

Memo

To: Dave Lorenz, Area Director

From: Ryan Greco, Acting District Forester

CC: Brian Pew, Deputy Chief State Forests,
Ron Zilli, AOP Coordinator

Date: 06/30/2016

Re: Information Item - Approved Annual Operations Plan for 2017

The 2017 State Forests Annual Operations Plan (AOP) for the Coos District is attached for your information. During my review of this plan, I have found that it is consistent with the *Elliott State Forest Management Plan*, all State Forest Operational Policies and the 2017 Annual Operations Planning Guidance. Additionally, all management activities comply with the Forest Practices Act.

Therefore, I have approved all management activities described in this plan.

New take avoidance policies for marbled murrelets has resulted in a shift of harvest acres into more of the 40-60 year old stands and less harvest of the mature stands. This shift provides less revenue and will not achieve the Annual Harvest Objective identified in the Implementation Plan. The new take avoidance policies are a direct result of *Cascadia Wildlands vs. Kitzhaber et al.* (case no. 3:12-cv-00961-AA).

During its preparation, this AOP was reviewed by technical specialists from within ODF, a resource specialist from the Confederated Tribes of Coos, Lower Umpqua & Siuslaw Indians, and an archaeologist from Oregon Department of Transportation. We received their comments verbally and in writing (written comments are on file at the district office). The draft AOP underwent a 45-day public comment period. However, the AOP remains unchanged after this public comment period as the District did not receive any comments from stakeholders.

Approval of this plan does not constitute final approval of individual project details. The management activities described in this plan may be modified during the final preparation and/or implementation. Modifications to these management activities will conform to the process included in the Annual Operations Planning Policy.

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

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

APPROVED:


Ryan Greco

6/30/2016
Date

COOS DISTRICT

2017 ANNUAL OPERATIONS PLAN

OVERVIEW

This plan describes the activities and outcomes that Oregonians can expect to see on Oregon's first State forest, the Elliott State Forest, for fiscal year 2017. The 2017 fiscal year runs from July 1, 2016 to June 30, 2017. Comments will be considered and will be used to improve this plan within the scope of the Department's authority, in alignment with the Elliott Forest Management Plan and Implementation Plan, and bounded by budgets and staff resources.

The Elliott State Forest is an actively managed forest, valued by many Oregonians for its unique mix of environmental, economic, and social benefits. This plan supports this mix and provides a balance of benefits as required by OAR 629-035-0000 through 629-035-0110.

In preparing this plan, we have consulted with geotechnical specialists, wildlife biologists, fish biologists, aquatic specialists, engineers, adjacent landowners, and an archeologist. In addition we offered a 45 day public comment period with opportunities for comment from various stakeholders as well as Oregonians in general.

SHORT SUMMARY OF ACTIVITIES PLANNED FOR FY2017

- Beginning the planning cycle to harvest approximately 0.19 million board feet of timber generating gross revenues of \$62,700.
- Protecting streams and water resources by conducting physical habitat and flow surveys and implementing a series of buffers and seasonal restrictions.
- Pursuing stream habitat development projects on West Fork Millicoma River, Scholfield Creek, Stulls Falls, and Elk Creek.
- Planting 436 acres and conducting vegetation and animal management activities on an additional 721 acres.
- Maintaining a road network of 320 miles.
- Removing 600 yards of historic sidecast material on a legacy road system at a cost of \$30,000.



"STEWARDSHIP IN FORESTRY"

COOS DISTRICT 2017 ANNUAL OPERATING PLAN

TABLE OF CONTENTS

INTRODUCTION.....	3
INTEGRATED FOREST MANAGEMENT OPERATIONS.....	5
Timber Harvest Operations	5
Overview of Timber Harvest Operations	5
Summary of Timber Harvest Operations by Basin.....	8
Forest Roads Management	9
Overview.....	9
Road Construction	9
Road Improvement	9
Road Access Management (Road Closures).....	10
Road Maintenance.....	10
Land Surveying	10
Young Stand Management	11
Site Preparation.....	11
Planting.....	11
Vegetation Management.....	12
Tree Protection.....	12
Recreation Management.....	12
Overview of Recreation Management.....	12
Facilities (Campgrounds, View Points, Trail Heads, etc.)	12
Trails.....	13
Land Exchange	13
Other Integrated Forest Management Operations.....	13
Firewood Cutting Program	14
PLANNING (and Information Systems).....	15
Stand Level Inventory and Other Vegetation Inventories.....	15
Fish and Wildlife Surveys.....	15
Table 3. Summary of status of T&E surveys	15
Aquatic and Riparian Resources	16
Research and Monitoring.....	16
Public Information and Education	17
Administration	18
Appendices	20

COOS DISTRICT

2017 ANNUAL OPERATIONS PLAN

INTRODUCTION

This Annual Operations Plan (AOP) covers the state forestlands managed by the Coos District for the fiscal year 2017, which runs from July 1, 2016 through June 30, 2017. This plan describes how the activities and projects planned in the Elliott State Forest will achieve the goals and objectives of the 2011 Elliott State Forest Management Plan (FMP) and the Coos District Implementation Plan (IP). Refer to these documents for details on strategies. These activities include the following integrated forest management operations: commercial harvest operations; road construction, road improvement and maintenance; reforestation and young stand management; recreation; and planning.

This summary document will give an overview of the operations, and includes tables giving a number of details including estimates of volume and acres to be harvested, project costs, and gross and net revenues, and acres and cost estimates of planned reforestation and young growth management operations. More detail on harvest operations is available in the individual Pre-Operations Reports, which are available by request. A public involvement summary (Appendix D) has been added to the final plan.

The current FMP and IP were approved for implementation on January 1, 2012. This FMP describes the resource management concepts and strategies and incorporates take avoidance strategies. The IP describes specific descriptions of each basin and provides the harvest and silvicultural goals for the 10 year period.

Coos District manages 93,524 acres of state forestland primarily in the southern coast range, but with some scattered tracts in the Klamath Mountains in southern Coos and Curry counties. About 91% of the lands managed by the Coos District are Common School Forest Lands (CSFL) owned by the State Land Board and managed for them and the Board's administrative agency - the Department of State Lands - by ODF. All revenue from CSFL goes to the Common School Fund and ODF is reimbursed from the Fund for management expenses. The remaining 9% are Board of Forestry lands. Approximately two-thirds of the revenue from BOF lands is distributed to the county where the land is located, with the remaining one-third going to ODF for management expenses. The main ownership is the Elliott State Forest, which is one block of about 91,224 acres located just south of the Umpqua River between Reedsport and Scottsburg on the north and between Coos Bay and Allegany on the south. The Elliott is divided into 13 management basins representing sub-watersheds in the forest. Additionally, some 2,082 acres of Common School Land and 218 acres of Board of Forestry small tracts are scattered between the California border in the south, up to the South Slough Estuary on the west, adjacent to Winchester Bay to the northwest, and to about Winston and

Elkton on the east. 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 Department of State Lands is currently leading the Elliott Ownership Transfer Opportunity. This project is intended to transfer ownership of the Common School Lands within the Elliott State Forest to a new owner by the end of calendar year 2017. At the request of DSL, no harvest operations on Common School Lands are proposed in this plan. For more information about the Elliott Ownership Transfer Project, see the dedicated DSL website: http://www.oregon.gov/dsl/Common_School_Fund_Property/Pages/Elliott-Opportunity---Project.aspx

Table 1 compares the proposed acres by harvest type¹ in this AOP to the harvest acre ranges specified in the IP. Total planned primary acres in this AOP are 11 net acres (approximately 0.01% of the district’s total acreage). The anticipated harvest acres, volume, and revenue for the proposed operation in this AOP are listed in the “Harvest Operations – Financial Summary” table in Appendix B, while a vicinity map of this harvest operation can be found in Appendix C.

Table 1. Annual Operations Plan objectives compared to annual estimated silvicultural activities identified in the Coos District IP. All values are net acres.

Silvicultural Activity	Elliott FMP & IP	2017 AOP
	Annual estimate	
Partial Cut Harvest – Primary	0 - 500 ¹	0
Regeneration Harvest - Primary	700 – 1000	11
Partial Cut Harvest – Alternate	0 - 500 ¹	0
Regeneration Harvest - Alternate	700 – 1000	0

¹ Partial cutting will be done as necessary to meet silvicultural objectives.

The FY 2017 operations plan includes both activities that take place “on the ground” within the fiscal year as well as operations that have contracts prepared within the fiscal year, but are actually accomplished in a future fiscal year. The proposed timber sale is planned to be designed, and submitted for processing during the FY17 time period. The actual on-the-ground operations will likely not occur during FY17 due to the time lag associated with contract duration. In contrast, reforestation and young stand management will be carried out during the FY17 time period.

The Forest Land Management Classification System (FLMCS) has been adopted into the 2011 Management Plan. Appendix F of this AOP summarizes the changes² that have been approved to the State Forests’ Forest Land Management Classification System. Mapped

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

² ‘Major Changes’ and the procedures for making these changes are described OAR 629-035-060.

wildlife habitat in Focused Stewardship and High Value Conservation Areas decreased by 3,534 and 16 acres, respectively, due to the abandonment of the Noble Creek owl circle and a correction to the Schumacher Marbled Murrelet Management Area in 2016. At the close of the public comment period, the District Forester forwarded these changes to the Area Director and State Forester for review and approval. The FLMC baseline began with the 2011 Coos District Implementation Plan, Pages 8-9 and are reviewed on an annual basis to determine if a revision to the FLMC is warranted.

INTEGRATED FOREST MANAGEMENT OPERATIONS

Timber Harvest Operations

Overview of Timber Harvest Operations

The FY17 primary harvest operation is estimated to generate gross revenues of approximately \$62,700 and net revenues of \$54,700. It is estimated that active management will result in producing approximately 0.16 million board feet of conifer volume and 0.04 million board feet of hardwood volume, for a total of 0.20 million board feet. 100 percent of the projected value is from Board of Forestry land.

There are no alternate harvest operations planned in FY 17.

In addition to the above revenue and volume, the FY17 operation is expected to have pulp removed from sale areas. The amount and value of pulp is difficult to predict during the planning process but will likely occur in areas of regeneration harvest using whole tree yarding systems. This material also has potential for use in biomass operations. Refer to the attached Financial Summary table for more detail on volumes and values. Because of the uncertainties due to T&E species, the final conifer regeneration harvest acres/volume and value are projections.

Under the ESF FMP and IP, protocol surveys for northern spotted owls (NSO) and marbled murrelets are required. Density surveys for NSO's have been conducted during 2010, 2011, 2012, 2013, 2014, and 2015 survey seasons covering the entire Elliott and were completed according to ODF's policy. Surveys for marbled murrelets are conducted using ODF's policies in potential suitable habitat - defined as stands dominated by Douglas-fir that are at least 100 years old or younger stands that have a component of residual trees. The operation in the FY2017 sale plan does not contain habitat for spotted owls or marbled murrelets. See Table 3 for more information about T&E surveys.

The primary harvest operation has been reviewed by ODF's wildlife biologists, aquatic specialist, geotechnical engineer, state forest engineer, and operations coordinator. During a cultural resources review process, the operation has also been examined by qualified archaeologists from the Oregon Department of Transportation. Information on operations that occur within the provincial circle of a northern spotted owl or within a marbled murrelet management area has been provided to the US Fish and Wildlife Service. Occasionally,

operations may contain a resource or activity where review with another state agency, such as the Department of Agriculture or the Department of State Lands, is warranted. Written comments from the external resource specialists and the resolution of those comments will be included as Appendix D of the final plan. A non-statutory written plan will be prepared in accordance with the Forest Practice Act for operations near or within habitat sites of any wildlife or aquatic species classified as threatened or endangered.

Surveys have also been, or will be conducted to determine stream classification of all streams associated with the planned harvest area. A statutory written plan will be prepared in accordance with the Forest Practice Act for operations within 100 feet of a Type F stream. Cable layouts through or over buffer strips are needed to provide for adequate suspension of logs. To protect water quality, full suspension will be required over stream channels and single end suspension where feasible on the rest of the sale area. During active operations a variety of methods will be used to prevent sediment from entering live streams. These methods include (but are not limited to) maintaining road surfaces, culverts and other road drainage structures, applying seasonal restrictions to haul routes, and monitoring and managing logging and hauling operations during times of heavy rainfall. Riparian areas along streams will be managed to support properly functioning aquatic habitats over time by applying the riparian management area (RMA) standards of the ESF FMP.

The FY17 harvest unit has been reviewed by an ODF Geo-technical specialist to determine the potential for deliverability of wood via debris flows or torrents originating in the units³. Debris flow track reaches receive the vegetation retention practices as prescribed in the Management Standards for Aquatic and Riparian Areas or in the case of public safety, comply with the Forest Practices Act retention standards.

To minimize yarding impacts on the slopes, single end suspension cable yarding will be required. Roads will be located on ridge-crests as much as possible and any steep sidehill portions will be constructed with full bench end-haul design and construction.

Application of Riparian Strategies

The sale in the FY17 AOP will be prepared using the aquatic-riparian strategy from the ESF FMP. Please refer to this plan for detailed information on the strategy⁴. The application of the strategy is accomplished by first determining the stream classification and then surveying the streams after July 15 to determine the upper extent of perennial flow as well as determining the upper extent of defined channels. Upper extent of perennial flow and defined channels are established with GPS and integrated into GIS using LiDAR base imagery. Stream and channel reaches are carefully measured and, during the sale layout process, buffer distances and required conifer retention are adhered to according to the ESF FMP aquatic-riparian

³ For detailed information on the risks associated with clearcut harvesting on steep slopes in the Tye Core Area, please refer to the following research paper: Robison, E.G., K. Mills, J.T. Paul, L. Dent, and A. Skaugset. 1999. Oregon Department of Forestry 1996 Storm Impacts Monitoring Project: Final Report. Forest Practices Technical Report #4. Oregon Department of Forestry, Salem Oregon, 141 pp.

⁴ http://www.oregon.gov/odf/state_forests/docs/esf/elliottf_fmp_2011/elliottsf_2011_fmp_final.pdf - Page 5-22 through 5-33

strategy. Additional trees needed to comply with the ESF FMP aquatic-riparian strategy are either included by increasing the buffer distance or by individually marking trees as wildlife trees above the minimum width buffer, but within the distances required in the ESF FMP aquatic-riparian strategy.

Old Growth

Reserving remnant old-growth trees - trees over 175 years old as of 2010 - is a district policy and protecting old growth stands is an FMP policy. Care is taken to walk through the unit and mark the residual old-growth as green tree retention. The only exception to this policy is if an old-growth tree is located where it impedes operability or causes a hazardous situation.

Plants

The sale area is checked against district knowledge for any listed plant location. The sale area is also checked against the Oregon Biodiversity Information Center (OBIC) database of known listed plant locations. Protection measures appropriate to the species would be implemented if listed plants were found within the harvest unit.

Clearcut Harvests

The ESF IP describes goals for the clearcut harvesting of 700 - 1000 acres on an annual basis. The FY2017 plan does not meet the IP goal of 700 – 1000 acres.

The clearcut timber sale in this plan has been selected to maintain adequate nesting, roosting, and foraging (NRF) habitat acreage for northern spotted owl provincial circles in accordance with State Forest policy. This practice is designed to maintain a diversity of age classes in the Elliott in keeping with the stand structure objectives. The location of timber sale unit was selected using legal requirements of FPA green-up, public safety areas, conservation areas, logistical issues of providing buffering between sold sales and murrelet survey areas, and maintaining logical harvest settings. Marbled Murrelet Management Areas (MMMA's) and Steep, Unique, and Visual (SUV) areas are excluded from harvest consideration.

Carbon

The Elliott State Forest and Pacific Northwest forests in general have the potential to sequester great amounts of carbon. A study completed by Ecotrust for the Elliott State Forest modeled five harvest level scenarios and resulting carbon storage potential of each harvest level. Data taken from this study shows the carbon sequestered each year on the Elliott State Forest is 800,000 tonnes of CO₂ per year from 2010 to 2015.⁵ The 2017 AOP timber harvest is estimated to release 500 tonnes of CO₂ into the atmosphere. Thus, during the 2017 AOP,

⁵ Carbon Analysis of Proposed Forest Management Regimes on the Elliott State Forest, Table 11.
http://www.ecotrust.org/forests/Carbon_Analysis_of_Elliott_State_Forest.pdf

the Elliott State Forest is estimated to sequester 799,500 tonnes of CO₂. This amount of sequestered carbon is equivalent to the annual emissions of 168,300 cars.⁶

Commercial Thinning

The ESF IP describes goals for the partial cut harvesting of 0 - 500 acres on an annual basis. There are no thinning operations planned for FY17.

Forest Health

ODF's primary long-range plan to deal with Swiss needle cast (SNC) and unknown future forest health problems is to plant a greater diversity of species. ODF is a member of the SNC Cooperative, which is looking for additional ways to control this disease. In addition, Douglas-fir resistance to SNC is being tested by the South Central Coast Tree Improvement Cooperative. Coos District is a member of this cooperative.

The Port-Orford-cedar root disease, caused by *Phytophthora lateralis*, threatens Port-Orford-cedar and, to some extent, Pacific yew in Southwest Oregon and northern California. Port-Orford-cedar occurs in some of the scattered tracts south of the Elliott's main block, but it has not been documented on the Elliott's main block. The 1993 survey for black stain root disease did not find any Port-Orford-cedar in the areas surveyed. Pacific yew does occur as scattered individuals on the Elliott. A total of 6 acres of Port-Orford cedar was planted on the Elliott in 2002 - 2003. Vehicle access to this area is blocked off year-round to protect fish and wildlife, which effectively prevents spread of POC root rot through vehicle traffic.

Sudden Oak Death has not been identified in the Elliott. Locations in Oregon where it has been identified have been quarantined by the Oregon Department of Agriculture to control its spread. ODF, in cooperation with the USFS, conducts annual statewide aerial surveys to identify areas with insect and disease problems, including Sudden Oak Death.

Summary of Timber Harvest Operations by Basin

In the following section, the commercial forest management operation planned for FY17 will be summarized in the context of the management basins on the Coos District. Only those management basins that have planned harvest will be discussed. The 2011 FMP and IP identify 14 management basins. Basins 1 -13 encompass the Elliott and Basin 14 is inclusive of the scattered tracts. This section is a summary of the planned operation by basin, and is not meant to completely describe the planned operation. Refer to Appendix A, Table 4 for more detail.

⁶ <http://www.epa.gov/cleanenergy/energy-resources/calculator.html#results>

Basin 9 – Henry’s Bend

Millicoma Flats – This sale is a 12 acre, 3rd growth, 1 unit clear cut with 11 total harvest acres.

Special Considerations: During the ODOT archaeologists’ cultural resources review, one resource was identified in the vicinity of the sale boundary. A field visit will be conducted as recommended by ODOT archaeologists during sale preparation.

Forest Roads Management

Overview

The following is a summary of forest road projects that are anticipated to be accomplished as part of the proposed timber sale in the 2017 fiscal year. The sale planned in the FY17 AOP has had a slope stability risk assessment by an ODF geotechnical specialist. As needed, the geotechnical specialist will make site-specific road and engineering recommendations for practices to achieve resource and economic goals for the forest consistent with the Elliott FMP and IP.

Road Construction

For FY 2017, 0.1 miles of new road construction is planned for a total cost of \$2,000. Other project work associated with the FY17 harvest operation account for an additional \$1,000 of total costs. The Roads Summary Table (Appendix A, Table 6) specifies sale-specific project costs. Further analysis during sale preparation may determine that in some cases the addition of new roads would provide better options in regard to safety and environmental impact. For example, there may be a more suitable location to position a yarder for guyline anchors and skyline road alignment. All road construction and improvement will be done during favorable weather and excavated material will be deposited on stable slope locations with very low risk of entering stream channels.

Road Improvement

1.1 miles of road improvement are identified in the primary operation for a cost of \$5,000. A project not funded by harvest operations will remove approximately 600 yards of sidecast material from a legacy road system at a cost of \$30,000. The State Forests Engineer, State Forests Geotechnical specialist, ODOT, and a contractor will be involved in planning and executing the project. Various prescriptions for road renovation may be required, including but not limited to, resurfacing with hard crushed quarry rock, replacing culverts that are damaged or undersized, installing culverts at new locations in order to achieve proper spacing and ditch water diversion, grading and ditching, widening, and roadside brushing. Also, potential hazards associated with the road systems, such as old sidecast material or sub-surface drainage problems, will be identified and corrected. Primarily, the objective is to minimize the impact forest roads have on slope stability, water quality, and wildlife and in general the

surrounding environment and at the same time provide an adequate, safe and efficient transportation system. The Roads Summary Table (Appendix A, Table 6) specifies specific project costs.

Road Access Management (Road Closures)

All of the roads that fall under this operations plan that are not surfaced will be closed to traffic, with the exception of ATV'S for reforestation or management purposes, once the operation is complete. The most common method of closing is to construct a tank trap or place large boulders at the road junction. A tank trap is a deep ditch between two large mounds of dirt. The road surface will be water barred at intervals proportional to gradient. Seasonal water-bars and closure may be necessary if an operation continues through two or more seasons.

Vacated Roads - None planned.

Road Maintenance

The Elliott State Forest maintains an average of 320 miles of road annually. Road maintenance on the Elliott State Forest is accomplished by a road maintenance contractor at an average yearly cost of \$250,000. Declining budgets have reduced the road maintenance budget to \$125,000 in FY 2017. The road maintenance contract does not include the delivery of rock stockpiles, which are used by the maintenance contractor to surface and repair roads. However, there are no plans to use rock stockpiles in the 2017 AOP operations. The focus of road maintenance activities for FY 2017 will be to prevent resource damage and insure compliance with the Forest Practices Act. Road maintenance activities that may occur during Fiscal Year 2017 include grading road surfaces to maintain a smooth, stable running surface and to retain the original surface drainage. Surfacing material may be added or replaced as necessary on road segments that experience a breakdown or loss of surface material. Culverts, catch basins and ditches will be cleaned as necessary to ensure proper drainage. Worn out, damaged or undersized drainage structures will be replaced as necessary to prevent resource damage. Cut and fill slopes will be monitored for any changes that could result in damage. Problems most often encountered include raveling, erosion and slumping. Slides in roadbeds will be removed and old sidecast material will be pulled back from the road shoulder where slumping or tension cracks occur. Roadside vegetation control measures may be taken to improve visibility, drainage and slope stability.

Land Surveying

The 2017 AOP operation are not adjacent to private ownership. However, the boundary between Board of Forestry and Common School Land ownership along the eastern edge of Millicoma Flats may be surveyed. This boundary is approximately 550 feet.

Young Stand Management

Total expenditures of young stand management for the 2017 AOP is estimated to be \$262,320. Plans for interplanting, mechanical release, application of big game repellent, and direct control for tree protection will be completed by an inmate crew led by an Inmate Crew Coordinator. The breakdown of individual activities is located in the Reforestation and Young Stand Management Report (Appendix A, Table 7). Planned operations in the FY17 AOP are designed to be in compliance with the current ESF Management Plan, Implementation Plan, and state and federal laws. Herbicides are applied in compliance with the label and the rules of the Forest Practice Act.

Site Preparation

Aerial chemical site preparation on 183 acres is planned for a total cost of \$16,470. Ground-based chemical site preparation on 152 acres is planned for a total cost of \$19,000. The goal of site preparation projects is to reduce vegetative competition and minimize tree seedling mortality during the first five years after planting. The primary and most cost-effective site preparation tool used by Coos District is aerial application of herbicides. Ground-based application may be used as an alternative to aerial application where resource concerns take precedent over cost-effectiveness. Coos District uses means other than herbicides when appropriate such as burning or mechanical release (i.e. chainsaws). Approximately 10-15% of each year's regeneration harvest acreage (units) are not treated with herbicides to promote growth of forage for deer and elk and other species. Units are typically site-prep sprayed once during the rotation length of the stand (i.e. 80 years).

Burning

Burning is planned on 74 acres for a cost of \$9,250. Burning is an alternative site preparation practice prescribed for the south aspect slopes of several units in each AOP. The main purpose of burning is to diversify the results of site preparation and to provide big game forage. However, portions of sales may also be burned to attain adequate stocking if planting sites are too few. The forb and grass competition resulting from burning provides forage to deer and elk. Burning is completed when duff moisture is adequate to avoid heat intensities that would damage soil. Areas chosen for burning have southern exposures, and a distribution of slash that can successfully spread fire.

Planting

Initial planting is planned on 436 acres for a cost of \$156,960. Inter-planting is planned on 60 acres for a cost of \$8,400. This operations plan will include several stock types and a mix of species. The density and species mix will vary through time to meet the goals for the stand. The stock type will vary to provide the best balance of vigorous cost-effective stock. Thirty to forty percent of seedlings planted will be minor species, primarily hemlock and western red-cedar, to provide for diverse habitat and reduce the effects of Swiss needle cast and other diseases. Planting costs include all costs including seedlings.

Vegetation Management

Release operations: Vegetation release is planned on 120 acres for a cost of \$16,650. These treatments are planned as needed to reduce competing vegetation. The purpose is to keep stands free to grow, keep stands vigorous and healthy and to increase return on investment. Most release treatments will be ground treatments: Hack & squirt with imazapyr, thin-line, or a ground based foliar application of triclopyr in water for Scotch broom, and manual release by inmates with chain saws.

Noxious or non-native plant control: Noxious plant control is planned on 55 acres for the 2017 AOP for a cost of \$2,750. The purpose is to control gorse, Scotch broom and other plants of concern identified as noxious by the Oregon Department of Agriculture. Integrated pest management will be used which may include the use of a range of control measures including mechanical, herbicides, and biological control including the overtopping of some plants by conifer plantations.

Tree Protection

Mountain beaver trapping is planned on 721 acres at a cost of \$28,840. Damage by mountain beaver can have significant impacts on stand stocking and growth. Mountain beaver trapping is prescribed on all clearcut harvest units in the 2017 AOP and other recent AOP clearcuts. This is done to reduce the mortality and damage of seedlings to acceptable levels. Species other than Douglas-fir may be treated with big game repellent (100 acres, \$4,000) to help reduce the damage caused by deer and elk.

Pre-commercial Thinning (density management) – No planned management.

Recreation Management

Overview of Recreation Management

Based on past assessment of needs and policies, there is very little formal recreation management on the Elliott State Forest. The Elliott is relatively lightly used for recreation, much of it occurring along the roads, rivers, and streams. The recreation that does occur is mostly confined to hunting, fishing, camping, and picnicking. Most recreation use is informal dispersed recreation, with the main users being the local residents who live in nearby communities. Local residents are attracted to the Elliott because its recreation is dispersed and unimproved, with few recreationists competing for favorite sites.

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

At the current time there are only two developed recreational facilities on the forest – both on Board of Forestry land. The Millicoma Interpretive Center (MIC) is a fish hatchery and

educational outreach facility on the West Fork Millicoma River operated by the ODFW. Salmonids, including chinook, steelhead, and Coho salmon, are spawned, reared, and acclimated at this facility to support fishery programs. The center also provides a hands-on approach to learn about the salmon life cycle to schools and groups who visit the facility. A short forest trail is associated with MIC for use by visitors.

Camp Chinook – adjacent to MIC - is operated by the Boy Scouts of America (BSA) who have received a permit to manage and improve the existing site. BSA has proposed improvements to the existing lodge and Adirondack style shelters. BSA has also proposed additional Adirondack style shelters, a covered gathering place, and road improvements. Site improvements may begin in FY2017.

Trails – No planned management.

Land Exchange – No BOF land exchanges are planned in FY2017. However, DSL is conducting the ongoing Elliott Ownership Transfer Opportunity Project.

Other Integrated Forest Management Operations

Cooperation and participation with Coos Watershed Association (CWA), Partnership for the Umpqua Rivers (PUR), and the Tenmile Lakes Basin Partnership (TLBP) will continue during the 2017 AOP period. Stream enhancement, restoration projects, and watershed and project monitoring are likely activities during this period. Riparian management activities on the ESF support the goals of the Oregon Coastal Coho Conservation Plan which are to create conditions in which Coho are sufficiently abundant, productive, diverse and self-sustaining and provide substantial environmental, cultural, and economic benefits within the state of Oregon.

During the 2017 AOP, the Coos District has plans for in-stream log and boulder placement activities on the West Fork Millicoma River in collaboration with the CWA. This in-stream work is planned to finish up the project reach begun in the summer of 2015 and will utilize up to 15 whole Douglas-fir trees and 250 cubic yards of boulders to be placed into the West Fork Millicoma River. The District also has plans for placing up to 120 Douglas-fir trees utilizing a helicopter for placement into Scholfield Creek with the assistance of PUR. A fish passage enhancement project is scheduled at Stulls Falls this summer. Fish passage channels will be cut into the bedrock to enable coho salmon to more easily pass the falls over a wider range of winter flows. Two other fish passage enhancement projects may be conducted if funding can be secured. Those sites are on the West Fork Millicoma River and Elk Creek. Existing boulders may be re-arranged to provide deeper jump pools for the salmon to pass over the step falls during winter flows.

The Coos District will continue to sell permits to harvest special forest products on a request basis, consistent with product availability and protection requirements. This has amounted to annual revenue of approximately \$350 for the last several years. Permits for special forest

products will not be issued on CSFL lands past March 1, 2017 due to the Elliott transfer process, unless otherwise directed by the Department of State Lands.

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

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

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

The public will be notified of firewood cutting permits through the district's telephone recording (541-267-1774) and posting at the district office. Permits will be issued for differing lengths based on resource conditions and amount of wood available, during the months outside the fire season. Coos Fire Protective Association (CFPA) regulates fire season and is generally from July 1st through October 15th.

A limited number of personal firewood cutting permits will be issued to the public, on a first come-first served basis, with a limit of two permits per individual or household within a firewood cutting season from fall through spring. The permit cannot be used to sell firewood to another party. Firewood cutting permits will be issued and administered to public employees under the same processes used by the public. Oregon Department of Forestry does not guarantee the quality or availability of wood when issuing firewood cutting permits. Exceptions to the two-cord limit may be made for non-profit organizations, with prior district authorization. Approximately 150 personal firewood cutting permits are issued each cutting season.

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

Enforcement of firewood cutting permits will be accomplished by contracted law enforcement officers and following ODF’s Firewood Cutting Guidance described in section 12.2.G1.2.2. Additional firewood cutting permit requirements and guidelines are provided with the permit.

Permits for firewood will not be issued on CSFL lands past March 1, 2017 due to the Elliott transfer process, unless otherwise directed by DSL.

PLANNING (and Information Systems)

Stand Level Inventory and Other Vegetation Inventories

Stand Level Inventory: There are no plans in the 2017 AOP for any stand level inventory work.

Stocking surveys and young stand fixed plots: These inventory projects as part of normal reforestation efforts identify stocking levels and growth rates and will be used to develop stand management prescriptions. Prescriptions can include inter-planting, release, animal damage control, and PCT.

Fish and Wildlife Surveys

Under the 2011 ESF FMP and IP, surveys of proposed timber sales for northern spotted owls are required on the Elliott. Density surveys for NSO have occurred in calendar years 2010, 2011, 2012, 2013, 2014, and 2015 and are planned for FY 2017. In calendar year 2015, the total cost of NSO surveys in the Coos District was \$182,526. Costs for planned NSO surveys in FY2017 are expected to be similar. These surveys show population density data and will provide two years of ongoing surveys as required by ODF’s NSO Policy.

Physical Habitat Surveys are done in the spring by ODF foresters to determine the upper extent of fish use in streams associated with timber sales. These surveys in addition to flow and channel surveys done after July 15 discussed earlier in the “Application of Riparian Strategies” section provide the information necessary to assure properly functioning aquatic and riparian systems will be maintained throughout the 2017 AOP.

Table 3. Summary of status of T&E surveys.

Operation	Species (NSO/MM) ¹	Status
ESF Density	NSO	Seventh year survey in 2016. Current survey expiration is March 15, 2018.
Millicoma Flats	NSO/MM	Non-Habitat

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

Aquatic and Riparian Resources

The objective of the 2003 Elliott Watershed Analysis was to compile information on water, fish, and wildlife issues that the Elliott State Forest will face in the near future and assess the historic, current, and future conditions of these resources. The analysis was tailored specifically to objectives for the Elliott State Forest and provides analysis for the Coos, Tenmile Lakes, and Umpqua watersheds within the Elliott. Additionally, the analysis includes an evaluation of social issues, such as human uses of the forest. The analysis is being used to support the Elliott's current Forest Management Plan, Implementation Plan, Annual Operation Plans, and for future adaptive management.

Research and Monitoring

The Riparian and Stream Temperature (“RipStream”) monitoring Project has been active in the Oregon Coast Range since 2002. Field work is complete and data analysis is ongoing. The project consists of 33 sites with about half on private forests and half on state forests. The objectives of this study are to evaluate effectiveness of Forest Practices Act and Forest Management Plan riparian strategies in protecting stream temperature and promoting riparian functions for the protection of fish and wildlife habitat. Baseline and post-harvest results have been published in three peer reviewed journal articles. Results indicate high variability in temperature patterns prior to harvest (Dent et al 2008)⁷. Results also indicate that current NW FMP State Forests Riparian Strategies are effective at meeting DEQ standards for “protecting cold water” (Groom et al 2011a and 2011b)⁸. The average harvest effect on maximum temperature by site (n=15, 3 of which were in or near the Elliott State Forest) was 0.0 C (range -0.87 to 2.27 C)” (Groom et al 2011b)⁹. These strategies are also used on the Elliott State Forest.

Coos District has been a participant in the Northwest Tree Improvement Cooperative since its founding over 30 years ago. The district is currently in the process of second generation testing. The district is also a participating member of the Stand Management Cooperative. A test site is located on the Elliott and district staff has been assisting in the measurement and

⁷ **Dent et al 2008:** Dent, Liz, Danielle Vick, Kyle Abraham, Stephen Schoenholtz, and Sherri Johnson, 2008. Summer Temperature Patterns in Headwater Streams of the Oregon Coast Range. *Journal of the American Water Resources Association (JAWRA)* 44(4):803-813. DOI: 10.1111/j.1752-1688.2008.00204.x

⁸ **Groom et al 2011a:** Groom, J. D., L. Dent, and L. J. Madsen (2011), Stream temperature change detection for state and private forests in the Oregon Coast Range, *Water Resource. Res.*, 47, W01501, doi:10.1029/2009WR009061.

Groom et al 2011b: Groom, J.D., et al. Response of western Oregon (USA) stream temperatures to contemporary forest management. *Forest Ecol. Manage.* (2011), doi:10.1016/j.foreco.2011.07.012

⁹ **Groom et al 2011a:** Groom, J. D., L. Dent, and L. J. Madsen (2011), Stream temperature change detection for state and private forests in the Oregon Coast Range, *Water Resour. Res.*, 47, W01501, doi:10.1029/2009WR009061.

Groom et al 2011b: Groom, J.D., et al. Response of western Oregon (USA) stream temperatures to contemporary forest management. *Forest Ecol. Manage.* (2011), doi:10.1016/j.foreco.2011.07.012

maintenance of these plots since the beginning of the research. Forest-wide permanent plots were established on the forest in 1998. We also participate in the Swiss needle-cast cooperative and have some plots installed in some young commercial thinning stands as a part of a study by this cooperative.

Public Information and Education

The most significant planned activity in this area will be the Annual Operations Plan process including the public comment period.

District personnel routinely participate in and are voting members of the Coos Watershed Association and the Tenmile Lakes Basin Partnership, and are also non-voting members of the Partnership for Umpqua Rivers. This activity enables the district to keep the watershed councils informed of district operations, to participate in planning watershed enhancement activities, and to receive information from neighboring landowners and other interested parties on concerns they have about the Elliott State Forest.

Each year the district participates with other landowners and agencies in the Lower Umpqua Tree Planting Day, which gives local school children an opportunity to plant trees. District personnel also assist with South Slough's Natural Resource Days each spring in helping school children learn basic forest measurements and outdoor skills.

Administration

It is anticipated that there will be about 10 Full-Time-Equivalent positions (**FTE's**) at the Coos District whose responsibility is to implement current and past Annual Operations Plans. The Coos District is organized into three primary teams:

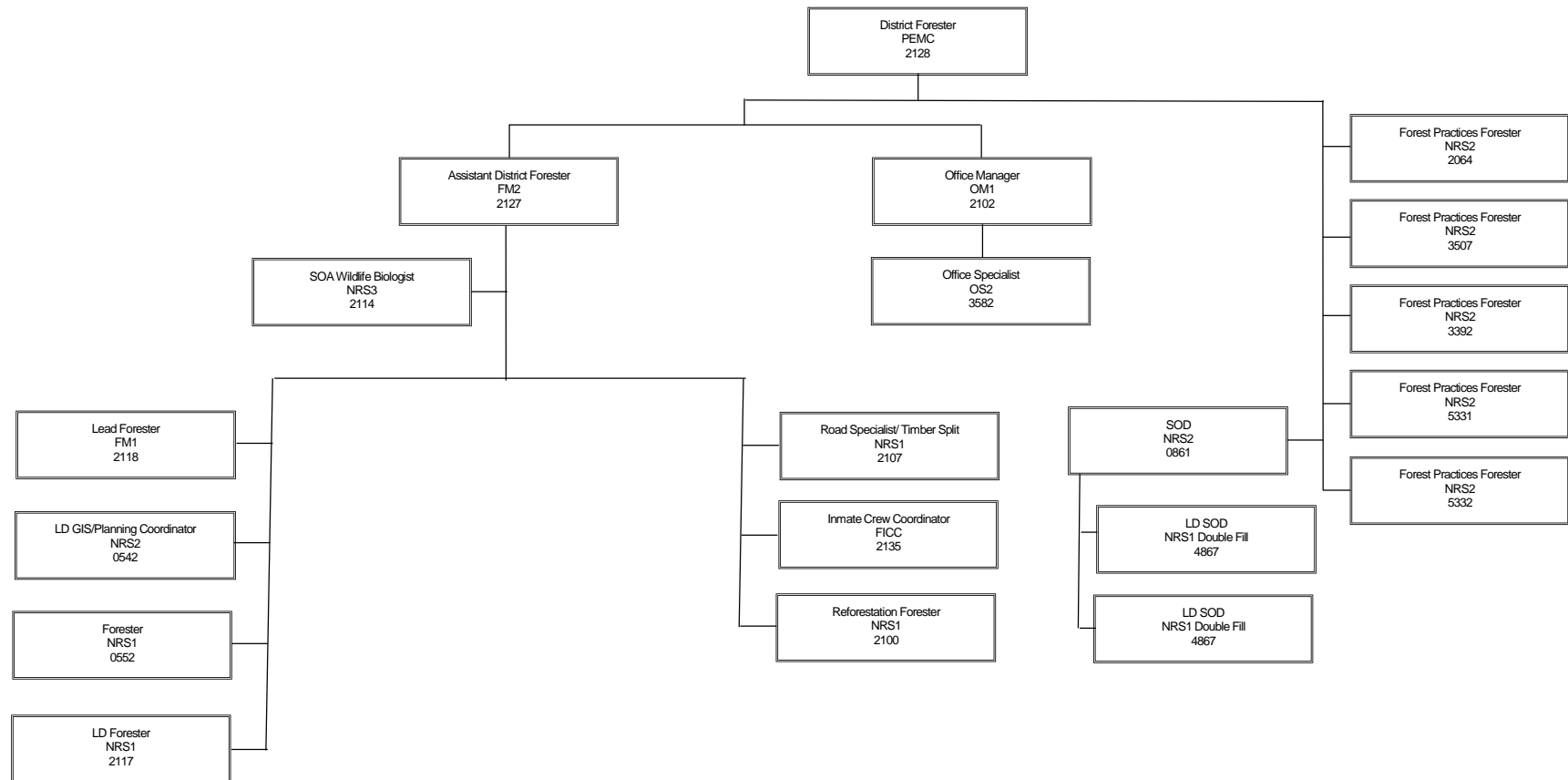
The Administrative Staff which includes the District Forester, Assistant District Forester, Office Manager, and the Southern Oregon Area Wildlife Biologist.

The Reforestation Team is composed of a Reforestation Forester and Forest Inmate Crew Coordinator (FICC). This team handles all noncommercial silvicultural treatments from site preparation through pre-commercial thinning.

The Timber Unit is composed of a Lead Forester, three additional Foresters, and a GIS/Planning Coordinator. One of the Foresters in the Timber Unit also splits their time as a Road Specialist. This team prepares Pre-Operations plans for timber sales, timber sale contracts, and administers timber sale contracts. They also are involved in long-range planning and threatened/endangered species monitoring and surveying.

The Road Specialist / Forester prepares engineering plans and exhibits for contracts, administers road building/improvement and the road maintenance contract (50 percent); and prepares timber sale contracts and administers timber sale contracts (50 percent).

Many of the above personnel are involved in wildland firefighting activities during project fire situations throughout the state which can be a very significant workload in addition to normal duties. The Coos District staffing levels are in compliance with current budget instructions. See the organization chart on Page 19.



APPENDIXES

A. Summary Tables

Table 4: Harvest Operations – Financial Summary

Table 5: Harvest Operations – Forest Resource Summary

Table 6: Forest Roads Management Summary

Table 7: Reforestation and Young Stand Management Summary

Table 8: Recreation Management Summary

B. Maps

1. Coos District 2017 Vicinity Map
2. Other maps that support the AOP

C. Consultations with Other Agencies

This appendix summarizes the results of consultations with the Oregon Department of Transportation, USDI Fish and Wildlife Service, and Confederated Tribes of the Coos, Lower Umpqua, and Siuslaw Indians.

D. Public Involvement

This appendix describes the results of the public involvement process of this AOP.

E. Pre-Operations Report

A draft Pre-Operations Report for Millicoma Flats is available from the District upon request.

F. Forest Land Management Classification Changes

This appendix describes (minor/major) changes to the State Forests' Forest Land Management Classification System including maps of the specific changes.

Summary Tables 2 & 3

Stewardship Classifications Maps

Appendix A. Summary Tables

Table 4 HARVEST OPERATIONS - FINANCIAL SUMMARY

District: Coos

Fiscal Year: 2017

Date: 03/02/2016

Primary Plan	Fund %		County	Sale Quarter	Net Acres		Volume (MMBF)			Value		
	BOF	CSL			Partial Cut	Clear-cut	Conifer	Hard-woods	Total	Gross	Projects	Net
Millicoma Flats	100%	0%	Coos	4	0	11	0.15	0.04	0.19	\$62,700	\$8,000	\$54,700
Total:					0	11	0.15	0.04	0.19	62,700	8,000	\$54,700

Table 5 FOREST RESOURCE SUMMARY

District: Coos

Fiscal Year 2017

Date: 03/02/2016

Forest Resources Present In or Adjacent To Harvest Operations

Primary Operation	Area (Optional)	Forest Health Issues Present ¹	Invasive Species Present ²	Install/Replace Culverts on Streams	Operating within 100' of Fish Bearing or Perennial Stream ⁵	Domestic Water Source Present/Adjacent	Potential Stream Habitat Improvement	Operating within a NSO Provincial Circle	Within 1/4 mile of MMMA	T&E Fish in Basin	T&E Plants Present/Adjacent	Geotechnical Issues Needing Review	Recreation Sites Present of Adjacent	Cultural Resources Present or Adjacent	Scenic Resources Present or Adjacent
Millicoma Flats		N	A	N	PS	N	N	N	N	Y	N	N	N	Y	N

¹ A 'Y' (in any column) indicates yes the operation does involve the specified resource

² A 'P' indicates that the specified resource is present within the operations boundaries, while an 'A' indicates that the resource is adjacent to the operation (in any column)

⁵ A 'F' for Fish Bearing or a 'PS' for Perennial Stream indicates that the operation may include activity within 100' of this stream type

Table 6 FOREST ROADS MANAGEMENT SUMMARY

District: Coos **Fiscal Year:** 2017 **Date:** 03/07/2016

Primary Operation	Construction		Improvement		Other Projects	Total Project Costs	Gross Value of Operation
	Miles	Cost	Miles	Cost			
Millicoma Flats	0.1	\$2,000	1.1	\$5,000	\$1,000	\$8,000	\$62,700

**Projects Not Funded
by Harvest Operations**

Primary Operation	Construction		Improvement		Other Projects	Total Project Costs	Funding Source
	Miles	Cost	Miles	Cost			
0300 Pullback	----	----	1.0	\$1,000	\$29,000	\$30,000	DSL

Table 7 REFORESTATION AND YOUNG STAND MANAGEMENT SUMMARY

District COOS		Fiscal Year: 2017		03/02/2016				
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	31	\$360.00	\$11,160.00	405	\$360.00	\$145,800.00	436	\$156,960.00
Interplanting	0	\$140.00	\$0.00	60	\$140.00	\$8,400.00	60	\$8,400.00
Underplanting	0	\$0.00	\$0.00	0	\$0.00	\$0.00	0	\$0.00
Tree Protection-Barriers	0	\$0.00	\$0.00	0	\$140.00	\$0.00	0	\$0.00
Tree Protection-Direct Control	31	\$40.00	\$1,240.00	690	\$40.00	\$27,600.00	721	\$28,840.00
Site Prep-Chemical- Aerial	31	\$90.00	\$2,790.00	152	\$90.00	\$13,680.00	183	\$16,470.00
Site Prep-Chemical- Hand	0	\$125.00	\$0.00	152	\$125.00	\$19,000.00	152	\$19,000.00
Site Prep -Slash Burning	29	\$125.00	\$3,625.00	45	\$125.00	\$5,625.00	74	\$9,250.00
Site Prep -Mechanical	0	\$0.00	\$0.00	0	\$0.00	\$0.00	0	\$0.00
Fertilization	0	\$0.00	\$0.00	0	\$0.00	\$0.00	0	\$0.00
Noxious weeds	5	\$50.00	\$250.00	50	\$50.00	\$2,500.00	55	\$2,750.00
Release-Chemical- Aerial	0	\$60.00	\$0.00	0	\$60.00	\$0.00	0	\$0.00
Release,-Chemical-Hand	0	\$125.00	\$0.00	10	\$125.00	\$1,250.00	10	\$1,250.00
Release-Mechanical-Hand	10	\$140.00	\$1,400.00	100	\$140.00	\$14,000.00	110	\$15,400.00
Precommercial Thinning	0	\$150.00	\$0.00	0	\$150.00	\$0.00	0	\$0.00
Pruning	0	\$0.00	\$0.00	0	\$0.00	\$0.00	0	\$0.00
Big Game Repellant (BGR)	0	\$40.00	\$0.00	100	\$40.00	\$4,000.00	100	\$4,000.00
Totals	137	--	\$20,465.00	1,764	--	\$241,855.00	1,901	\$262,320.00

*Planting costs include all costs including seedlings

Table 8 RECREATION MANAGEMENT SUMMARY

District: Coos

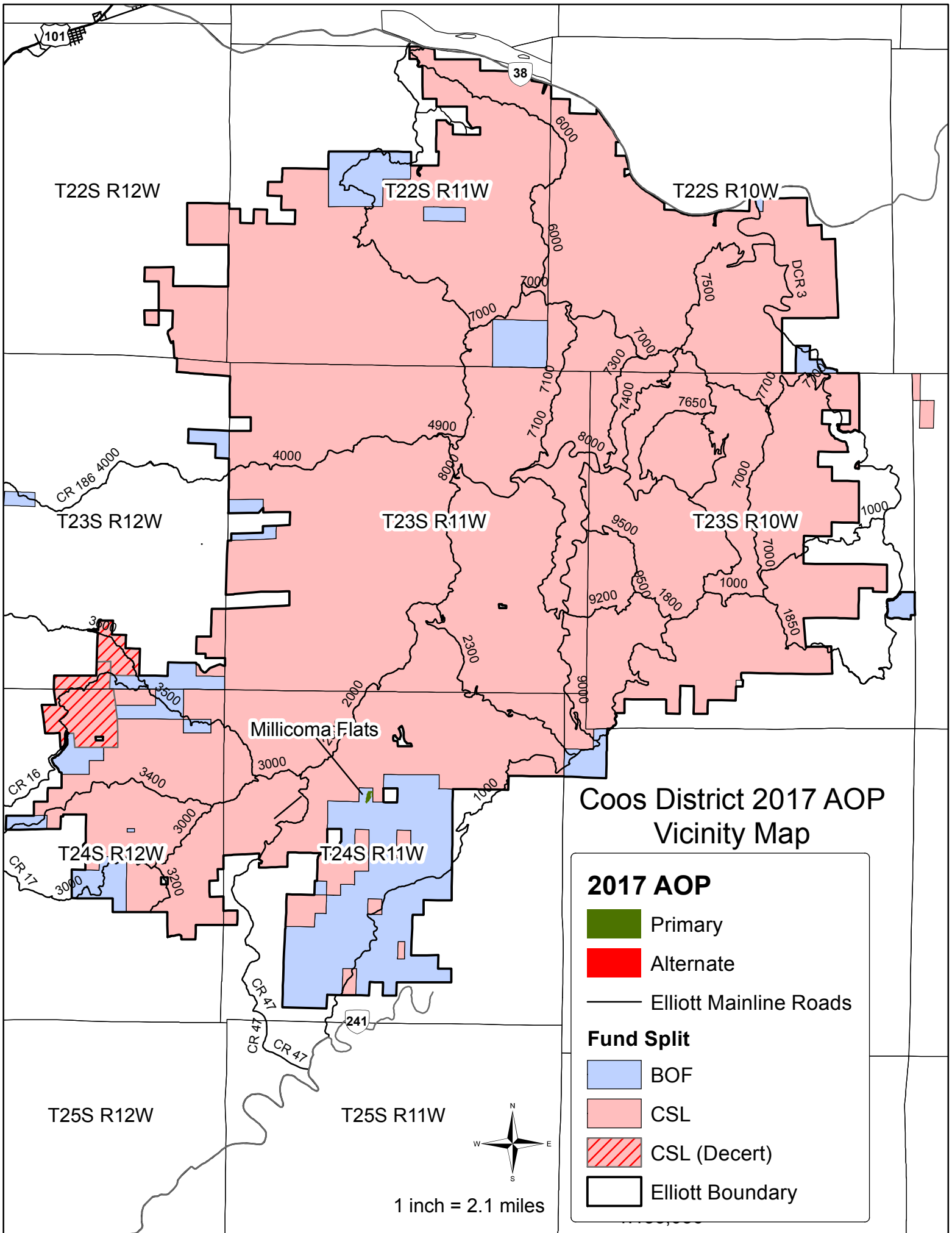
Fiscal Year: 2017

Date: 03/07/2016

Operation	Unit of Measure	Current	Construction Projects	Construction Cost (Funding)		Improvement Projects	Improvement Cost (Funding)		Total Cost	Comments
				ODF	Other		ODF	Other		
Facilities										
Campsites	Sites								\$0	
Day Use Areas*						*	0		\$0	
Trailheads									\$0	
Interpretive Sites									\$0	
(Other)	Sites								\$0	
Trails										
Non-Motorized	Miles								\$0	
Motorized	Miles								\$0	

Total:	\$0
---------------	------------

* Refuse removal and Road Maintenance of undeveloped camping spots primarily along the West Fork Millicoma & Elk Creek



Coos District 2017 AOP Vicinity Map

2017 AOP

- Primary
- Alternate

— Elliott Mainline Roads

Fund Split

- BOF
- CSL
- CSL (Decert)
- Elliott Boundary



1 inch = 2.1 miles

Appendix C. Consultations with Other State Agencies

This appendix summarizes the results of consultations with the Oregon Department of Transportation.

The following consultations were made:

- During the ODOT cultural resources review, one resource was identified in the vicinity of the sale boundary. A field visit will be conducted as recommended by ODOT during sale preparation.

Appendix D: Public Involvement

Public Comment Process for the 2017 Annual Operation Plan

The Oregon Department of Forestry held a formal 45 day public comment period for the 2017 Annual Operations Plans from April 4 through May 20, 2016.

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

No public comments were received.

Appendix E. Pre-Operations Report

Operation Name:	Millicoma Flats		
Management Basin:	09 – Henrys Bend	Sale Quarter:	4
County (%):	Coos	100%	BOF %
			100
			CSL %
			0

I. VOLUME AND VALUE SUMMARY

Table 1. Types, Acres, and Value

Area	Harvest Type	Anticipated Product ³	Gross Acres ⁴	Net Acres	MBF/Acre ¹	MBF/Area ¹	\$/MBF ²	\$/Area
1	Clearcut	DF-M	12	11	19	209	300	62,700
Total		Regeneration	12	11		209		
		Partial Cut						
						Gross Value		62,700
						Project Costs		8,000
						Net Value		54,700

1. Estimated harvest volume per acre or Area.
2. Estimated 'stumpage value' (excluding Project Costs)
3. Anticipated Product (AA-B-C) – AA) SLI species code of the bid species, B) Size Class (S – small [average DBH < 15], M – medium [average DBH 15 to 23], L – large (average DBH > 23)), C) Special Product (P – Premium, H – Hardwood)
4. All acres within timber sale boundary, stream buffers and interior roads.

II. PHYSICAL DESCRIPTION OF OPERATION AREA

Table 2. Physical Characteristics of Operation Area

Location: T24S, R11W, Sections 9 & 16	
Rainfall: 68-78 inches	Elevation: 300 - 500 feet
Site Index: 134	Aspect: South(60%), Southeast(40%)
Vegetation Zone: -	Other:

III. CURRENT STAND CONDITION:

Table 3. Stand Inventory Information²

Area	Stand ID	Measured /Imputed ¹	Species	Age	TPA	DBH	BA	% SDI	Net Acres
1	1673	M	DFRA	51	149	15"	172	45	11

¹Identify the source of stand inventory information. Use the following codes: M = Measure SLI data, I = Imputed SLI data, P = Pre-Cruise Plots, O = OSCUR data.

1. Stand information is based on trees >=8", grown to 2014.

Table 4. Additional Stand Information

Area	Stand ID	Snags/Acre ¹	Down Wood /Acre ²	% Ground Cover	Predominant Understory Vegetation	Forest Health Issues
1	1673	1	13	74	Swordfern, Salmonberry, Evergreen Huckleberry	

1. Identify the number of hard snags per acre (decay classes 1 and 2).
2. Identify the cubic feet per acre of hard down wood (decay classes 1 and 2).

IV. DESIRED FUTURE CONDITION/VISION:

Table 5. Stand Structure Information

Area	Stand ID	Current	Post Harvest ¹	Net Acres
1	1673	INT	EAR	11

1. The stand is expected to develop into this condition in the five to ten years after this operation is completed.

This management prescription in Area 1 will result in a young, well-stocked and vigorous stand of newly established trees, grasses, herbs and shrubs. These Early Structure stands will contribute to a broad diversity of forest structures over time. Forest-wide, Early Structure will be maintained within a range of 10-20 percent.

V. PROPOSED MANAGEMENT PRESCRIPTION:

Table 6. Prescription

Area	Harvest Type	Harvest Species	Residual Species	Residual TPA	Residual BA	Residual SDI
1	Clearcut	DF, WH, RA	DF, WH, RA	2-4	9	2

Table 7. Structural Components

Area	Purpose	Species	DBH	TPA	Arrangement					Anticipated Down Wood (ft ³ /Acre)
					Scattered in Unit	Clumps in Unit	In Unit RMA	Adjacent RMA	Green Tree Area	
1	GTR	DF/WH	15"+	2-4			X		X	60 - 120

Table 8. Pathway

Area	Reforestation			Pre-commercial Thinning		Partial Cut A	Partial Cut B	Regeneration Harvest
	Type	Species	TPA	Age	TPA	Age	Age	Age
1	Planting	60-70% DF: 30-40%minor	400-550	50% @ age 15	194-222	40	-	-

Table 9. Site Preparation

Area	Site Prep				Other issues (Big Game, Mtn. Beavers, SNC, etc)			
	Slash Treatment	Whole Tree Yarding	Chemical	Other	Vegetation	Animal	Insect & Disease	Other
1	Burn landing piles	As needed	Glyphosate, Imazapyr	Invasives, Scotchbrm	RA	M. Boomer Elk		

VI. HARVESTING AND ACCESS CONSIDERATIONS:

Table 10. Harvest System and Access Summary

Area	Harvest System		Slope (%)	Area Access	Seasonal Access
	% Cable	% Ground			
1	0	100	< 35%	Established	Dry Weather

Are Easements required along haul route? YES NO

No new easements are required. However, the transportation of forest products along county maintained haul routes in proximity to the sale is pursuant to the terms of existing easements.

Are property line surveys required for this operation? YES NO

If "yes", describe the lines to be surveyed, type of survey (i.e. section subdivision, refresh previously established line, etc.), and length of survey. May require survey of 550' between BOFL and CSFL boundary along eastern edge of sale.

Are Invasive Species present along the haul route? YES NO

If "yes", describe below the management actions necessary to meet management goals for these species. Scotch broom is present and will be spot treated as necessary.

Table 11. Transportation Management Summary (Miles or Number of Crossings)

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct				0.1
Improve		1.1		
Maintain		1.1		0.1
Block (Dormant)				0.1
Vacate				
Stream Crossings				
Type F				
Type N				

VII. AQUATIC RESOURCES AND WATER QUALITY:

Table 12. Stream Classifications Within or Adjacent to the Operation

Area	Fish Bearing (Type F)	Operating in Inner Zone of Type F	Non-Fish Bearing (Type N)				Unknown - Fish Presence Surveys Required
			Large / Medium	Small Perennial	H.E.R. / P.D.F.T	Seasonal/ Other	
1	TBD	-		TBD	TBD	TBD	Yes

TBD: To Be Determined

Table 13. Additional Stream Considerations

Area	Aquatic Anchor	Potential Stream Habitat Project	Domestic Water Sources Present	Stream Name
1	-	No	No	W. Fk. Millicoma Tribs

VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:

Table 14. Northern Spotted Owls - Surveys and Presence

Area	NSO Surveys Required ¹	Years Surveys Completed	Additional Surveys Planned	NSO Response
1	N.H.			

1. Surveys are required if the Area contains NSO habitat, as determined by Area Wildlife Biologist. Enter “Yes” or one of the following codes when surveys are not required: “N.H.” – no habitat within the Area; “N.R.” – surveys of individual operations are not required (Klamath-Lake District only); “T.B.” – surveys are not required because the Area is within the Tillamook Burn (see NSO Policy); “HCP” – covered by a Habitat Conservation Plan; “S.W.” – a survey waiver has been issue for another reason (explain below or attach the waiver).

Is the Operation within an NSO Provincial Circle or Home Range? YES NO
 If “yes”, attached the preliminary Biological Assessment.

Table 15. Marbled Murrelets - Surveys and Presence

Area	MM Surveys Are Required ¹	Years Surveys Completed	Additional Surveys Planned	MM Observations
1	N.H.	-	-	-

1. Survey are required if the Area contains or is adjacent (within 330 feet) of potential marbled murrelet habitat, as determined by Area Wildlife Biologist. Enter “Yes”, or one of the following codes when surveys are not required: “N.H.” – no potential habitat within or adjacent to the Area; “O.Z.” – outside the Marbled Murrelet Survey Zone; “S.S.” – in Systematic Survey Zone; “T.C.” – tree climbing was used (or planned) instead of the normal survey protocol; “HCP” – covered by a Habitat Conservation Plan; “S.W.” – a survey waiver has been issue for another reason (explain below or attach the waiver).

Is the Operation within a Marbled Murrelet Management Area? YES NO
 If “yes”, attached the preliminary Biological Assessment.

Other Wildlife Considerations:

T&E Fish:

Streams in and adjacent to this sale are within the West Fork Millicoma river basin. As of May 2008, coho salmon are federally listed as threatened in the Oregon Coast ESU and occur within this basin but not in the sale area.

T&E Plants:

Does the Oregon Biodiversity Information Center database or field reconnaissance indicate the presence of known threatened or endangered plants near the operation? YES NO

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

Table 16. Summary of Slope Stability Assessment¹

Area	Potential Hazards ²					Geotech Review to Date	Additional Geotech Review ⁴
	Deep Seated Landslide	HLHL – Risk to Stream	HLHL – Risk to Public	Potential Debris Flow Track Reach ³	Inner Gorge		
1	NL	NL	NL	NL	NL	LiDAR, GE	As req.
Unit located within relict meander bend of WF Millicoma							

¹ All assessments are based on the review conducted to date; additional field work by the Geotechnical Specialist (Geotech), foresters, or others may identify additional sites or risks that could lead to further evaluation or modification of the operation. Additionally, most or all of the above potential issues may be mitigated during timber sale layout by boundary changes, buffering, green-tree retention areas or other modifications prior to harvest.

² The potential hazards are rated as: Not Likely (NL)– additional action is not required; Likely – additional field review by forester or Geotech required; Present – specific hazards have been identified. Additional detail on “deep seated” is provided as observed.³ Seasonal Type N streams that have been determined to have a high likelihood of direct delivery of wood to a Type F stream.

⁴ As requested by district.

X. RECREATION RESOURCES:

Table 17. Recreation Sites In the Vicinity of the Operation¹

Type of Recreation Site or Facility	In or Immediately Adjacent to the Operation	In the Vicinity of the Operation (1/4 mile)	On the Anticipated Haul Route
Motorized Trails	-	-	-
Non-Motorized Trails	-	-	-
Campgrounds	-	-	-
Other Recreation Sites or Facilities	-	-	X

Millicoma Interpretative Center Fish Hatchery, Camp Chinook Boy Scout Camp, and dispersed unimproved river access along anticipated haul route.

XI. CULTURAL RESOURCES:

Have cultural resources been identified in the vicinity adjacent to this operation? YES NO

If “yes”, describe the resources below. During the ODOT cultural resources review, one resource was identified in the vicinity of the sale boundary. A field visit will be conducted as recommended by ODOT during sale preparation.

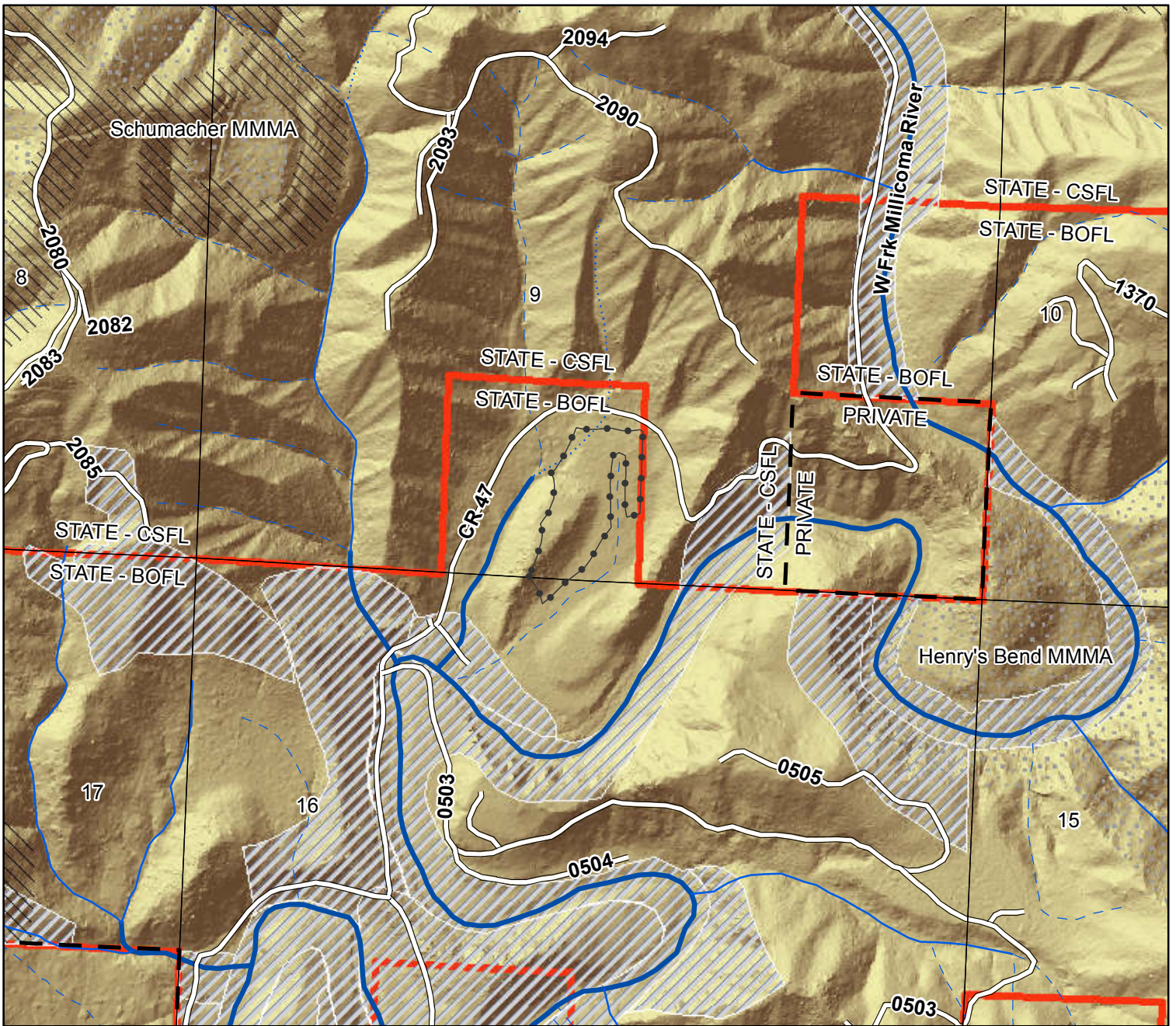
XII. SCENIC RESOURCES:

The district has reviewed the scenic potential of vantage points in and around this operation. This review shows that this operation does not contain areas with an ODF Visual Classification.

XIII. OTHER RESOURCE CONSIDERATIONS:

Are there other resources present in or around this operation that need special consideration?

YES NO



- Forest Boundary
- Fund Split Boundary

Timber Sale Boundary

- Clearcut
- Existing Roads

Streams

- Type F
- Type N Perennial
- Type N Seasonal
- Unclassified

Murrelet Management Areas

- BUFFER
- MMMA

Steep, Unique and Visual Area

- Visual

**Millicoma Flats
FY 2017 Sale Plan
Coos District**

Portions of Sections 9 & 16
T24S, R11W WM
Coos County, Oregon

Total net harvest acres: 11 acres



1:12,000 1 inch = 1,000 feet

This product is for informational use and may not have been prepared for, or suitable for legal or surveying purposes



Oregon

Kate Brown, Governor

Department of Forestry

Coos District
63612 Fifth Road
Coos Bay, Oregon 97420
541.267.4136
FAX 541.269.2027
<http://www.odf.state.or.us>



"STEWARDSHIP IN FORESTRY"

To: Dave Lorenz, Southern Oregon Area Director
Doug Decker, State Forester

From: Norma Kline, District Forester

Date: May 25, 2016

Re: Revision of the District Forest Land Management Classification

The Coos District is recommending a major change to the District Forest Land Management Classification (FLMC). The difference between major and minor change is defined in OAR 629-035-0060; in general a major change consist of a single change of 160 acres or more or multiple small changes that result in greater than 500 acres of change in one year. A major change requires State Forester approval.

Three changes resulted in an overall increase of the mapped General Stewardship and an overall decrease of both Focused Stewardship and High Value Conservation Area. These changes are summarized as follows:

- A correction to the Schumacher Marbled Murrelet Management Area identified by newer orthoimagery, resulting in the removal of 16 clearcut acres within the existing MMMA AND
- The removal of the Noble Creek Northern Spotted Owl circle (3,544 acres) AND
- The redesignation of 20 previously misclassified acres from CSFL to BOFL in T. 24 S. R. 12 W. Section 22, Willamette Meridian

Tables 2 and 3, originating in the District Implementation Plan have been updated to reflect these changes. Table 3 illustrates where the change in acres occurred. The number with the strikethrough is the acreage prior to this modification. As defined in OAR 629-035-0060, major modifications require State Forester approval.

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

Classification	BOFLs	CSFLs	Total Acres
General Stewardship	4,295 1,424	42,259 12,406	43,554 13,830
Focused Stewardship	5,300 5,178	49,846 49,678	55,146 54,856
Special Use	475	2,080	2,555
High Value Conservation Area	1,807 1,820	20,492 20,463	22,299 22,283
Total Acres	8,877 8,897	84,647 84,627	93,524

There is no overlap between stewardship classes.

Table 3. Coos District Acres, Focused Stewardship, Special Use and High Value Conservation Area Subclasses

Subclass	Focused Stewardship	Special Use	High Value Conservation Area
Administrative Sites	-	-	-
Agriculture, Grazing or Wildlife Forage	-	99	-
Aquatic and Riparian Habitat	17,424	-	5,018
County or Local Comprehensive Plans	-	-	-
Cultural Resources	22	1	-
Deeds	-	-	-
Domestic Water Use	806	-	-
Easements	-	3	-
Energy and Minerals	-	-	-
Operationally Limited	-	2,980	-
Plants	45	-	-
Recreation	-	5	-
Research/Monitoring	39	57	-
Transmission	-	11	-
Unique, Threatened or Endangered Plants	-	-	609
Visual	2,492	77	-
Wildlife Habitat	70,675 67,139	-	48,339 18,323

There is no overlap within a subclass of a stewardship class.

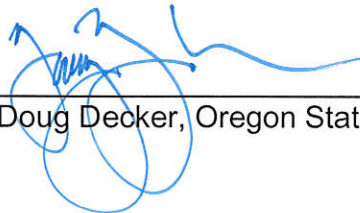
The required 30-day public comment period was satisfied by having draft maps and tables available for a public comment process occurring concurrently with the normal 45-day public comment period for the Annual Operations Plan. This public comment period occurred between April 4 and May 18, 2016, during which time the Coos District did not receive any public comment.

Although the Coos District did not receive any public comment on the FY17 AOP, the ODF Staff Analysis and Response to Public Comments in regards to both the AOP and FLMC is available at:

http://www.oregon.gov/odf/pages/state_forests/annual_operations_plans.aspx

The District is requesting review by the Southern Oregon Area Director and approval from the State Forester for this major change.

Approved by:



Doug Decker, Oregon State Forester

6.21.16

Date

Appendix F - Changes to Forest Land Management Classification

This Appendix describes changes to the Coos District Forest Land Management Classification (FLMC). These changes meet the definition of a major modification. A major change is defined as one that cumulatively exceeds 500 acres within one year. Major changes require a 30 day public comment period which is held in conjunction with the Districts 2017 AOP comment period.

The following points are changes made:

- A correction to the Schumacher Marbled Murrelet Management Area identified by newer orthoimagery, resulting in the removal of 16 clearcut acres within the existing MMMA AND
- The removal of the Noble Creek Northern Spotted Owl circle (3,544 acres) AND
- The redesignation of 20 previously misclassified acres from CSFL to BOFL in T. 24 S. R. 12 W. Section 22, Willamette Meridian

These changes resulted in a net increase of General Stewardship acres while decreasing Focused Stewardship. High Value Conservation Area acres increased on BOFL as a result of redesignating ownership within the Sullivan Headwaters MMMA and decreased on CSFLs. Refer to Table 2 for a detailed summary of these changes.

Tables 2 and 3, originating in the District Implementation Plan have been updated to reflect these changes. Table 3 illustrates where the change in acres occurred. The number with the strikethrough is the acreage prior to this modification. As defined in OAR 629-035-0060, major modifications require State Forester approval.

Updated FLMC maps are also included in this Appendix.

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

Classification	BOFLs	CSFLs	Total Acres
General Stewardship	1,295 1,424	12,259 12,406	13,554 13,830
Focused Stewardship	5,300 5,178	49,816 49,678	55,116 54,856
Special Use	475	2,080	2,555
High Value Conservation Area	1,807 1,820	20,492 20,463	22,299 22,283
Total Acres	8,877 8,897	84,647 84,627	93,524

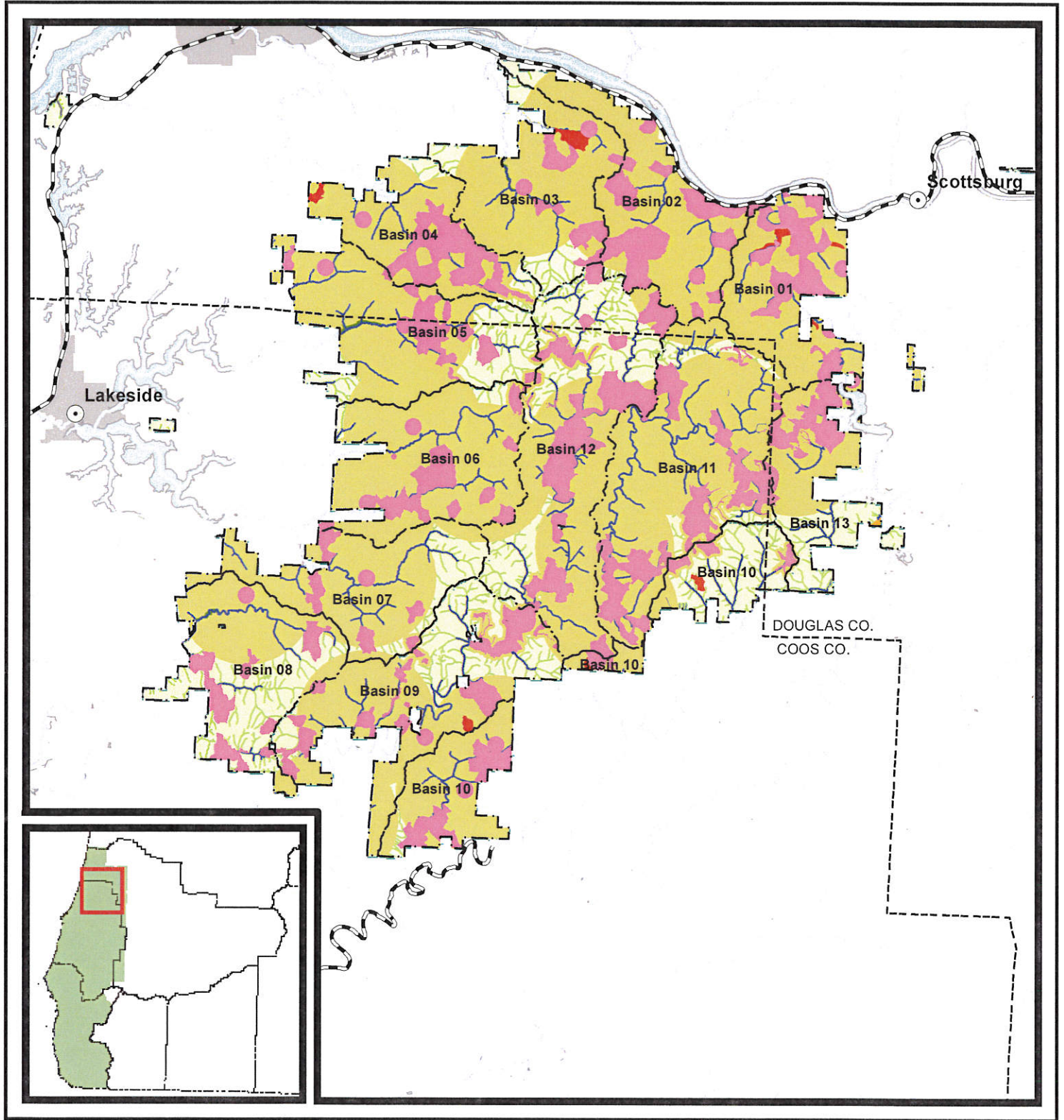
There is no overlap between stewardship classes.

Table 3. Coos District Acres, Focused Stewardship, Special Use and High Value Conservation Area Subclasses




Subclass	Focused Stewardship	Special Use	High Value Conservation Area
Administrative Sites	-	-	-
Agriculture, Grazing or Wildlife Forage	-	99	-
Aquatic and Riparian Habitat	17,424	-	5,018
County or Local Comprehensive Plans	-	-	-
Cultural Resources	22	1	-
Deeds	-	-	-
Domestic Water Use	806	-	-
Easements	-	3	-
Energy and Minerals	-	-	-
Operationally Limited	-	2,980	-
Plants	45	-	-
Recreation	-	5	-
Research/Monitoring	39	57	-
Transmission	-	11	-
Unique, Threatened or Endangered Plants	-	-	609
Visual	2,492	77	-
Wildlife Habitat	70,675-67,139	-	18,339-18,323

There is no overlap within a subclass of a stewardship class.

Coos District Stewardship Classifications - Biological Subclasses






High Value Conservation Area

-  Aquatic and Riparian Habitat
-  Wildlife Habitat
-  Unique, Threatened or Endangered Plants

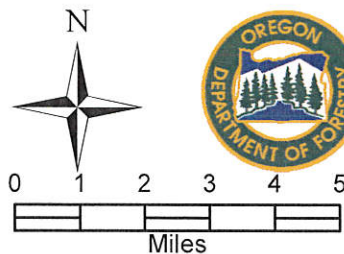
Special Use

-  Agriculture, Grazing or Wildlife Forage

Focused Stewardship

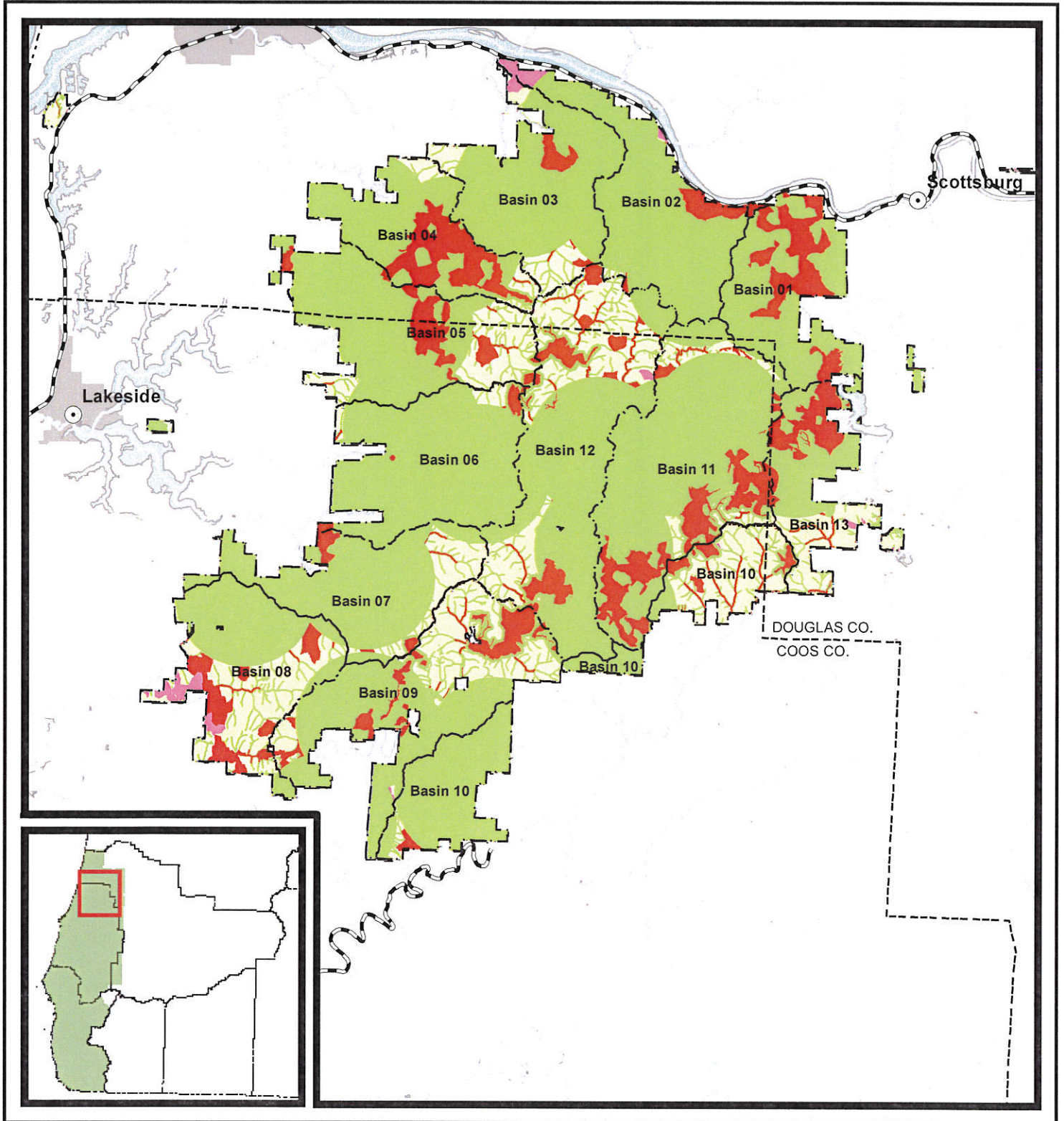
-  Plants
-  Aquatic and Riparian
-  Wildlife Habitat

-  Towns
-  Adjacent Districts
-  Management Basins






This product is for informational purposes, and may not be suitable for legal, engineering or surveying purposes. This information or data is provided with the understanding that conclusions drawn from such information are the responsibility of the user.

Coos District Stewardship Classifications



Stewardship Classification

-  Focused
-  HVCA
-  Special

-  Towns
-  Adjacent Districts
-  Management Basins



This product is for informational purposes, and may not be suitable for legal, engineering or surveying purposes. This information or data is provided with the understanding that conclusions drawn from such information are the responsibility of the user.