

TILLAMOOK DISTRICT



2016 ANNUAL OPERATIONS PLAN

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OVERVIEW

This plan describes the activities and outcomes that Oregonians can expect to see on the western side of the Tillamook State Forest for 2016. 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 approximately 1 million trees on 2,575 acres and conducting vegetation and animal management activities on an additional 2,544 acres to ensure the survival and growth of these plantations.
- Maintaining a 1,068 mile road network that provides access to timber harvest as well as various recreational opportunities, forest patrol and protection.
- Conduct individual surveys for northern spotted owls over more than 35,000 acres.
- Evaluate over 20 miles of streams to determine flow duration and approximately 2 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 sediment 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 \$10.7 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
 - 4 OHV staging areas
 - 89 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.
- Supporting the planning effort on the Salmonberry Rail and Trail project.
- Providing a firewood cutting program and miscellaneous forest products permits (salal, mushrooms, etc.) as done in 2015.
- Supporting ongoing research on the district, in partnership with research cooperatives and universities.

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INTRODUCTION

This annual operations plan (AOP) outlines activities planned on state-owned forestland managed by the Tillamook District for Fiscal Year 2016 (FY16), which begins July 1, 2015 and ends June 30, 2016. 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.

In June 2013, the Board of Forestry directed the State Forests Division to develop a new forest management plan to replace the current NW Oregon Forest Management Plan. The new plan is under development and may be adopted in 2015, during the implementation of this annual operating plan. The strategies in the new plan have not been fully developed but will likely be different than those in current forest management plans, so some planned activities in this annual operating plan may need to be revised to align with the new forest management plan. Some of the changes may be minor, such as a change in the width of a riparian area or in the number and location of green trees retained in clearcuts. Other changes may be more significant, such as changing a partial cut to a clearcut. Finally, the new FMP may result in increased harvest levels. This will be addressed by moving one or more of the Alternate Operations into Primary Operations.

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 FY16 time period. Actual on-the-ground operations will likely not occur during FY16 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 FY2016.

A 45-day public comment period runs from April 6, 2015 through May 20, 2015. 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.

Accomplishments of forest management activities that occurred under previous AOPs can be found in several reports, including the *State Forester's Annual Report for the Association of Oregon Counties*, the *Common School Forest Lands Annual Report*, and 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.¹

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 2016 harvest levels², the district has included 47.6 MMBF of timber harvest in this Annual Operations Plan (Table A-1).

The FY16 sale plan is estimated to generate gross revenues of approximately \$10,711,000 and net revenues of \$8,839,475. It is estimated that active management will result in producing approximately 41 million board feet of conifer volume, 6 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 type³ in this AOP to the harvest acre ranges specified in the IP. Total planned acres in this AOP are 3,089 net acres (approximately 1.2% of the district's total acreage) which achieves the annual volume objective. Harvest activities in this AOP consist of 14% partial cuts and 86% regeneration harvest, by acres. The anticipated harvest acres, volume, and revenue for each proposed operation in this AOP are listed in the "Harvest Operations – Financial Summary" table in Appendix B-1, while a vicinity map of these harvest operations can be found in Appendix C.

¹ 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>

² Oregon State Forests Guidance 2016 Annual Operations Planning Guidance dated July 1, 2014.

³ 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).

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		2016 AOP Objective
	Low	High	
Partial Cut Harvest	850	3,450	440*
Regeneration Harvest	800	3,150	2,649
Reforestation (Initial Planting)			2,075

*The partial cut acreage range in the Tillamook District IP was addressed in the 2015 AOP which included a minor modification to the Tillamook District IP for both 2015 and 2016 AOP.

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 2016 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 four primary sales, Clear Silence, Old Bungee, King Kong, Red Shack, where part of a sale area contains an area with a DFC of Layered and a prescription for modified clearcut. These sales are primarily mixed hardwood and Douglas-fir stands, where the Douglas-fir has moderate SNC. 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.) This AOP proposes removing 14 acres from the Landscape Design to provide better operational boundaries on one alternate timber sale and changes 111 acres from OFS to LYR to better define the characteristics of these stand which are being managed to develop complex structure. The changes in these areas maintain the balance of 20% Layered and 20% Older Forest Structure. These changes also maintain the total area designated for development into complex structure (40%), consistent with the IP and NW FMP.

Table 2. Minor changes to the Landscape Design.

Operation/Unit	Modification	Acres Added	Acres Removed
Clear Silence (Primary)	Change OFS to LYR	67 to LYR	67 from OFS
Broken Arrow (Alt)	Change OFS to LYR	45 to LYR	45 from OFS
The Simms (Alt)	Remove from OFS	--	15 from OFS
Total Change		112	127

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 2016 AOP.

Table 3. Summary of Harvest Operation within TAS

Terrestrial Anchor Site (TAS)	Current AOP (FY 2016) Planned Harvest		Cumulative Harvest (FY 2012 AOP to Present)	
	Clearcut	Partial Cut	Clearcut	Partial Cut
Entire District (AOP) (250,470 acres)	2,649	440	9,094	3,710
% of Acres	1.0%	0.2%	3.6%	1.5%
Bastard Creek	0	0	0	0
(5,021 acres) % of Acres	0%	0%	0%	0%
Ripple Creek	0	0	0	559
(3,831 acres) % of Acres	0%	0%	0%	14.6%
Miami	0	0	0	0
(6,396 acres) % of Acres	0%	0%	0%	0%
Hembre	0	0	0	0
(2,981 acres) % of Acres	0%	0%	0%	0%
Boundary	0	0	0	0
(2,138 acres) % of Acres	0%	0%	0%	0%
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 2016) Planned Harvest		Cumulative Planned Harvest 2014 AOP to Present	
	Clearcut	Partial Cut	Clearcut	Partial Cut
Entire District (AOP)	2649	440	7070	2131
(250,470 acres) % of Acres	1.0%	.2%	2.82%	0.85%
Ben Smith Creek	0	0	198	56
(3,602 acres) % of Acres	0.00%	0.00%	5.50%	1.55%
Cedar Creek	335	0	979	0
(7,214 acres) % of Acres	4.64%	0.00%	13.57%	0.00%
Coal Creek	0	0	0	0
(1,237 acres) % of Acres	0.00%	0.00%	0.00%	0.00%

Cook Creek	346	0	1225	249
(18,286 acres) % of Acres	1.89%	0.00%	6.70%	1.36%
East Fork S Fork Trask	681	0	919	100
(15,627 acres) % of Acres	4.36%	0.00%	5.88%	0.64%
Elkhorn	330	0	330	0
(3,860 acres) % of Acres	8.55%	0.00%	8.55%	0.00%
Foley Creek	0	0	0	0
(4,403 acres) % of Acres	0.00%	0.00%	0.00%	0.00%
Little N Fork Wilson	228	0	348	0
(10,310 acres) % of Acres	2.21%	0.00%	3.38%	0.00%
Miami	0	0	181	0
(13,910 acres) % of Acres	0.00%	0.00%	1.30%	0.00%
Middle Kilchis	0	0	313	0
(14,155 acres) % of Acres	0.00%	0.00%	2.21%	0.00%
S Fork Salmonberry	0	0	559	559
(2,813 acres) % of Acres	0.00%	0.00%	19.87%	19.87%
All Aquatic Anchors	1478	0	4493	1095
(95,417 acres) % of Acres	1.55%	0.00%	4.71%	1.15%

Summary of Timber Harvest Operations by Basin

In the following section, the commercial forest management operations planned for FY16 will be summarized in the context of the 11 management basins (5th field) on the Tillamook District. ODF and ODFW resource specialists reviewed the FY16 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	2016 AOP	
	Partial Cut	Clearcut
N. Fork Nehalem	0	0
Lower Nehalem	0	346
Short Sands	0	0
Miami	0	0
Kilchis	275	0
Tillamook Bay	0	0
Wilson	0	784
Tillamook River	0	0
Trask	165	1519
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

Red Shack – This sale consists of three areas totaling 346 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 and Area 3 are 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 is a 59 year-old stand of Douglas-fir and scattered red alder. Area 3 is a 48 year-old stand that is also a Douglas-fir stand with a mix of red alder. The designation for most of all the Areas is General Stewardship. Area 1 also contains 35 acres of Desired Future Condition (DFC) – LYR, Area 2 contains 30 acres of DFC – LYR, and Area 3 contains 3 acres of DFC - LYR. The hardwood dominated condition in these parts of the stands, adjacent to the riparian area, cannot be grown into Layered stands.

The prescription for these three 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. Access to Area 2 will be along a reconstructed legacy road and to Area 3 along an existing open spur road.

The district cultural resource layer shows resource sites along the haul route, Cook Creek Road. The ODOT cultural resources review identified a couple of historic trails in the vicinity of the sale location. These areas will be reviewed for potential resources in the field during sale layout and protected appropriately if needed.

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 FY16.

Miami Basin

There are no harvest operations planned in this basin for FY16.

Kilchis Basin

Old Bungee – Areas 1, 2, and 3 are in the Wilson River Basin. Areas 4 and 5 are in the Kilchis Basin. This sale consists of five areas totaling 610 net acres; 335 modified clearcut and 275 acres of partial cut. The stands are approximately 50 years old and mainly consist of Douglas-fir with scattered red alder. There is a small component of western hemlock in Area 5. The desired future condition for all areas is a mixture of General stewardship, layered, and older forest structure. The sale area is located near Cedar Butte, between the Kilchis and Wilson River basins. This sale area is in the Cedar Creek Aquatic Anchor.

Areas 2, 4, and 5 have had no previous management. Portions of Areas 1 and 2 were commercially thinned in 1997 (Kilchis Falls Thin). The prescription for Areas 1, 2, and 3 is modified clearcut to harvest the stand for volume and start a new mixed conifer stand. The new mixed conifer stands will be capable of being managed for a Layered condition where required. 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. Areas 4 and 5 will be partial cut to allow for a second cohort to become established and move towards an older forest structure.

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.

The ODF cultural resources (GIS) layer indicated that there is a cultural resource in the vicinity of the Old bungee timber sale. Further review will be done during sale layout and the site will be protected appropriately if needed.

Tillamook Bay Basin

There are no harvest operations planned in this basin for FY16.

Wilson River Basin

Lobo Canyon (Alternate) – This sale consists of two areas totaling 194 acres of modified clearcut. The stands are approximately 65 years old and consist of Douglas-fir with scattered red alder. The desired future condition for all areas is General stewardship. The

sale area is located near Cedar Creek in the Wilson River basin. This sale area is in the Cedar Creek Aquatic Anchor.

These stands have had no previous management. The prescription for both areas 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.

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.

Portions of the sale area have a visual classification of 2.

Broken Arrow (Alternate) – This sale consists of three areas totaling 335 acres of modified clearcut. The stands are approximately 55 years old and consist of Douglas-fir with scattered red alder. The desired future condition for all areas is a mixture of General stewardship, layered, and older forest structure. The sale area is located on Archer's Ridge between Jordan and Buck Creeks in the Wilson River basin.

These stands have had no previous management. The prescription for all areas is modified clearcut to harvest the stand for volume and start a new mixed conifer stand. The new mixed conifer stands will be capable of being managed for a Layered condition. 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.

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.

Three Little Ridges – This sale consists of three areas totaling 348 acres of modified clearcut. The stands are approximately 55 years old and consist of Douglas-fir, red alder, western hemlock, and Sitka spruce. The desired future condition for all areas is General stewardship. The sale area is located southeast of the Little North Fork Wilson River. Areas 1 and 3 are in the Little North Fork Wilson River Aquatic Anchor.

Area 3 has had no previous management. Areas 1 and 2 were commercially thinned in 2002 (Muesial Five Thin). The prescription for all areas 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.

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.

Tres Hembres – This sale consists of three areas totaling 346 acres of modified clearcut. The stands are approximately 50 years old and consist of Douglas-fir, red alder, and western hemlock. The desired future condition for all areas is General stewardship. The sale area is located on Hembre Ridge between the Wilson and Trask river basins.

All of Area 3 and portions of 1 and 2 were commercially thinned in 2000 (Ziggy Bob). The prescription for all areas 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.

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.

Both the district Cultural resources layer and the ODOT cultural resources review identified a couple of historic trails and a house site in the vicinity of the sale location. These areas will be reviewed for potential resources in the field during sale layout and protected appropriately if needed.

Tillamook River Basin

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

Trask Basin

Clear Silence – This sale consists of four areas totaling 426; 261 acres of modified clearcut and 165 acres of partial cut. The stands are approximately 55 to 60 years old and consist of Douglas-fir with scattered red alder. The desired future condition for the sale area is a mixture of General stewardship, layered, and older forest structure. The sale area is located near the confluence of Clear and Cedar Creeks in the Trask River basin.

None of these stands have had any prior management. The prescription for Areas 1, 2, and 3 is modified clearcut to harvest the stand for volume and start a new mixed conifer stand. The new mixed conifer stands will be capable of being managed for a Layered condition. 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. Area 4 will be partial cut to open up the canopy and promote understory development moving this stand toward a LYR and OFS condition.

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.

The ODOT cultural resources review indicated that there may potentially be some historic trail locations present either in or adjacent to the sale area. These areas will be reviewed for potential resources in the field during sale layout and protected appropriately if needed.

The Simms (Alternate) – This sale consists of nine areas totaling 949 net acres of modified clearcut. The stands range in age between 50 and 60 years-old and are Douglas-fir stand with scattered red alder. The Desired Future Condition (DFC) for all of the areas is General stewardship except for 14 acres in Area 2 which is currently in DFC – Older Forest Structure. These 14 acres will be changed to DFC – general stewardship. The sale area is located in upper Trask River basin. The majority of the sale area is in the Elkhorn Creek Aquatic Anchor.

All sale areas have been previously commercially thinned between (Gobbler’s Thin 1994, and Murphy Simmons Thin, 2002). The prescription for all areas 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.

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.

Both the district Cultural resources layer and the ODOT cultural resources review identified potential cultural resource site locations within the vicinity of the sale location. These include trail and “cabin” locations, including the former Murphy Camp site. These areas will be reviewed for potential resources in the field during sale layout and protected appropriately if needed.

Clay Pigeon – This sale consists of two areas totaling 205 net acres of modified clearcut. The stands are approximately 55 to 60 years old and consist of Douglas-fir with scattered red alder. The desired future condition for both areas is General stewardship. The sale area is located northeast of the East Fork Trask River, between Scotch and Pothole Creeks. This sale area is in the East Fork of the South Fork Trask Aquatic Anchor.

Area 1 has had no previous management. Area 2 was commercially thinned in 1994 (Steampot Thin). 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.

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.

The ODF cultural resources (GIS) layer indicated that there is a cultural resource in the vicinity of the Clay Pigeon timber sale. Further review will be done during sale layout and the site will be protected appropriately if needed.

King Kong – This sale consists of five areas totaling 476 net acres of modified clearcut. The majority of the stands are approximately 55 years old, with Area 2 being 45 years old. The stands consist of Douglas-fir with scattered red alder. The desired future condition for all areas except Area 2 is General stewardship. Area 2 contains 2 acres of LYR – Layered. The sale area is located southwest of the East Fork Trask River, near Bales and Miller Creeks. This sale area is in the East Fork of the South Fork Trask Aquatic Anchor.

Areas 1 and 2 have had small portions of their upper slopes commercially thinned in 2001 (Bushong Thin). The remainder of the sale area has had no previous management. The prescription for all areas is modified clearcut to harvest the stand for volume and start a new mixed conifer stand. The new mixed conifer stands will be capable of being managed for a Layered condition. 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.

There is permanent easement in place for access through a section of Stimson property along the South Fork Trask River.

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.

There are overhead power lines bordering the southern boundary of Area 2.

Fireworks – This sale consists of three areas totaling 330 net acres of modified clearcut. The stands are approximately 50 years old. The stands consist of Douglas-fir with scattered red alder. The desired future condition for all areas is General stewardship. The sale area is located in the upper Trask basin, near Laughlin and Elkhorn Creeks. This sale area is in the Elkhorn Creek Aquatic Anchor.

Area 1 has had no previous management. Areas 2 and 3 were commercially thinned in 2001 (La Cruz Thin). The prescription for all areas 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.

Property Line surveys may be required for Area 3.

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.

North Fork Nehalem Basin

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

Forest Roads Management

Overview

The Tillamook District road system consists of approximately 993 miles of rocked roads, 75 miles of unsurfaced spur roads, and 282 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 2016 AOP includes approximately 13.3 miles of new road construction and abandoned road reconstruction and 40.4 miles of road improvement. In addition, 4.1 miles of road will be closed or vacated resulting in a net gain of 9.2 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 2016 AOP timber sales will occur in the upper Wilson and Trask River Basins. Stockpiles in these basins will continue to be replenished to allow for adequate road maintenance rock. Hembre Ridge and Toll Roads will be targeted for alignment improvements and rocking. Also, the King Kong and Clay Pigeon timber sales will explore new rock source opportunities in the southern portion of the Trask Basin.

Road Construction

The majority of roadwork in this AOP is new road construction. Approximately 11 miles of new rocked roads will be constructed and 2.3 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 firefighting. 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 locked 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 150 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 2016 priority will be to survey a property line associated with the Fireworks timber sale. 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. Majority of the tools listed above are completed with contract labor. South Fork work camp provides annual production estimates to the district so additional labor can be scheduled and completed by contractors.

The types and anticipated amounts of reforestation and stand management activities that will occur in FY16 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 2015 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 if weather conditions are favorable. Tillamook will host this year's broadcast burn as part of a shared/rotating training opportunity. 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 1,944 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 2,075 acres of initial planting (over 900,000 seedlings). South Fork work camp will be responsible for planting approximately 90,000 seedlings.

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. South Fork work camp will be responsible for planting approximately 120,000 seedlings.

This district is addressing interplants in several units. The interplants are necessary because of heavy elk and mountain beaver 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 FY16.

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 400 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 200 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 FY16 is 3,100 acres. South Fork work camp will be responsible for trapping 1,500 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. Over the fiscal year district staff will survey and evaluate potential stands for pre-commercial thinning needs. 1000 acres are scheduled for PCT in FY16.

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 day use, white water kayaking and white water canoeing continues to grow while anglers increasingly use walk-in access for remote bank fishing opportunities. Anglers also 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.

At present the district manages 3 fee campgrounds, 4 OHV staging areas 2 of which charge for overnight use, 5 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.

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 FY 2016 are based on a flat budget consistent with 2015 levels. Tillamook District will work to protect the existing infrastructure, provide for public safety and sanitation, and mitigate damage to natural resources while facing the challenge of increased visitation levels.

ODF continues to receive 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, the ST240 Single Track Trail machine, 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 Forest Management Plan effort. Short range FY 2016 planning work includes:

- Review FY 2017 proposed timber sales and provide comments and recommendations to avoid or mitigate impacts on recreation trails and facilities.
- OHV Trail Planning and Reroute– conduct conceptual planning and field reconnaissance and possible re-routes for Hembre Ridge Bypass Trail.

- Parking Lot West OHV Trail will be opened for a dual sport event in summer 2015. This trail is being evaluated for future use.
- Participation in the ODF Volunteer Program Update, updating the agency's Volunteer Directive, volunteer manual, and all volunteer forms to provide consistency agency wide.
- Continued participation with workgroup to address OAR's for recreation management, policy and Special Use Permits including a fee schedule. New rules to be presented to Board of Forestry for promulgation in January of 2016.
- Work with Salem policy analyst on special use permit fee structures, policies, and limits on numbers of permits issued.
- Continue to provide input and comments to Salmonberry Rails & Trails effort.
- Diamond Mill OHV Staging Area – level and rock site, improve site drainage, and add boulders to protect trees and define campsites in north portion of staging area.
- Conceptual planning and relocation of kid's learner loop to west side of Diamond Mill and add additional parking.
- Development of OHV trail plan for Diamond Mill OHV Area

Grants

Recreation is planning to apply for the following grants in FY 2016 to support Recreation Operations.

- Apply for a RTP grant in fall for two or three trail bridges (23', 25, & 36') on the Wilson River Trail. The bridges needing replacement are aging single log stringers.
- Apply for ODFW Access and Habitat Grant to provide dumpster service and porta pottie placement on Cook Creek during the fall hunting season.
- Work with Invasive Species Specialist to draft an Oregon Weed Advisory Board grant for signing, education materials and enforcement of weed free feed rules. This grant would be contingent on adoption of new public use Oregon Administrative Rules by Board of Forestry.

Facilities (Campgrounds, Day Use Areas, Trailheads, etc.)

Facilities Improvements

Jones Creek Campground

- Fencing repair to prevent trampling, site expansion and trail creation.
- Replace signage as needed due to weather damage.
- Install simple cable gate for C loop commons.
- Build eco block retaining wall in site B1 to replace rotting railroad ties.
- Fire grate repair and/or replacement as needed throughout.

Nehalem Falls Campground

- Reroute loop trail (upper section) around steep root steps.
- Hazard tree removal throughout campground & limb removal on main access road.
- Fire grate repair and/or replacement as needed throughout.

Jordan Creek OHV Campground & Staging Area

- Install new concrete footings for information board.
- Fire grate repair and/or replacement as needed throughout.

Diamond Mill OHV Campground & Staging Area

- Replace deteriorating rails on all fencing.
- Fire grate repair and/or replacement as needed throughout.

Peninsula Day Use Area

- Replace deteriorating posts in upper parking area with boulders.
- Remove wooden steps, repair trail slope and conduct maintenance on entire trail.
- Repair picnic tables along trail and in day use area.

Cedar Creek Staging Area

- Install basic information board with OHV information and stay limits.

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 facilities will be open for FY 2016 operation period:

- Jones Creek Campground - Open Memorial Day Weekend through September 21
- Nehalem Falls Campground – Open Memorial Day Weekend through September 21
- Jordan Creek OHV Campground & Staging Area - Open Memorial Day through September 21
- Diamond Mill OHV Campground & Staging Area - Open year round
- Keenig Creek Campground & Trailhead – Open year round

- Footbridge Trail & Day Use Area – Open year round
- Cedar Butte Trailhead - Open year round
- Coal Creek Trailhead – Open year round
- Sprague Wayside – Open year round
- Hollywood OHV Staging Area - Open year round
- Edwards Creek OHV Learners Area – Open year round
- Cedar Creek OHV Staging Area – Open year round
- Peninsula Day Use Area & Boat Launch – Open year round
 - Lake Tahoe
 - Cedar Creek
 - Cook Creek
 - Jordan Creek
 - North Fork
 - Morrison Eddy
 - North Fork Trask
 - East Fork Trask
 - South Fork Trask
 - Ben Smith

Designated Dispersed Camping Sites

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.

The following is work to be completed in designated dispersed sites FY 2016

- Complete site planning for rehabilitation of damaged dispersed sites on Nehalem River Corridor between Nehalem Falls and Morrison Eddy.
- Fire grate repair and/or replacement as needed.

Dispersed Site Closure/Modification

The following sites will no longer be designated dispersed campsites. They are being closed because of resource damage, proximity to streams, and/or unsafe for fires during fire season. Walk-in camping may still be an option depending on the site location.

- West Muesial
- Cable Hole
- Cook Creek user created site adjacent to stockpile
- Crawdad Hole (North Fork Trask rock pit)
- North Morris Waste Area
- North Fork of the West Fork – modify for pump chance

The following sites will be modified to reduce resource damage and maintain forest management access

- Cook Creek #14 – modify entire area: Close lower camping area adjacent to McKenney Creek, close upper area and rehabilitate disturbed areas with native plants
Cook Creek MP4 (north of Clammer Road) access to waste area – Road Crew to install jersey barriers. Evaluate for closure.

OHV Trail Inventory

In FY 2016 the Trask trail inventory will be updated and trail signing will begin to prepare for publication on trail maps at a later date. Additional inventory will be conducted as needed and as time and priorities allow on trails that have been re-routed and user created trails that have been reported.

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.

Trails (Non-Motorized and Motorized)

Through FY 2016, 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 to September 30 from Jones Creek Trailhead to Elk Creek Campground.

Non-Motorized Trail Maintenance

The district will seek to maintain 20.1 miles of non-motorized trails in FY 2016. Annual trail work includes bridge inspection, brushing, grade repair, and removal of wind throw. Trail maintenance may be accomplished through a variety of resources including volunteers, contract crews and South Fork inmate crews.

Motorized Trail Re-routes

Motorized trail re-routes in FY 2016 on the Tillamook District will be limited to sections needed to mitigate resource problems or public safety issues. Trail re-routes in FY 2016 will include the linking of trails on Hembre Ridge to create a route that bypasses the haul road. This work will address public safety by moving riders off a main line haul route and address resource impacts by repairing trails

that run sediment into ditch lines. Other reroutes will include Schwarz's Trail, Clear Creek Pit, Steampot, and Duane's Trail.

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

Motorized Trails Maintenance

For FY 2016 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 reversals, 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.

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, bobcat, furbearers, and predators such as coyotes, and rabbits. The Recreation Unit will continues to monitor hunt camps and impacts to popular hunting areas.

The Tillamook District will 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). The district will explore extending the Travel Management Area into the Cook Creek area dependent on ODFW funding and support. In addition, the district will explore applying for an Access and Habitat grant to support portable restrooms and trash service in the Cook Creek area during fall hunting season.

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. Rainbow trout are found in mountain lakes.

The forest provides many opportunities for fishing at both walk-in areas as well as to drive to popular sites. The work in this AOP will focus on mitigating impacts to the Wilson River from steep, raveling, user created trails and provide improved access points for anglers.

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. In FY 2016 special use permits are planned for a 15 mile and 50K running event and a hunting guide.

Organized Event Administration

For FY 2016 Tillamook District will administer or review permits for 20 motorized events on the Tillamook State Forest. Events include poker runs, races, 4WD runs, dual sport runs, and observed motorcycle trials.

Tillamook District Volunteer Activities

In FY 2016 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.

Additionally, the district will explore partnerships with colleges for spring and holiday breaks volunteer excursions. This may fill a need for hands on experience for the student and much needed trail work for the district.

Law Enforcement

ODF, the Tillamook County Sheriff's Office (TCSO), and the BLM partner to maintain 3 full time forest deputies that are funded through ATV grants, ODF dollars, and BLM dollars.

The forest deputies enforce state, federal, and forest recreation laws with an emphasis on ATV enforcement as they patrol the forest in both the Tillamook and Forest Grove Districts. 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. The forest deputies are essential to the success and overall management of the forest and their presence benefits all forest users.

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 and local schools.
- Act as liaison with other natural resource agencies on Public Use issues. (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

The district has plans to enter into a land exchange in FY16 with Tillamook County that is mutually beneficial for management of lands and recreational facilities.

The district does not have an approved long-range acquisition and exchange plan. However, this is an opportunity with the County that benefits both parties and creates more efficient management of lands and facilities. In 2011, ODF and the county entered an Intergovernmental Agreement (IGA) that allowed the county to manage the park for recreational purposes and allowed ODF to manage a facility on county land. This was agreed upon with the provision that the two parties would work together to complete land exchange, acceptable to both parties, at some point in the future.

The land exchange would entail exchanging a 73 acre parcel of BOF lands which is currently managed by the County as a campground/park (Trask River Campground/Park) for an 80 acre parcel of Tillamook County lands which ODF currently operates and maintains as the Sprague Memorial Wayside for a day use site and rest area. An exchange of these parcels would better facilitate management and be beneficial for both parties.

The District is seeking concept consensus from Area Director, Deputy Chief, Division Chief, and State Forester to pursue this exchange and enter into a Preliminary Agreement with Tillamook County.

To move this concept forward, both ODF and County will obligate staff time and finances to complete the necessary specialist reviews, title reports, SHPO Notice, biological assessment, appraisal and public hearing/comment process.

The district will continue to work on identifying parcels to acquire and exchange.

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.

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.

Miscellaneous Forest Products

Commercial permits will be issued for moss, bear grass, salal, ferns, vine maple, and alder saplings.

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 6,010 SLI stands on the Tillamook district, totaling 252,470 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 (1,902) 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 FY16. 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 2016 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 2016 AOP timber sales.

Northern Spotted Owl Surveys

In FY16 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 FY16 sales. There will be 39 sales surveyed for northern spotted owls in FY16, for current, previous and future sale plans, to complete protocol surveys. There will also be additional surveys for spot checks for 14 active timber sales and for district monitoring purposes on 10 northern spotted owl activity centers. No marbled murrelet surveys are required for the timber sales in the 2016 AOP.

Table 7. Summary of Surveys for Threatened and Endangered Species

Operation	Species ¹ (NSO/MM)	Survey Years ²	BA ³ Required	Special Considerations
Clay Pigeon	NSO	2014, 2015	--	
Clear Silence	NSO	2014, 2015	--	
Fireworks	NSO	2014, 2015	--	
King Kong	NSO	2014, 2015	--	
Old Bungee	NSO	2014, 2015	--	
Red Shack	NSO	2013, 2014, 2015	--	
Three Little Ridges	NSO	2014, 2015	--	
Tres Hembres	NSO	2014, 2015	--	
Broken Arrow (ALT)	NSO	2014, 2015	--	
Lobo Canyon (ALT)	NSO	2014, 2015		
The Simms (ALT)	NSO	2014, 2015	--	

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 FY16 timber sales. A Candidate plant listed in the Tillamook Implementation Plan

was identified as being within the vicinity of one timber sale in the FY16 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 the Red Shack sales falls 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 potential stream enhancement projects identified by the Aquatic Specialist that could be done in association with sales in this sale plan.

- Elk Horn Creek is a good candidate for a stream enhancement project, which may be available with the Fireworks sale and is being evaluated by the ODF Aquatic Specialist.
- Review potential for stream enhancement project on Cedar Creek. The Old Bungee timber sale will be adjacent to the creek and may be used to facilitate in-stream wood placement.
- Evaluate and review three culverts on South Fork Trask Road with the King Kong timber sale and review potential for in-stream wood placement in Miller Creek.
- Review potential for stream enhancement project on Clear Creek. The Clear Silence 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 2016, the Tillamook District will partner with Tillamook Estuaries Partnership (TEP) on the project development 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 FY16. 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)

- Monitoring of SNC disease conditions through periodic measurements.
- Installation of new monitoring plot network to take place of aging Growth Impact Study Plot network in stands 10 to 20 years old.

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.

Trask River Paired Watershed Study: (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.

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 Zone⁴ 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 FY16 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 FY16 Tillamook District personnel will continue to work on the design, review, and testing of Contractor, the contract creation feature of the program. 2016 AOP timber sales have been created in the Geo-Planner function of the program.

Board of Forestry

The Board of Forestry has directed the State Forests Division to develop a new forest management plan to replace the current NW Oregon Forest Management Plan. The

⁴ ODF Marbled Murrelet Operations Policy, August 28, 2013, 1.1.6.20
TILLAMOOK DISTRICT 2016 ANNUAL OPERATIONS PLAN
DRAFT

new plan is under development and may be adopted in 2015, during the implementation of this annual operating plan. District workload will consist of reviewing the proposed plan and model outputs and provide feedback to staff and the Board of Forestry.

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 FY16 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 2015 through the end of February 2016 because of the limited operational budget.

Administration

There are 31 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 2016 Annual Operations Plan. These positions are divided into five functional groups: Forest Management, Forest Roads, 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 Forest Roads unit is responsible for all aspects of road management and land surveying. These activities include road design and layout, rock pit development, road maintenance, property line location, road construction and improvement appraisals, contract preparation, and road contract administration. The Forest Roads unit works with the 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.

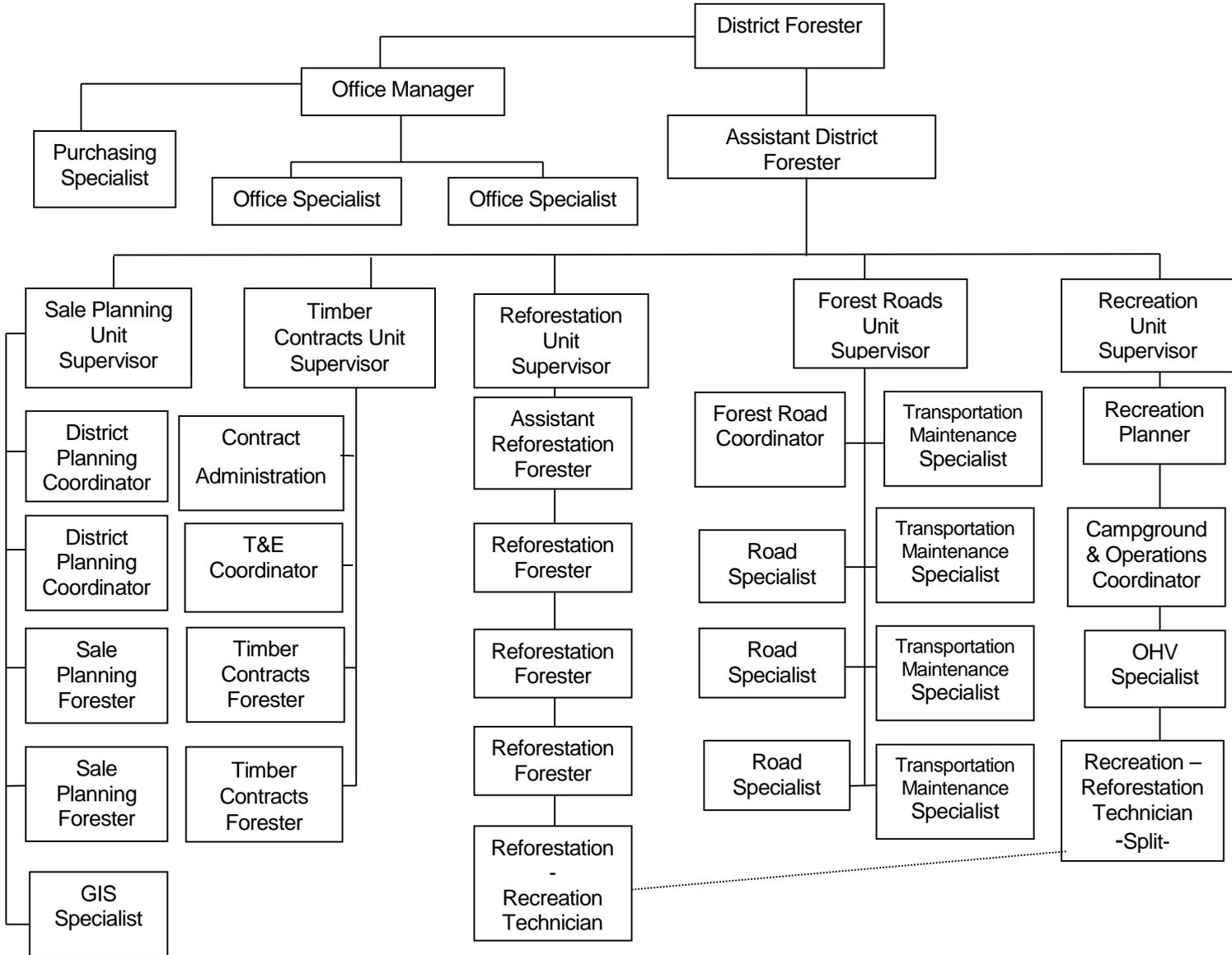
Administration consists of the District Forester, Assistant District Forester, Office Manager, Purchasing Specialist, and two Office Specialists. The District Forester and Assistant District Forester provide policy direction, budget development, and oversight to the field units.

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. 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**

B. Maps

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

C. Consultations with Other State Agencies

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

D. Public Involvement

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

E. Pre-Operations Reports

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

TIMBER HARVEST OPERATIONS - FINANCIAL SUMMARY

District: Tillamook

Fiscal Year: 2016

Date: 01/14/2015

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
Clay Pigeon	100%	0%	Tillamook		0	205	3.5	0.1	3.6	\$893,650	\$50,440	\$843,210
Clear Silence	100%	0%	Tillamook		165	261	4.5	0.6	5.1	\$1,040,725	\$173,820	\$866,905
Fireworks	100%	0%	Till/Wash		0	330	6.8	0.3	7.1	\$1,626,800	\$204,690	\$1,422,110
King Kong	100%	0%	Tillamook		0	476	7.4	0.9	8.3	\$1,866,975	\$229,613	\$1,637,362
Old Bungee	100%	0%	Tillamook		275	335	6.8	1.4	8.2	\$1,729,400	\$399,562	\$1,329,838
Red Shack	100%	0%	Tillamook		0	346	3.9	1.3	5.2	\$1,064,850	\$115,380	\$949,470
Three Little Ridges	100%	0%	Tillamook		0	350	4.7	0.6	5.3	\$1,418,625	\$404,510	\$1,014,115
Tres Hembres	100%	0%	Tillamook		0	346	3.7	1.1	4.8	\$1,069,975	\$293,510	\$776,465
Total:					440	2,649	41	6	47.6	10,711,000	1,871,525	8,839,475

Alternate Operations

Broken Arrow	100%	0%	Tillamook		0	335	4.6	1.3	5.9	\$1,355,900	\$370,670	\$985,230
Lobo Canyon	100%	0%	Tillamook		0	194	2.6	0.4	3.0	\$661,700	\$122,780	\$538,920
The Simms	100%	0%	Tillamook		0	949	13.9	1.6	15.5	\$3,802,950	\$316,961	\$3,485,989

PRIMARY HARVEST OPERATIONS - FOREST RESOURCE SUMMARY

District:

Tillamook

Fiscal Year 2016

Date: Feb-15

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

Primary Harvest Operations	Unit (Optional)	Forest Health Issues ¹	Invasive Species	LYR/OFS Structures ²	Landcape Design LYR/OFS ³	Install/Replace Culverts on Fish Bearing / Perennial Streams	Harvesting within 100' of Fish Bearing Stream	Domestic Water Source	Potential Stream Habitat Improvement ⁴	Within Aquatic Anchor	Within Terrestrial Anchor	Operating within a NSO Provincial Circle	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
Clay Pigeon										X			X			X	X		
Clear Silence			X	X	X	X							X			X	X		
Fireworks			X							X			X			X			
King Kong			X	X	X					X			X			X			Powerlines, Permanent Plot
Old Bungee			X	X	X	X				X			X			X	X		
Red Shack			X	X	X	X				X			X	X		X	X		
Three Little Ridges		X								X			X			X			Wet weather haul restrictions
Tres Hembres													X			X	X		Permanent plot

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.

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 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	
Broken Arrow		X		X	X	X								X			X				
Lobo Canyon			X							X				X			X				
The Simms			X	X	X					X				X			X	X			

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

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

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

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

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

TIMBER HARVEST OPERATIONS - FOREST STRUCTURE SUMMARY

District: Tillamook

Fiscal Year 2016

Date: 02/25/2015

Current Structure	
	Total
REG	
CSC	
UDS	3,089
LYR	
OFS	
Total	3,089

Post Harvest Structure				
REG	CSC	UDS	LYR	OFS
2,649		440		
2,649	0	440	0	0

Desired Future Condition		
GEN	LYR	OFS
2,312	468	309
2,312	468	309

FOREST ROADS SUMMARY

District: Tillamook

Fiscal Year: 2016

Date: Feb-15

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					
Clay Pigeon	2	\$50,440				\$50,440	\$893,650	5.6%	
Clear Silence	1	\$41,691	3	\$125,838	\$6,291	\$173,820	\$1,040,725	16.7%	
Fireworks			15	\$194,070	\$10,621	\$204,690	\$1,626,800	12.6%	
King Kong	3	\$208,714	1	\$17,899	\$3,000	\$229,613	\$1,866,975	12.3%	
Old Bungee	4	\$394,163			\$5,399	\$399,562	\$1,729,400	23.1%	
Red Shack	1	\$80,051	5	\$31,694	\$3,636	\$115,380	\$1,064,850	10.8%	
Three Little Ridges	3	\$199,166	8	\$200,079	\$5,265	\$404,510	\$1,418,625	28.5%	
Tres Hembres	1	\$94,872	9	\$178,058	\$20,581	\$293,510	\$1,069,975	27.4%	
Total	13.3	\$1,069,097	40.4	\$747,637	\$54,791	\$1,871,525	\$10,711,000	17.5%	

Alternate Operations

Broken Arrow	2.19	291602.99	2.6	75876.34	3190.67	\$370,670	\$1,355,900	27.3%	
Lobo Canyon	0.99	37202.41	4.19	82332.52	2741.07	\$122,780	\$661,700	18.6%	
The Simms	3.36	163909.1	3.4	117834	35217.87	\$316,961	\$3,802,950	8.3%	

Road Projects Not Funded by Harvest Operations

Operation	Construction		Improvement		Other Projects	Total Project Costs	Funding	Comments
	Miles	Cost	Miles	Cost				
Bridge Inspections					\$6,500	\$6,500	FD	Periodic Bridge Inspections
Roadside Spraying			150		\$23,000	\$23,000	FD	Approximately 150 miles
Barnsdale Rd. Pullback						\$0	FD	District Road Crew Project

REFORESTATION AND YOUNG STAND MANAGEMENT SUMMARY

District: Tillamook

Fiscal Year: 2016

Date: 02/24/2015

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 (Contractor)	1,866	\$305.00	\$569,130.00			\$0.00	1,866	\$569,130.00
Initial Planting (SFK)	209	\$360.00	\$75,240.00			\$0.00	209	\$75,240.00
Interplanting (Contractor)			\$0.00			\$0.00	0	\$0.00
Interplanting (SFK)	500	\$252.00	\$126,000.00			\$0.00	500	\$126,000.00
Underplanting			\$0.00			\$0.00	0	\$0.00
Tree Protection-Barriers			\$0.00			\$0.00	0	\$0.00
Tree Protection-Direct Control (Contractor)	1,600	\$65.00	\$104,000.00			\$0.00	1,600	\$104,000.00
Tree Protection-Direct Control (SFK)	1,500	\$135.00	\$202,500.00			\$0.00	1,500	\$202,500.00
Site Prep-Chemical- Aerial (Contractor)	1,900	\$45.00	\$85,500.00			\$0.00	1,900	\$85,500.00
Site Prep-Chemical- Hand (Contractor)	44	\$80.00	\$3,520.00			\$0.00	44	\$3,520.00
Site Prep -Slash Burning			\$0.00			\$0.00	0	\$0.00
Site Prep -Mechanical			\$0.00			\$0.00	0	\$0.00
Fertilization			\$0.00			\$0.00	0	\$0.00
Noxious weeds			\$0.00			\$0.00	0	\$0.00
Release-Chemical- Aerial			\$0.00			\$0.00	0	\$0.00
Release,-Chemical-Hand (SFK)	200	\$68.00	\$13,600.00			\$0.00	200	\$13,600.00
Release-Mechanical-Hand (SFK)	400	\$164.00	\$65,600.00			\$0.00	400	\$65,600.00
Precommercial Thinning (Contractor)	1,000	\$100.00	\$100,000.00			\$0.00	1,000	\$100,000.00
Pruning			\$0.00			\$0.00	0	\$0.00
Totals	9,219	--	\$1,345,090	0	--	\$0.00	9,219	\$1,345,090

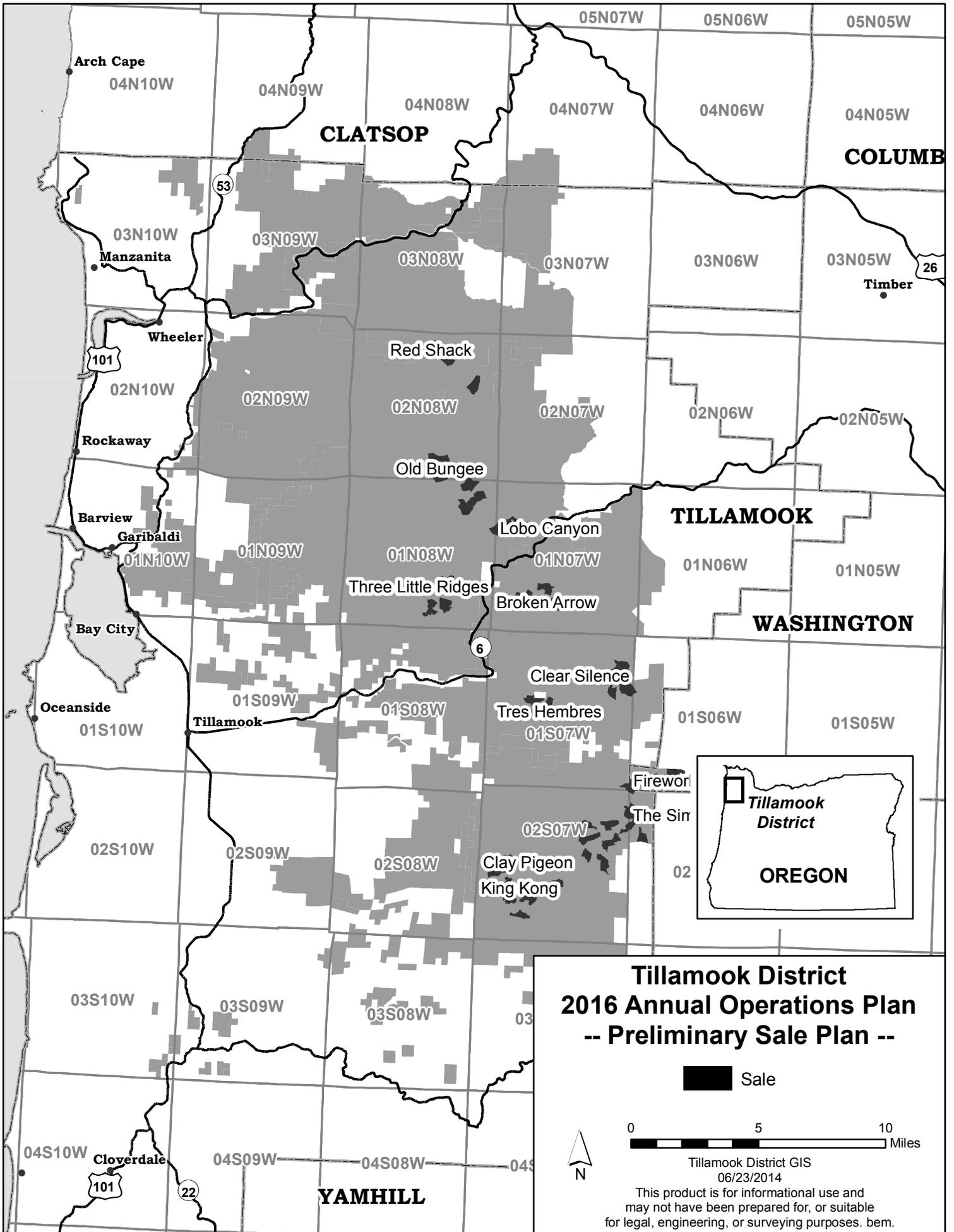
*Planting costs include all costs including seedlings

*Contractor = Contracted Labor

*SFK = South Fork Inmate Labor

Grant Funded Activities Management Activity	Board of Forestry			Common School Forest Lands			District	
	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

RECREATION MANAGEMENT SUMMARY											
District: Tillamook			Fiscal Year: 2016				Date: 01/30/2012				
Operation	Construction Projects	Construction ODF	Other	Improvement Projects	Improvement ODF	Other	Operations/Maintenance	Operations/Maint. ODF	Other	Total Costs	Comments
Facilities											
Campgrounds											
Jones Creek Campground				Fence repair, signage, cable gate C -Loop commons, retaining wall, fire grate repair	\$500		septic pumping, dust abatement, trash service, well maintenance, welding	\$11,220.73		\$11,721	
Keenig Creek Campground	dig vault toilet holes, haul rock	\$ 1,250					septic pumping, trash service, maint supplies	\$2,548		\$3,798	grant - LWCF - ODF Match
Nehalem Falls Campground				hazard tree abatement	\$600		septic pumping, trash service, maint supplies	\$6,532		\$7,132	
Designated Dispersed Campsites											
Cedar Creek (24 sites)							septic pumping, trash service, maint supplies	\$250	\$4,209	\$4,459	OPRD grants - ATV
North Fork Wilson (7 sites)							maintenance, & portable toilet service	\$1,213		\$1,213	
Jordan Creek (15 sites)							signs & posts	\$250		\$250	
North Fork Trask (3 sites)							signs, posts, firegrate repair	\$100		\$100	
East Fork Trask (9 sites)							signs, posts, firegrate repair	\$200		\$200	
South Fork Trask (7 sites)							signs, posts, firegrate repair	\$200		\$200	
Cook Creek (17 sites)				Private contractor Rehab, #14, close site by stockpile, close Cable Hole -\$3000. Road Crew close Clammer Flats site w/jersey barriers-\$722	\$722	\$3,000	trash service, portapottie, & signs		\$2,384	\$6,106	
Morrison Eddy (6 sites)							port a pottie 18 weeks + 100 gen maint	\$1,213		\$1,213	
total 89 sites											
Day Use Areas											
Sprague Wayside							power, septic pumping, maint supplies	\$1,650		\$1,650	
Footbridge Trailhead	retaining walls - Bridge Cr. Falls Trail & asphalt road way - construction materials approx. 200 blocks at \$3.77 ea	\$754					septic pumping, trash service, maint supplies	\$4,796		\$5,550	
total 2 sites											
Trailheads											
Keenig Creek	information board	\$80								\$80	Wilson R. Trail re-routed to trailhead (former stockpile site)
Cedar Butte											
Peninsula							portapottie, gen maint.	\$1,213		\$1,213	
Boat Launches											
Stones Road										\$0	
Peninsula										\$0	
Beaver Slide							signs, posts	\$50		\$50	
OHV Staging Areas/Campgrounds											
Diamond Mill OHV Staging Area				rocking, boulder placement, drainage work, Road Crew	\$15,000	\$2,000	septic pumping, trash service, maint supplies	\$875.00	\$2,396.00	\$20,271.00	
Jordan Creek OHV Staging Area	repair information board footings	\$750					septic pumping, trash service, maint supplies	\$575	\$1,667	\$2,992	
Cedar Creek OHV Staging Area								\$2,328	\$2,475	\$4,803	
Hollywood OHV Staging Area							maintenance supplies	\$100		\$100	
Trails											
Non-Motorized							personnel		\$65,928.00	\$65,928	OHV Coord. ATV Transfer Fund
Motorized										\$0	
Other Operations											
Law Enforcement							contracted law enf.	\$207,429	\$138,289	\$345,718	Tillamook County Sheriff's Contract
Dumpsite Cleanup							dump fees	\$400		\$400	
Special Projects							Lifeflight LZ signing	\$60		\$60	
									District Total	\$262,858	
									Other Total	\$222,349	
									TOTAL	\$485,207	



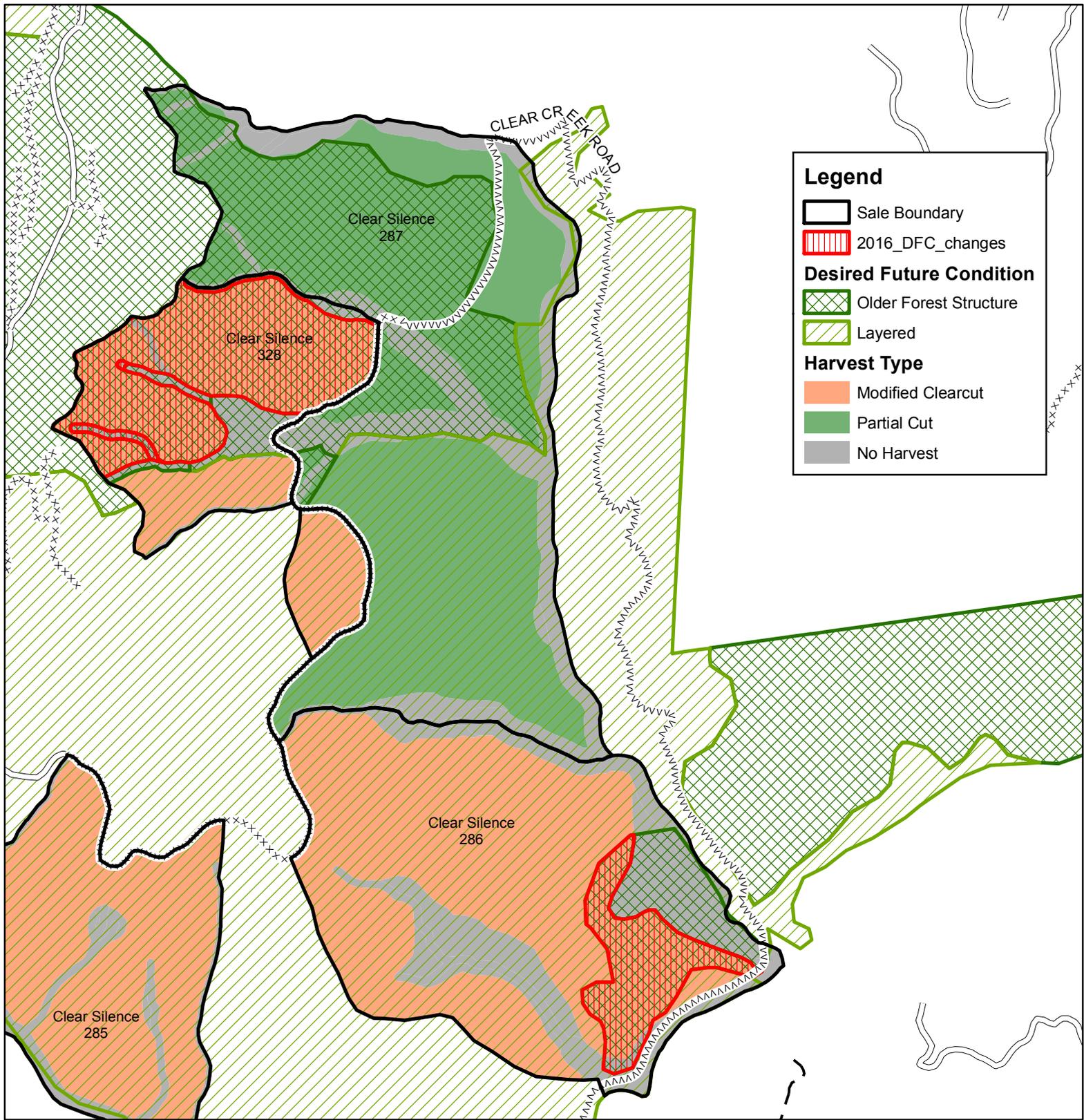
**Tillamook District
2016 Annual Operations Plan
-- Preliminary Sale Plan --**

Sale

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Tillamook District GIS
 06/23/2014

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2016 Tillamook AOP

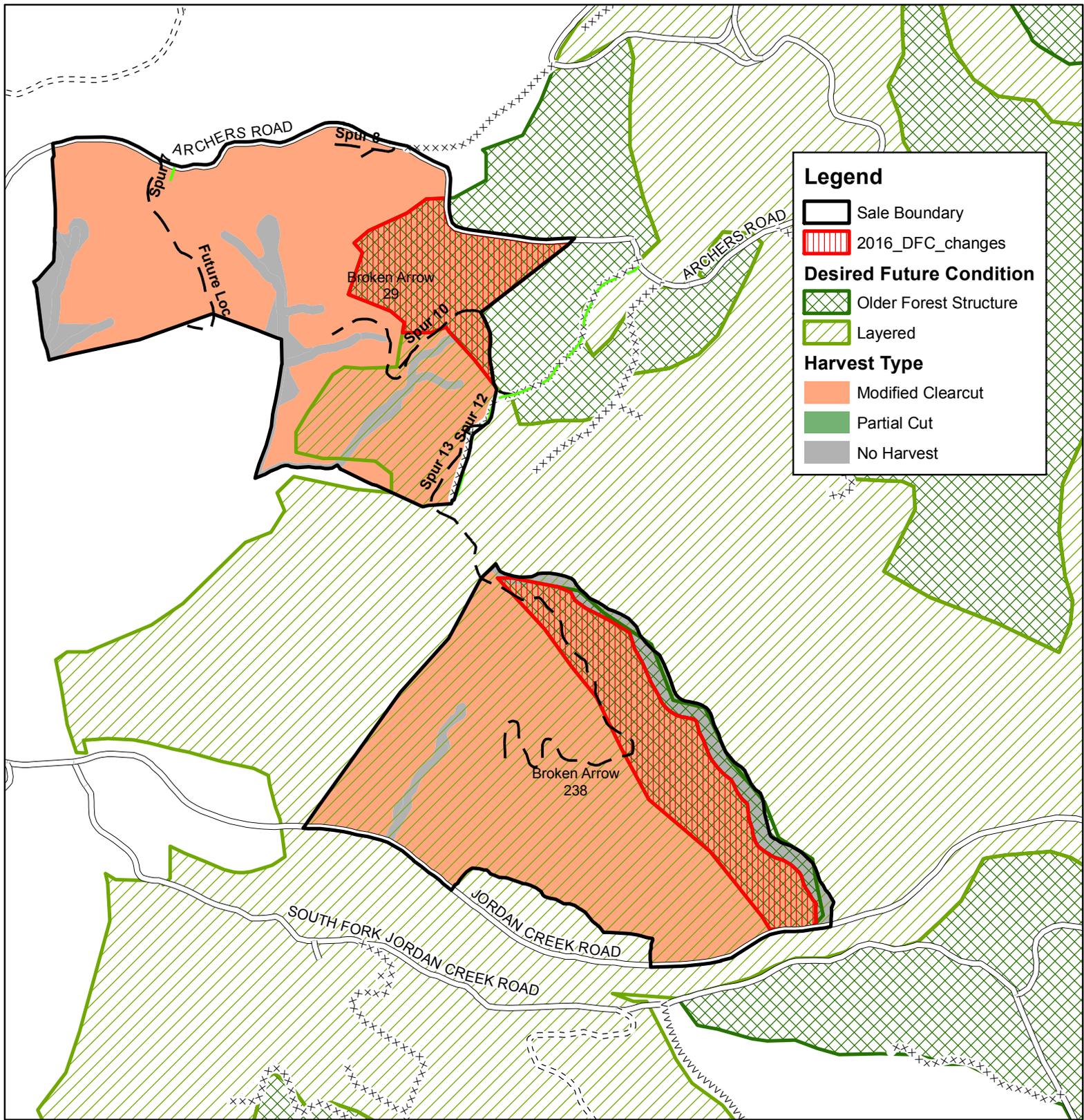
Change 67 acres from OFS to LYR

Tillamook District GIS
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Date: 03/20/2015



1:12,000



2016 Tillamook AOP

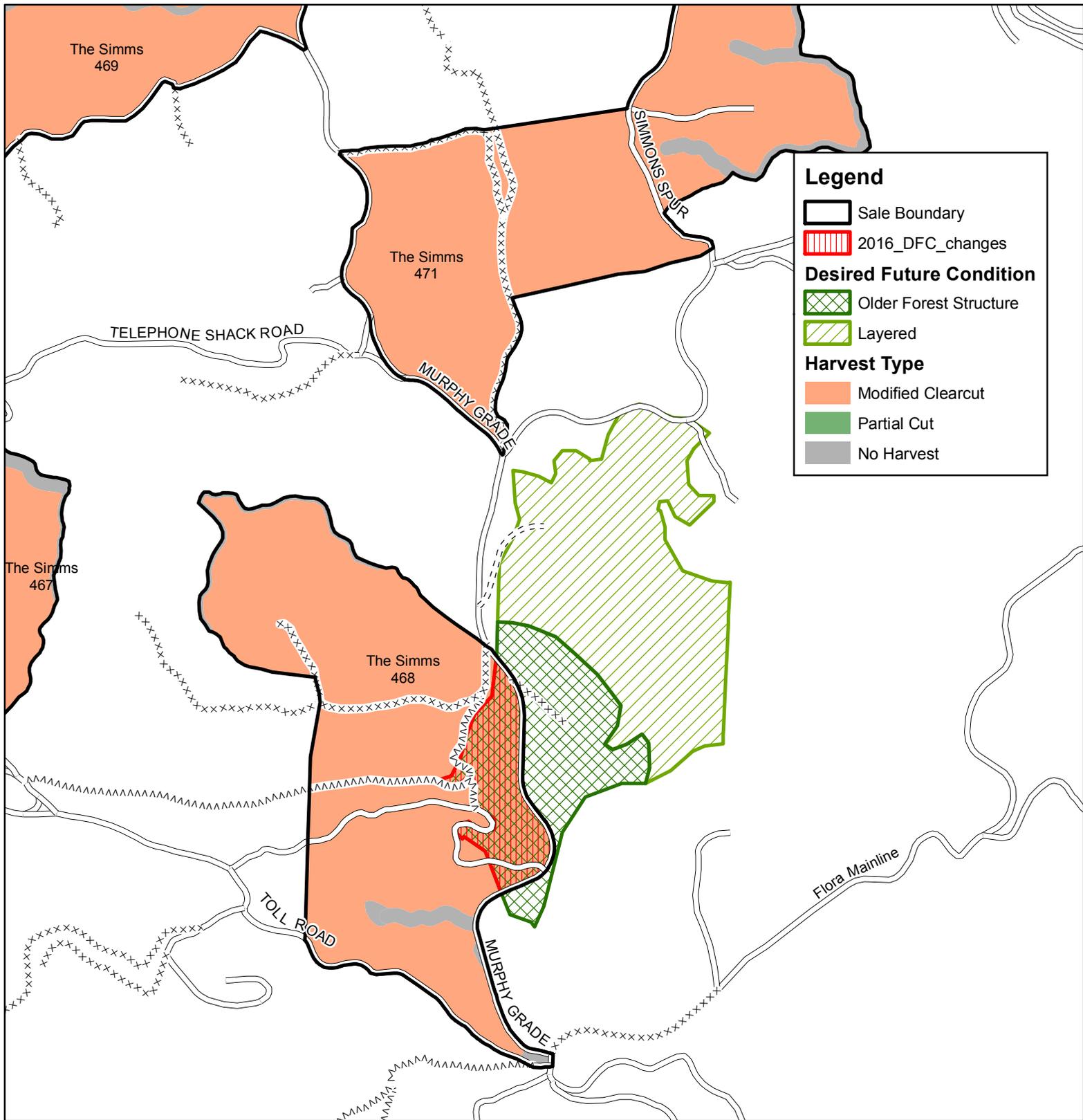
Change 45 acres from OFS to LYR

Tillamook District GIS
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Date: 03/20/2015



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2016 Tillamook AOP

Remove 15 acres from OFS

Tillamook District GIS
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Date: 03/20/2015



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Appendix D

Consultations with Other State Agencies

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

ODOT

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

The following sales (listed by the historic activity) will be reviewed on the ground prior to sale or project layout to determine if any cultural artifacts are present:

- Potential Adjacent Trail: Red Shack, Tres Hembres, and The Simms
- Potential House or Cabin: Tres Hembres, Clear Silence, and The Simms

ODFW

- Sale Specific Comments - ODFW recommends:

Clay Pigeon

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

Clear Silence

- GTs should be primarily scattered or clumped in distribution. Placement of GTs should be avoided in green tree areas (GTAs).
- Snag creation or extra wildlife trees to meet standard in FMP as existing levels are <2 hard snags/acre.
- New dirt spur roads should be closed after sale completed.

Fireworks

- GTs should be primarily scattered or clumped in distribution. Placement of GTs should be avoided in and adjacent to RMAs and GTAs.
- Snag creation or extra wildlife trees to meet standard in FMP as existing levels are <2 hard snags/acre.

King Kong

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

Old Bungee

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

Red Shack

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

Three Little Ridges

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

Tres Hembres

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

Broken Arrow

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

- Snag creation or extra wildlife trees to meet standard in FMP as existing snag levels are <2 hard snags/acre.
- Good to see that new dirt spur roads are slated for closure; consider the same for rocked spur roads after sale completed.

Lobo Canyon

- GTs should be primarily 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 hard snag levels are apparently <2/acre.
- New dirt and rocked spur roads should be closed after sale completed.

The Simms

- GTs should be primarily scattered or clumped in distribution.
- Snag creation or extra wildlife trees to meet standard in FMP as existing hard snag levels are apparently <2/acre.
- Good to see that new dirt and rocked spur roads will be closed after sale completed.

- General ODFW 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 or adjacent to 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.”

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 or adjacent to GTAs and 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. ODFW recommends that new spur roads should be closed after administrative use, and reopened when needed.