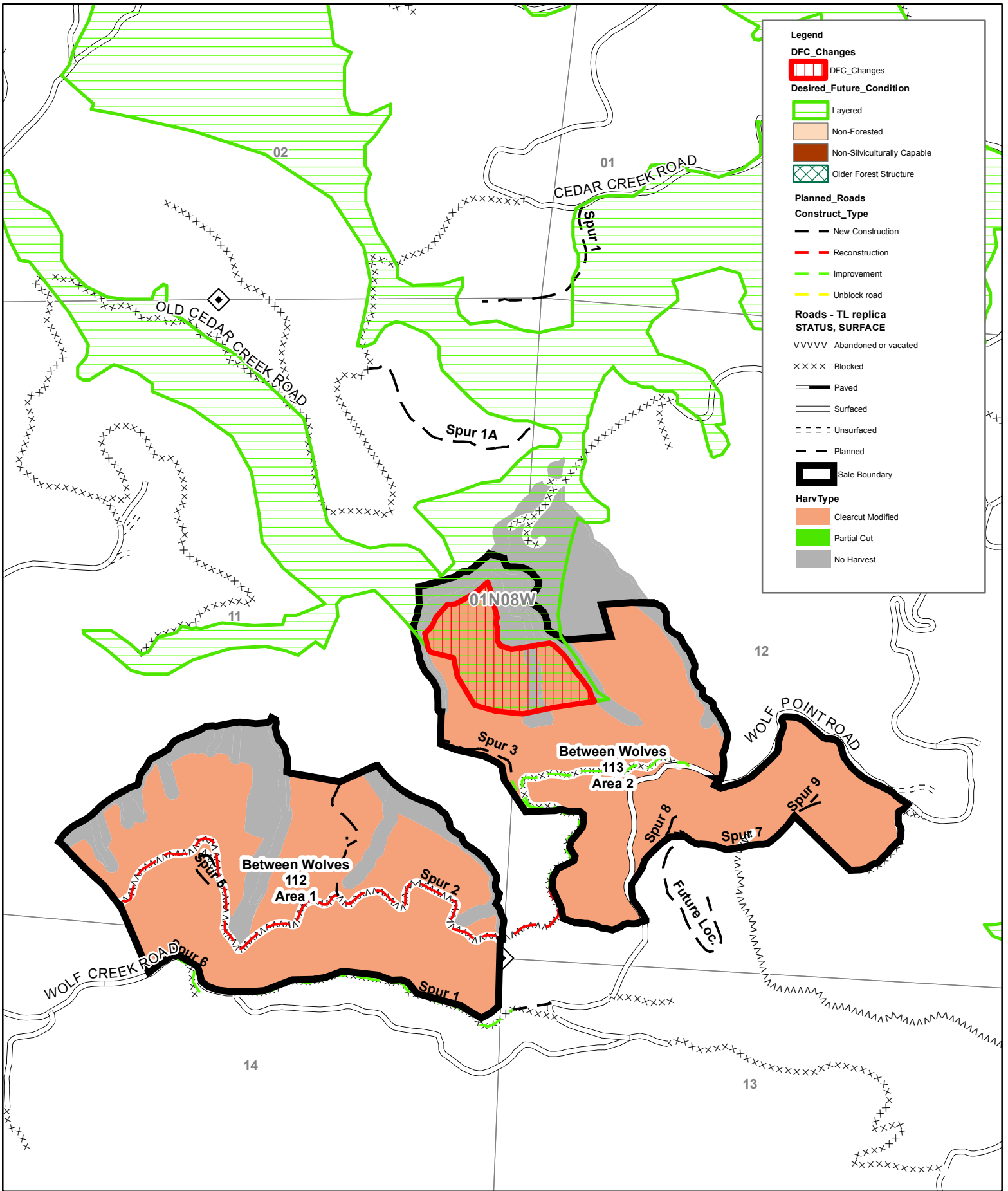
Fiscal Year: 2015

Date Filled Out:

02/20/2014

Operation	Construction Projects	Construction Cost (Funding)		Improvement Projects	Improvement Cost (Funding)		Operations/Maint. (Funding)		Total Costs	Comments	
		ODF	Other		ODF	Other	ODF	Other			
Facilities											
Campgrounds											
Jones Creek								\$12,500		\$12,500	
Jordan Creek								\$0	\$4,000	\$4,000	OPRD ATV Funds
Keenig Creek					\$ 29,027	\$19,147		\$6,500		\$54,674	other - LWCDF 50% grant for 2 -vault toilets
Diamond Mill									\$3,800	\$3,800	OPRD ATV Funds
Nehalem Falls								\$10,500		\$10,500	
Designated Dispersed Campsites											
Cedar Creek									\$5,200	\$5,200	OPRD ATV Funds
North Fork Wilson								\$1,200		\$1,200	
Jordan Creek									\$3,500	\$3,500	OPRD ATV Funds
Trask								\$350		\$350	
Hollywood									\$1,200	\$1,200	OPRD ATV Funds
Tahoe								\$1,200		\$1,200	
Cook Creek									\$2,000	\$2,000	OPRD ATV Funds
Morrison Eddy								\$1,200		\$1,200	
Day Use Areas											
Footbridge								\$4,000		\$4,000	
Sprague								\$1,025		\$1,025	
Stones Road								\$100		\$100	
Peninsula								\$1,300		\$1,300	
Edward Learners Loop								\$100		\$100	
										\$0	
Trailheads											
Coal Creek								\$400		\$400	
Cedar Butte								\$500		\$500	
Keenig Creek								\$500		\$500	
								\$0		\$0	
Trails											
Non-Motorized								\$500		\$500	
Motorized									\$300	\$300	OPRD ATV Funds
Other Operations											
Dumpsite Cleanup								\$1,000		\$ 1,000.00	
OHV Personal Equip									\$275	\$ 275.00	OPRD ATV Funds
OHV Volunteer Mgt.								\$500		\$ 500.00	OPRD ATV Funds
OHV Equip Rent/Maint									\$3,600	\$ 3,600.00	OPRD ATV Funds
OHV Vehicle O & R									\$1,200		OPRD ATV Funds
Law Enforcement								\$220,000	\$130,000	\$ 350,000.00	50% funded by OPRD ATV grant
									District Total	\$292,402	
									Other Total	\$174,222	
									TOTAL	\$465,424	



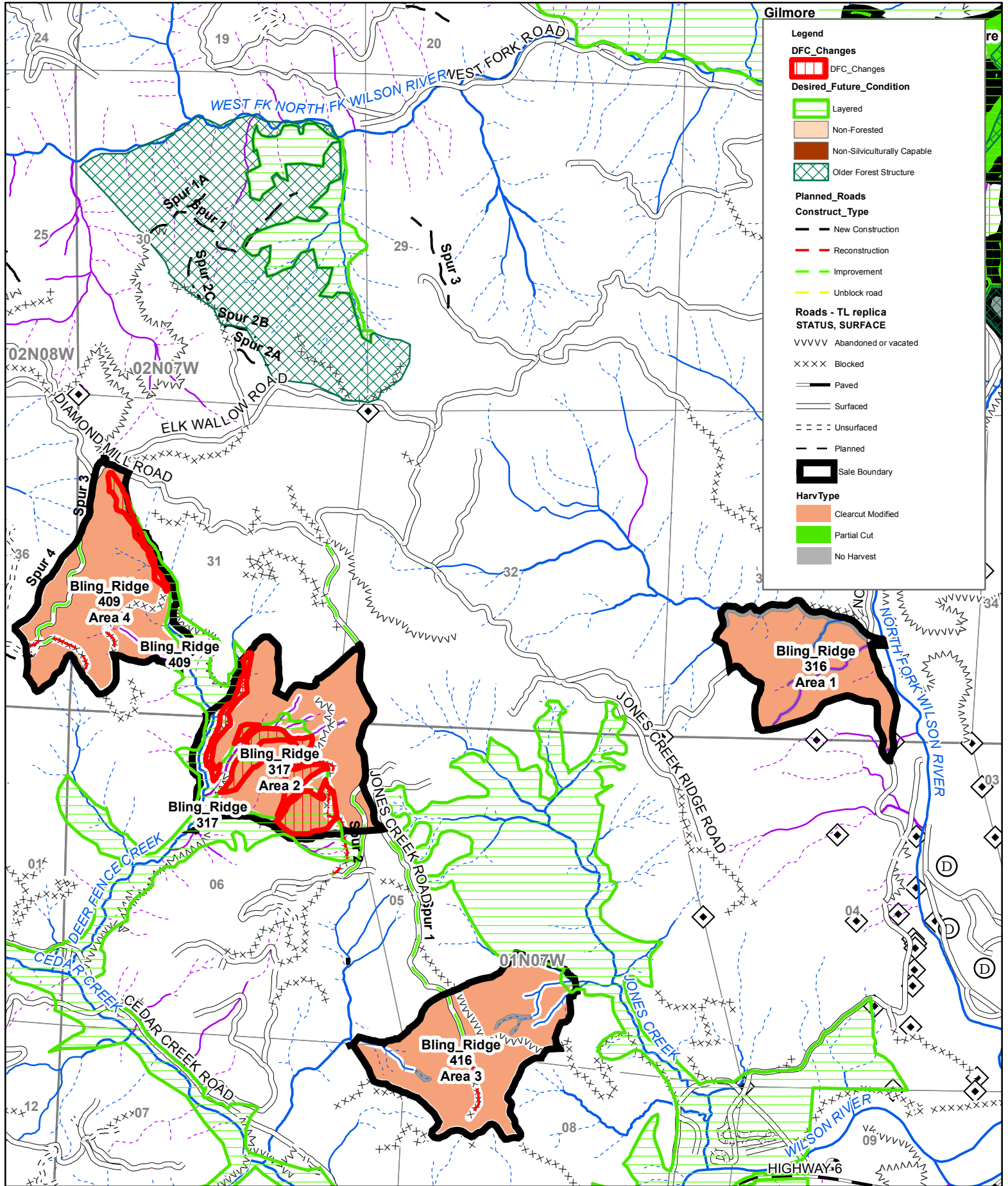


2015 Tillamook AOP

Remove 17 acres from LYR



1 inch = 1,000 feet

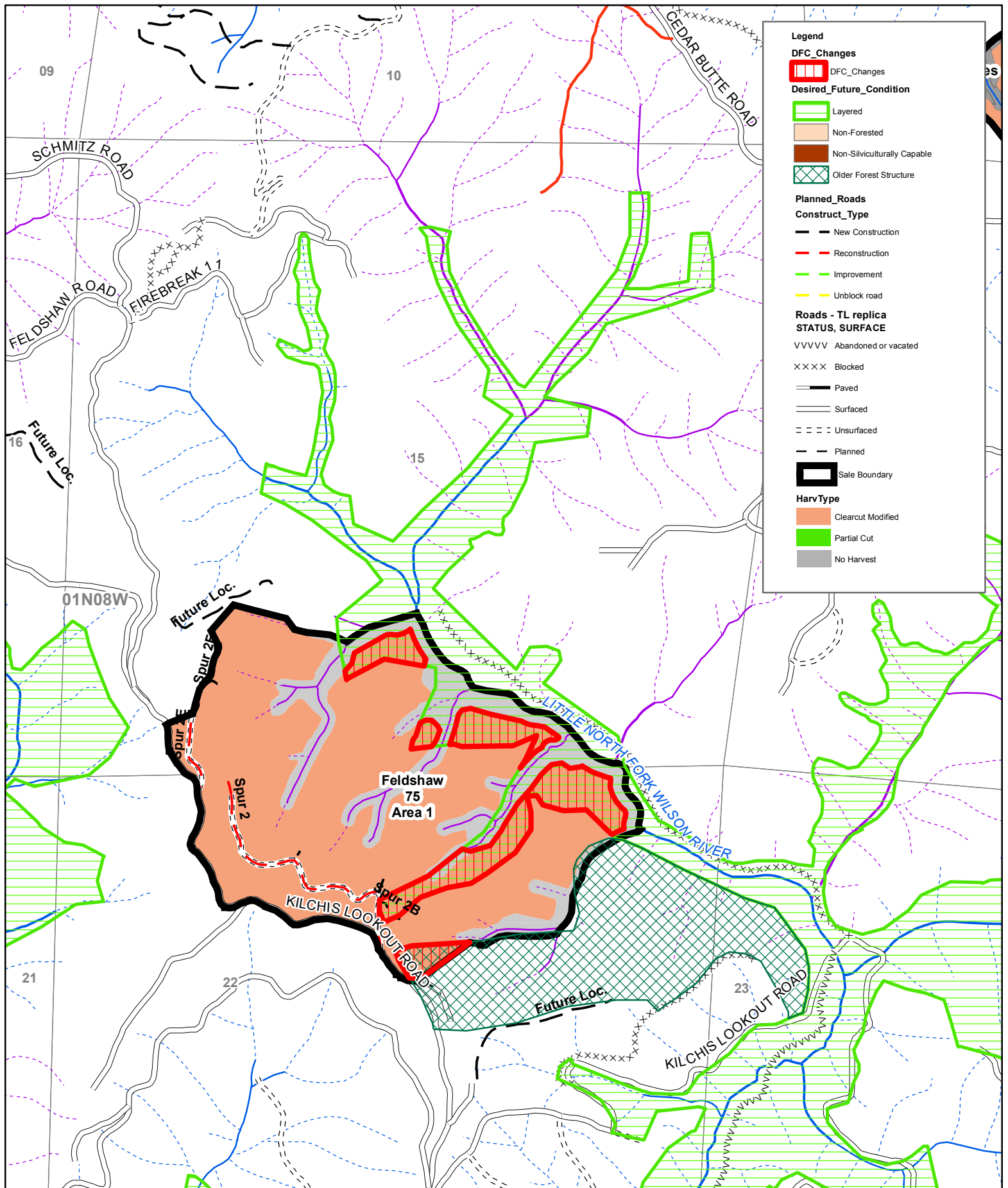


2015 Tillamook AOP

Remove 35 acres from LYR



1 inch = 2,000 feet



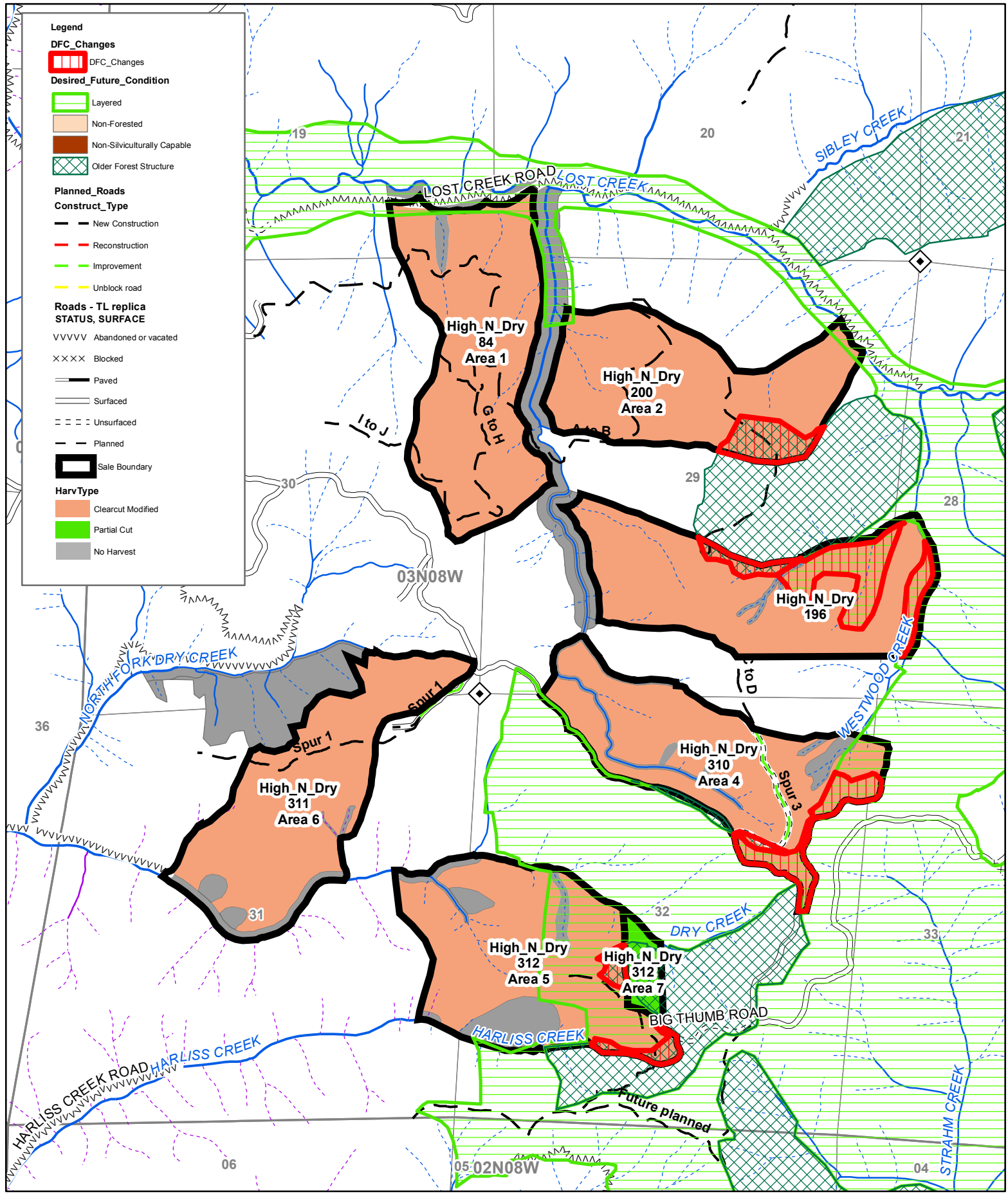
2015 Tillamook AOP

Remove 20 acres from LYR

Remove 2 acres from OFS



1 inch = 1,000 feet



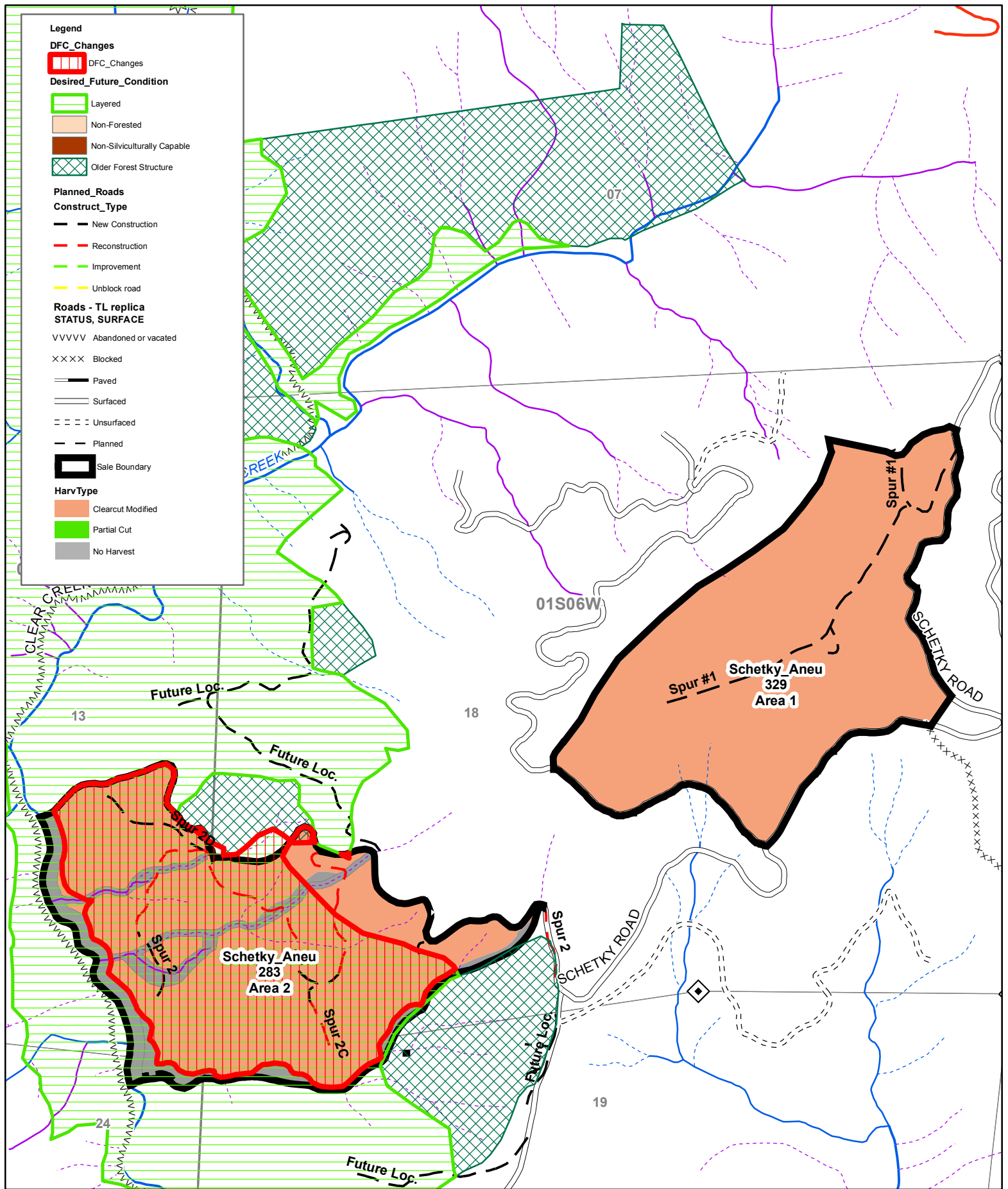
2015 Tillamook AOP

Remove 34 acres from LYR
 Remove 15 acres from OFS

1 inch = 1,500 feet

Change 7 acres from OFS to LYR





2015 Tillamook AOP

Remove 102 acres from LYR
 Remove <1 acre from OFS



1 inch = 1,000 feet

APPENDIX D

Tillamook ODF FY 2015 Comments

Sale-specific comments

ODFW recommends:

Axe Ridge

- Green trees (GTs) should be scattered or clumped in distribution. Placement of GTs should be avoided in green tree areas (GTAs) and riparian management areas (RMAs).
- Snag creation or extra wildlife trees to meet standard in FMP as existing levels if below 2 snags/acre.
- Good to see that rocked spur roads will be closed after sale is completed.

Between Wolves

- GTs should be scattered or clumped in distribution. Placement of GTs should be avoided in RMAs.
- Snag creation or extra wildlife trees to meet standard in FMP as existing levels are likely <2 snags/acre.
- New dirt spur roads should be closed after sale completed.

Bling Ridge

- GTs should be scattered or clumped in distribution. Placement of GTs should be avoided in RMAs and GTAs.
- Good to see dirt spur roads will be closed after sale completed.

Doghouse

- GTs should be scattered or clumped in distribution. Placement of GTs should be avoided in RMAs.
- Snag creation or extra wildlife trees to meet standard in FMP as existing levels are 1.2 snags/acre.
- New dirt and rocked spur roads should be closed after sale completed.

Feldshaw

- GTs should be scattered or clumped in distribution. Placement of GTs should be avoided in GTAs and RMAs.
- Snag creation or extra wildlife trees to meet standard in FMP as existing snag levels appear to be <2 snags/acre.
- New rocked spur roads should be closed after sale completed.

The Gilmore

- GTs should be scattered or clumped in distribution. Placement of GTs should be avoided in RMAs.

APPENDIX D

- Snag creation or extra wildlife trees to meet standard in FMP as existing snag levels appear to be <2 snags/acre.
- Good to see that new dirt spur roads will be closed after sale completed.

High N Dry

- GTs should be scattered or clumped in distribution. Placement of GTs should be avoided in RMAs and GTAs.
- Snag creation or extra wildlife trees to meet standard in FMP as existing snag levels are <2 snags/acre.
- New rocked spur roads should be closed after sale completed.

Red Shack

- GTs should be scattered or clumped in distribution. Placement of GTs should be avoided in RMAs and GTAs.
- Snag creation or extra wildlife trees to meet standard in FMP as existing snag level is <2 snags/acre.
- New rocked spur roads should be closed after sale completed.

Schetky Aneu

- GTs should be scattered or clumped in distribution. Placement of GTs should be avoided in RMAs and GTAs.
- Snag creation or extra wildlife trees to meet standard in FMP as existing snag levels are apparently <2 snags/acre.
- New dirt and rocked spur roads should be closed after sale completed.

S'Moore

- GTs should be scattered or clumped in distribution. Placement of GTs should be avoided in RMAs.
- Snag creation or extra wildlife trees to meet standard in FMP as existing snag levels are apparently <2 snags/acre.
- New dirt and rocked spur roads should be closed after sale completed.

General comments:

Green Trees

GTs within regeneration harvest units that are distributed primarily in clumped or scattered configurations maximize utility for wildlife, especially territorial songbirds. RMAs should stand alone as being adequate (without needing extra GTs) for protection of riparian resources. Placement of GTs should be avoided in RMAs and GTAs as their functions as structural components are minimized. Page 4-53 in the 2001 FMP states "Residual live trees will be retained to meet short-term habitat needs of species, to serve as future snags and down wood, and to provide legacy trees in future stands."

APPENDIX D

Down Wood

The sales with regeneration harvest in this AOP should meet or exceed the minimum standard of 600 cu ft of down wood per Landscape Management Strategy 3d on page 4-54 in the 2001 FMP which states “During regeneration harvest, retain an average of 600 to 900 cubic feet of hard conifer logs (decay class 1 and 2) per acre,…” Like with GTs, if wildlife trees are planned to be retained in lieu of creating down wood at harvest, those trees should be scattered and clumped across upland areas of harvest units to be most effective. Many wildlife species utilizing down wood (e.g. amphibians and reptiles) have limited mobility; placement of down wood in upland portions of harvest units is important for habitat connectivity to reduce the likelihood that these populations become isolated.

Snags

Regeneration harvest units should meet the Landscape Management Strategy (LMS) 3c on page 4-53 in the 2001 FMP related to snags (“Manage to provide at least 2 snags per acre, at least 15 inches in diameter, on average across the landscape on each district.”). In stands with smaller diameter trees, it may be appropriate to defer snag creation with the retention of wildlife trees, but in larger diameter stands, snag creation should be pursued, if needed. Like with GTs, if wildlife trees are planned to be retained in lieu of creating snags at harvest, those trees should be scattered and clumped across upland areas of harvest units to be most effective for wildlife. Putting all, most or many of the wildlife trees for future snags in GTAs or in/along RMAs provides limited benefits to forest wildlife species.

Roads

This AOP calls for a substantial amount of new road construction, or in some cases, reconstruction. These new roads, many of them spurs, create negative impacts to wildlife habitat. If not closed soon after administrative use, they continue to impact wildlife, especially big game. Impacts to wildlife not only include loss of habitat, but disturbance and increased vulnerability to hunting and poaching. New spur roads should be closed after administrative use, and reopened when needed.

Comments on Draft Snag and Down Wood Guidelines

- The guidance document uses a standard for trees of >17” dbh for modified clear-cut prescriptions as the threshold for deciding when to create snags and/or down wood. Yet the FMP uses a standard of 15” for minimum size for snags. Why the difference?
- Is it implied that with stands where the average dbh is <17” that there will be no snag or down wood creation?
- How far away is ODF from replacing the word “may” with more definitive terms? The word “may” is weaker than “should”, and is the weakest legal direction for compliance. Essentially, there is no legal obligation to follow the guidelines when the word “may” is used.

APPENDIX D

Tillamook ODF FY 2015 Comments

(2/12/14 Addendum)

ODFW recommends that ODF continues to work cooperatively and build relationships with the Oregon Hunter's Association (OHA) by seeking opportunities to improve big game habitat and including OHA in discussions of recreation planning efforts.

APPENDIX D

Response to ODFW Comments on Draft Snag and Down Wood Guidelines

- The guidance document uses a standard for trees of >17” dbh for modified clear-cut prescriptions as the threshold for deciding when to create snags and/or down wood. Yet the FMP uses a standard of 15” for minimum size for snags. Why the difference?

The FMP uses 15” as a minimum size where snags are useful. Information on snags and the birds and animals that use snags suggests that the larger trees – 24+ DBH – are used by a larger variety of bird and animals, especially ones that require a larger cavity for nesting. If a stand has few trees just above the minimum size required for snags it would be detrimental to the development of the stand to turn the largest trees into snags. This removes the opportunity to grow larger trees and keep a larger diameter component for green trees, future snag recruitment and larger down wood in the short and long term.

The State Forest managers and ADF in Tillamook decided as a district strategy to use a tree size larger than the minimum snag size in the FMP to guide decision making for creating snags. As stated above, the Tillamook managers did not believe it was good management to turn the largest trees in a stand into snags. For example, if the largest trees on a harvest unit meet 15” DBH and are only 5 trees per acre, we have made the decision to not make those into snags in the short term but grow them forward to larger trees for future stand components (snags, down wood, or green trees).

- Is it implied that with stands where the average dbh is <17” that there will be no snag or down wood creation?

That is somewhat correct. In those stands the trees will be left alive to grow to a larger size for future snags. Some will succumb and become snags over time. Down wood is being created through the harvests and our monitoring and transects have shown that we are meeting the 600 ft² Class 1 and 2 down wood required for regeneration harvests. The stands that may be harvested and may not have the required down wood would be small diameter conifer or hardwood stands. In these stands additional trees would be left to supplement future larger down wood.

- How far away is ODF from replacing the word “may” with more definitive terms? The word “may” is weaker than “should”, and is the weakest legal direction for compliance. Essentially, there is no legal obligation to follow the guidelines when the word “may” is used.

This guidance was created for the Tillamook district by the Tillamook district to assist foresters in stand management to meet the many FMP goals. The FMP Guidelines for Snag Management (4-54 NW FMP) were used to create the Tillamook guidance.

- “Snags will be retained in a variety of arrangements throughout the landscape. Uniform or random distributions as well as dispersed clumping will be used to provide for a variety of habitat and predatory/prey conditions.”
- “Where fewer than 2 hard snags per acre exist in a planned harvest unit, consider using snag creation prescriptions or additional live tree retention to supplement snag levels.”

APPENDIX D

- “Select larger diameter trees for snag creation; larger snags can be used by more species than smaller snags”.
- “Snag creation prescriptions may be applied in any partial cut harvests, but will be emphasized in larger diameter stands.”

The district guidance is not intended to be a legal document or direction. It provides foresters assistance (guidance) for consistency and FMP measures in a landscape of dense small timber with growth impacted by Swiss needle cast or hardwood dominated stands while balancing efficient harvest plans as well as managing short and long term decadence.

APPENDIX 'E'
PUBLIC COMMENTS ON THE TILLAMOOK DISTRICT
2015 ANNUAL OPERATIONS PLAN

Introduction

The Tillamook District 2015 Annual Operations Plan (AOP) was included in the formal public comment period held from March 17th through May 2nd, 2014 by the Oregon Department of Forestry. The purpose of the public comment period was to provide a time for the districts to share their plans with the public and for the public to ask questions and offer comments. After the public comment process was completed, the AOPs were revised if needed, then reviewed, and approved by the District Forester.

At the end of the public comment period ODF's headquarters in Salem had received several comments specific to Tillamook District's AOP.

Evaluation Process

The following process to evaluate and resolve the statements related to the AOP:

1. Review each document to identify and evaluate individual statements;
2. Address each statement to 1) briefly show how the district intends to change the AOP based on the statement, or 2) why the statement does not warrant a change to the AOP.
3. Respond to the statement(s) in a letter to the commenter if a return address was provided. The response is either a very brief synopsis of how the district intends to change the AOP based on the statement, or an explanation of how the planned activity is consistent with the FMP, IP, and other policy or regulation;
4. The public comment documents and the department's responses will be placed on the web site as Appendix D. Commenters who supplied return addresses were sent a personal response and were given the opportunity notify ODF if they did not want to have their public comment document posted on the web site.

Tillamook District Specific Changes

- Language was added noting that ODF will partner with TEP on a fish passage feasibility study on Patterson Creek.
- OHA cooperative projects:
 - Information was added regarding the Elk Forage Pilot Project Plan.
 - Seasonal gate closures to increase walk-in hunting opportunities will continue.
- Language was added clarifying assistance from South Fork Prison Camp who will both plant and trap 1000 acres.
- Language was added regarding the Nestucca/Tillamook Fish Passage Partnership.



Oregon

John A. Kitzhaber, MD, Governor

Department of Forestry

Tillamook District
5005 Third Street
Tillamook, OR 97141
503-842-2545
FAX 503-842-3143



June 27, 2014

Dear Ted Chu,

Thank you for your interest in State Forests and the time you took to complete the on-line survey regarding the implementation of High Value Conservation Areas and on our 2015 Annual Operations Plan. The management plan for the State Forests in Northwest Oregon is designed to achieve a balance of environmental, economic, and social outcomes, and includes strategies to protect and enhance many of the resources.

Some of the resources that are valued and protected through this plan, include:

- Harvesting of existing old growth is prohibited under this plan, and it has the goal of increasing the amount of Older Forest Structure (a forest type similar to old growth) from about 3 percent of the landscape to 15 or 20 percent of the landscape.
- Providing protection for approximately 90 northern spotted owl sites covering approximately 72,000 acres and 166 sites for marbled murrelets covering approximately 13,000 acres.
- Extensive riparian management strategies for the protection of water quality and fish habitat. These strategies are being tested, and if necessary, revised through formal scientific research, which include the [Ripstream](#) project and the [Trask Paired Watershed Study](#). Research conducted to date has shown that these strategies are protecting water quality and providing important components for fish habitat.
- The forest management plan primary strategy of "Structure Base Management" has the goal of producing all of the forest stand structure types that occurred historically across the landscape. This strategy is intended to provide habitat for all of the wildlife and plants that occur on these lands.
- While harvesting is occurring on these forest to provide jobs and building materials, the total standing wood volume on these forests is anticipated to increase by 25 percent over the next 50 years, with a corresponding increase in carbon storage.
- The State Forests Division has a strong recreation program that serves a multitude of users, including hiking, mountain biking, horseback riding, various off-highway vehicles, fishing, and camping. While the Division is vigorously pursuing alternative funding sources, such as grants and Oregon's Off-Highway Vehicle Fund, the majority of the funding for recreation programs is from timber sale revenues.

The Forest Land Management Classification System designations will continue to reflect the Northwest Forest Management Plan.

Again, thank you for the time and interest you took to comment on our plans.

Sincerely,

Kate Skinner
District Forester
Tillamook District



Oregon

John A. Kitzhaber, MD, Governor

Department of Forestry

State Forester's Office
2600 State Street
Salem, OR 97310-1336
503-945-7200
FAX 503-945-7212
www.oregon.gov/ODF

June 27, 2014



"STEWARDSHIP IN FORESTRY"

Dear Fauna-June Fauth,

Thank you for your interest in State Forests and the time you took to complete the on-line survey regarding the implementation of High Value Conservation Areas and on our 2015 Annual Operations Plan. The management plan for the State Forests in Northwest Oregon is designed to achieve a balance of environmental, economic, and social outcomes, and includes strategies to protect and enhance many of the resources.

Although the Department of Forestry has no ownership adjacent to Wildcat Mountain, we do own a block of land near the end of East Beaver Creek Road and as such would like to address your concerns regarding the impacts of clearcutting. While clearcutting is not aesthetically pleasing, it does provide habitat for a variety of wildlife species. Deer and elk browse the brush that grows in the recent clearcuts; it is especially beneficial where the clearcuts are mixed with mature forests, because the adjacent forests provide thermal cover for these species in cold weather. The abundance and diversity of birds is high in recent clearcuts and they provide essential habitat for birds such as the olive-sided flycatcher, the willow flycatcher, and the orange crowned warbler.

Some of the resources that are valued and protected through this plan, include:

- Harvesting of existing old growth is prohibited under this plan, and it has the goal of increasing the amount of Older Forest Structure (a forest type similar to old growth) from about 3 percent of the landscape to 15 or 20 percent of the landscape.
- Providing protection for approximately 90 northern spotted owl sites covering approximately 72,000 acres and 166 sites for marbled murrelets covering approximately 13,000 acres.
- Extensive riparian management strategies for the protection of water quality and fish habitat. These strategies are being tested, and if necessary, revised through formal scientific research include the [Ripstream](#) project and the [Trask Paired Watershed Study](#). Research conducted to date has shown that these strategies are protecting water quality and providing important components for fish habitat.
- The forest management plan primary strategy of "Structure Base Management" has the goal of producing all of the forest stand structure types that occurred historically across the landscape. This strategy is intended to provide habitat for all of the wildlife and plants that occur on these lands.
- While harvesting is occurring on these forest to provide jobs and building materials, the total standing wood volume on these forests is anticipated to increase by 25 percent over the next 50 years, with a corresponding increase in carbon storage.

- The State Forests Division has a strong recreation program that serves a multitude of users, including hiking, mountain biking, horseback riding, various off-highway vehicles, fishing, and camping. While the Division is vigorously pursuing alternative funding sources, such as grants and Oregon's Off-Highway Vehicle Fund, the majority of the funding for recreation programs is from timber sale revenues.

Again, thank you for the time and interest you took to comment on our plans.

Sincerely,

Kate Skinner
District Forester
Tillamook District



Oregon

John A. Kitzhaber, MD, Governor

Department of Forestry

Tillamook District
5005 Third Street
Tillamook, OR 97141
503-842-2545
FAX 503-842-3143



June 27, 2014

Dear Jaeden Hunter,

Thank you for your interest in State Forests and the time you took to complete the on-line survey regarding the implementation of High Value Conservation Areas and on our 2015 Annual Operations Plan. The management plan for the State Forests in Northwest Oregon is designed to achieve a balance of environmental, economic, and social outcomes, and includes strategies to protect and enhance many of the resources.

Some of the resources that are valued and protected through this plan, include:

- Harvesting of existing old growth is prohibited under this plan, and it has the goal of increasing the amount of Older Forest Structure (a forest type similar to old growth) from about 3 percent of the landscape to 15 or 20 percent of the landscape.
- Providing protection for approximately 90 northern spotted owl sites covering approximately 72,000 acres and 166 sites for marbled murrelets covering approximately 13,000 acres.
- Extensive riparian management strategies for the protection of water quality and fish habitat. These strategies are being tested, and if necessary, revised through formal scientific research include the [Ripstream](#) project and the [Trask Paired Watershed Study](#). Research conducted to date has shown that these strategies are protecting water quality and providing important components for fish habitat.
- The forest management plan primary strategy of “Structure Base Management” has the goal of producing all of the forest stand structure types that occurred historically across the landscape. This strategy is intended to provide habitat for all of the wildlife and plants that occur on these lands.
- While harvesting is occurring on these forest to provide jobs and building materials, the total standing wood volume on these forests is anticipated to increase by 25 percent over the next 50 years, with a corresponding increase in carbon storage.
- The State Forests Division has a strong recreation program that serves a multitude of users, including hiking, mountain biking, horseback riding, various off-highway vehicles, fishing, and camping. While the Division is vigorously pursuing alternative funding sources, such as grants and Oregon’s Off-Highway Vehicle Fund, the majority of the funding for recreation programs is from timber sale revenues.

To address your comment specifically, all Department of Forestry managed lands are subject to HVCA designations where applicable. As such, there are numerous acres within these basins currently designated as HVCA’s, many of which are in the riparian areas. The Salmonberry basin contains a large block of private ownership which stretches approximately 3 miles along the south side of the river. The private ownership is not subject to HVCA designation, however, any management performed must meet Forest Practices Act requirements for buffers and stream protection.

Again, thank you for the time and interest you took to comment on our plans.

Sincerely,

Kate Skinner
District Forester
Tillamook District



Oregon

John A. Kitzhaber, MD, Governor

Department of Forestry

Tillamook District
5005 Third Street
Tillamook, OR 97141
503-842-2545
FAX 503-842-3143



June 27, 2014

Dear Bob Rees,

Thank you for your interest in State Forests and the time you took to complete the on-line survey regarding the implementation of High Value Conservation Areas and on our 2015 Annual Operations Plan. The management plan for the State Forests in Northwest Oregon is designed to achieve a balance of environmental, economic, and social outcomes, and includes strategies to protect and enhance many of the resources.

Some of the resources that are valued and protected through this plan, include:

- Harvesting of existing old growth is prohibited under this plan, and it has the goal of increasing the amount of Older Forest Structure (a forest type similar to old growth) from about 3 percent of the landscape to 15 or 20 percent of the landscape.
- Providing protection for approximately 90 northern spotted owl sites covering approximately 72,000 acres and 166 sites for marbled murrelets covering approximately 13,000 acres.
- Extensive riparian management strategies for the protection of water quality and fish habitat. These strategies are being tested, and if necessary, revised through formal scientific research include the [Ripstream](#) project and the [Trask Paired Watershed Study](#). Research conducted to date has shown that these strategies are protecting water quality and providing important components for fish habitat.
- The forest management plan primary strategy of "Structure Base Management" has the goal of producing all of the forest stand structure types that occurred historically across the landscape. This strategy is intended to provide habitat for all of the wildlife and plants that occur on these lands.
- While harvesting is occurring on these forest to provide jobs and building materials, the total standing wood volume on these forests is anticipated to increase by 25 percent over the next 50 years, with a corresponding increase in carbon storage.
- The State Forests Division has a strong recreation program that serves a multitude of users, including hiking, mountain biking, horseback riding, various off-highway vehicles, fishing, and camping. While the Division is vigorously pursuing alternative funding sources, such as grants and Oregon's Off-Highway Vehicle Fund, the majority of the funding for recreation programs is from timber sale revenues.

Again, thank you for the time and interest you took to comment on our plans.

Sincerely,

Kate Skinner
District Forester
Tillamook District



Oregon

John A. Kitzhaber, MD, Governor

Department of Forestry

Tillamook District
5005 Third Street
Tillamook, OR 97141
503-842-2545
FAX 503-842-3143



June 27, 2014

Dear Nancy Webster,

Thank you for your interest in State Forests and the time you took to complete the on-line survey regarding the implementation of High Value Conservation Areas and on our 2015 Annual Operations Plan. The management plan for the State Forests in Northwest Oregon is designed to achieve a balance of environmental, economic, and social outcomes, and includes strategies to protect and enhance many of the resources.

Some of the resources that are valued and protected through this plan, include:

- Harvesting of existing old growth is prohibited under this plan, and it has the goal of increasing the amount of Older Forest Structure (a forest type similar to old growth) from about 3 percent of the landscape to 15 or 20 percent of the landscape.
- Providing protection for approximately 90 northern spotted owl sites covering approximately 72,000 acres and 166 sites for marbled murrelets covering approximately 13,000 acres.
- Extensive riparian management strategies for the protection of water quality and fish habitat. These strategies are being tested, and if necessary, revised through formal scientific research, which include the [Ripstream](#) project and the [Trask Paired Watershed Study](#). Research conducted to date has shown that these strategies are protecting water quality and providing important components for fish habitat.
- The forest management plan primary strategy of "Structure Base Management" has the goal of producing all of the forest stand structure types that occurred historically across the landscape. This strategy is intended to provide habitat for all of the wildlife and plants that occur on these lands.
- While harvesting is occurring on these forest to provide jobs and building materials, the total standing wood volume on these forests is anticipated to increase by 25 percent over the next 50 years, with a corresponding increase in carbon storage.
- The State Forests Division has a strong recreation program that serves a multitude of users, including hiking, mountain biking, horseback riding, various off-highway vehicles, fishing, and camping. While the Division is vigorously pursuing alternative funding sources, such as grants and Oregon's Off-Highway Vehicle Fund, the majority of the funding for recreation programs is from timber sale revenues.

Although Jetty Creek is not under state ownership, ODF is responsible for enforcing the Forest Practices Act. If you feel that there has been a violation of the Forest Practices Act you can contact your local ODF district office to speak with a Stewardship Forester who may be able to further assist you.

Again, thank you very much for your comments and interest in the Tillamook State Forest.

Sincerely,

Kate Skinner
District Forester
Tillamook District



Oregon

John A. Kitzhaber, MD, Governor

Department of Forestry

Tillamook District
5005 Third Street
Tillamook, OR 97141
503-842-2545
FAX 503-842-3143



June 27, 2014

Dear Kay Wooldridge,

Thank you for your interest in State Forests and the time you took to complete the on-line survey regarding the implementation of High Value Conservation Areas and on our 2015 Annual Operations Plan. The management plan for the State Forests in Northwest Oregon is designed to achieve a balance of environmental, economic, and social outcomes, and includes strategies to protect and enhance many of the resources.

Some of the resources that are valued and protected through this plan, include:

- Harvesting of existing old growth is prohibited under this plan, and it has the goal of increasing the amount of Older Forest Structure (a forest type similar to old growth) from about 3 percent of the landscape to 15 or 20 percent of the landscape.
- Providing protection for approximately 90 northern spotted owl sites covering approximately 72,000 acres and 166 sites for marbled murrelets covering approximately 13,000 acres.
- Extensive riparian management strategies for the protection of water quality and fish habitat. These strategies are being tested, and if necessary, revised through formal scientific research include the [Ripstream](#) project and the [Trask Paired Watershed Study](#). Research conducted to date has shown that these strategies are protecting water quality and providing important components for fish habitat.
- The forest management plan primary strategy of "Structure Base Management" has the goal of producing all of the forest stand structure types that occurred historically across the landscape. This strategy is intended to provide habitat for all of the wildlife and plants that occur on these lands.
- While harvesting is occurring on these forest to provide jobs and building materials, the total standing wood volume on these forests is anticipated to increase by 25 percent over the next 50 years, with a corresponding increase in carbon storage.
- The State Forests Division has a strong recreation program that serves a multitude of users, including hiking, mountain biking, horseback riding, various off-highway vehicles, fishing, and camping. While the Division is vigorously pursuing alternative funding sources, such as grants and Oregon's Off-Highway Vehicle Fund, the majority of the funding for recreation programs is from timber sale revenues.

Again, thank you very much for your comments and interest in the Tillamook State Forest. We are pleased to hear of your support for the High Value Conservation Areas and encourage you to continue to explore the many recreational (including hunting and fishing) opportunities found on the Forest.

Sincerely,

Kate Skinner
District Forester
Tillamook District