

Elliott State Research Forest

2027–2029

Biennial Operations Plan

Public Draft

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Introduction and Overview

This proposed Biennial Operations Plan (BOP) for 2027–2029 outlines planned forest operations for the Elliott State Research Forest (ESRF), supplemented with descriptions of research, monitoring, partnership activities, and supporting management actions. As Oregon’s working research forest, this plan represents a commitment to supporting healthy ecosystems, communities, and local economies. Please see Appendix A for summary tables, Appendix B for maps, and Appendix C for a glossary of terms.

Governance of the ESRF is shared by the State Land Board, the Oregon Department of State Lands (DSL) and the ESRF Board of Directors (ESRF Board). The State Land Board sets policy direction, approves FMP and HCP amendments, and appoints the ESRF Board. DSL manages the forest on the Land Board’s behalf, implementing the FMP and HCP, ensuring transparency and public engagement, and responding to ESRF Board recommendations. Management decisions occur through an iterative process between DSL and the ESRF Board, which advises on forest actions and provides recommendations to the Forest Manager and DSL Director. At their May 2027 meeting, the ESRF Board will vote on whether to recommend the ESRF Manager adopt the proposed 2027-2029 BOP.

All proposed harvest operations, forest management treatments, and associated activities in this BOP are designed in compliance with the ESRF Forest Management Plan (FMP), Habitat Conservation Plan (HCP), and the Oregon Forest Practices Act (OFPA). This document implements the direction provided in the FMP; it does not replace or modify that direction. Plans described here apply specifically to the 2027–2029 biennium, with relevant context from prior or future biennia included where necessary.

Together with the FMP, HCP, and other guiding documents, this BOP provides the operational foundation for management, monitoring, and research during the biennium, reflecting the ESRF’s commitments to adaptive and science-based decision-making, public accountability, and long-term resilience of the forest and the communities connected to it.

Planned Forest Management Operations and Treatments

Timber Harvest Operations

The State Land Board envisions the ESRF as a publicly owned research forest that advances the study and understanding of the many values and benefits forests provide.

This mission necessitates the development of a sustainable harvest operations plan that meets rules and regulations of the HCP, FMP, and OFPA while providing revenue necessary for financial self-sufficiency. This section identifies project areas planned, harvest types, estimated volume, and estimated revenue generated from planned projects in support of this mission. This section also details supporting management activities associated with 2027-2029 biennium projects.

Harvest unit selection for the 2027-2029 biennium projects are designed to meet policy rules and regulations, achieve revenue and volume objectives, maintain maximum research flexibility, and maximize operational efficiency while considering ecological function and value. While projects detailed here are for the 2027-2029 biennium, timber sales associated with this BOP may have contract terms that extend beyond this BOP period. DSL will procure service contracts or agreements for items such as sale layout, cruising, and other forestry services to accomplish work related to timber sales preparation and administration in the 2027-2029 biennium.

Overview of Timber Harvest Operations

Application of active forest management in combination with passive forest management creates the platform for innovative forest research. The ESRF is delineated into two watershed designations: Conservation Research Watersheds (CRW) and Management Research Watersheds (MRW). Watersheds are further delineated into reserve, restoration thinning, extensive, and intensive treatment allocations. For more information on the ESRF watershed designations and treatment allocations see Chapter 4 of the FMP, "Research Forest Design".

The HCP and FMP prescribe an annual timber harvest acreage limitation of 1,000 acres with up to 300 additional acres of restoration thinning. Of these acres, no more than 480 acres can be intensive regeneration harvest (FMP Ch. 6.1.3, HCP 3.4.1). The total biennial acreage cap is 2,600 acres. The FMP and HCP set a harvest volume objective of 17 MMBF (million board feet) per year on a four-year rolling average, with no more than 20 MMBF within a fiscal year in that timeframe. The 2027-2029 BOP is estimated to produce 31 million board feet in volume, generate gross revenues of approximately \$9,315,210 and net revenues of \$7,438,868. This planned volume is within the 17 MMBF annual objective outlined in the ESRF FMP.

The majority of the 2,110 acres planned for 2027-2029 BOP are commercial thinning and partial harvest operations (see Appx. C for glossary of terms). Ecological forestry silviculture practices such as Variable Density Thinning (VDT) and Variable Retention Harvest (VRH) are applied in restoration thinning and extensive allocation types.

Regeneration harvests will occur on 641 acres in intensive allocations only (see Appendix A Table 1).

Significant and unpredictable events may result in planned projects becoming infeasible to implement. These events may consist of, but are not limited to, storm damage, insect and/or disease outbreaks, timber market conditions, or other significant events. If volume from planned projects is lost, alternate projects included in the 2027-2029 BOP may be sold in response to any of these circumstances to replace volume. Any projects planned in the 2025-2027 biennium not implemented in that biennium may be transferred to this biennium as alternate projects, while staying within the 17 MMBF four-year rolling average as dictated by the ESRF FMP and HCP. Appendix A Table 2 identifies 427 acres of alternate projects representing net revenues of \$761,785 and 4.5 MMBF.

Additional operations may produce timber volume during the 2027-2029 biennium but are not included in this plan. These are generally small areas that produce little volume, and/or are time sensitive in nature. These sales do not require significant effort to develop and execute and will comply with all policies including the forest's HCP, FMP, and OFPA. Examples of these sales include salvage, pulp sales, removal of hazard trees, and pole sales. Additional non-revenue generating use of ESRF timber may include aquatic restoration efforts, riparian thinning research activities, and cultural uses. These projects will be reflected in biennial operations reports. Any unplanned timber sales resulting from unanticipated events will stay within the volume objective.

Summary of Timber Harvest Operations by Project

Schedule of Operations

All projects in the 2027-2029 BOP are planned to be sold by June 30th, 2029. Projects sold early in the biennium may have active harvest operations in the 2027-2029 biennium, while projects sold near the end of the biennium may not have active operations initiated until the 2029-2031 biennium. This is due to the nature of timber sale preparation, contract terms (one- to three-year contracts), and fluctuations in timber markets. To maintain full flexibility, the order of timber sales will not be determined in this planning process.

Seasonal Restrictions

All operations will comply with seasonal restrictions in accordance with HCP and FMP to avoid disturbance to covered species during protected breeding seasons (FMP Ch. 6.1.4). Activities adjacent to northern spotted owl (NSO) activity centers will be restricted during the critical nesting season (March 1 through July 7) as detailed in Condition 1 (HCP 5.5.2; FMP Ch. 9.2.1.4). Activities adjacent to marbled murrelet occupied stands will be restricted during the breeding season (April 1 through September 15) as detailed in

Condition 6 (HCP 5.5.7; FMP Ch. 9.2.2.3). Seasonal restrictions are applied to in-stream work, ground-based operations, and native surface roads during the wet season to prevent soil erosion and sediment runoff. Limiting operations during saturated conditions protects stream water quality and helps to safeguard critical spawning and rearing habitat for coho salmon and other native aquatic species.

Forest Roads Management

Overview of Forest Roads Management

The existing road network within the ESRF is extensive and robust. Mainline roads are regularly maintained through a road maintenance contract. Spur roads and access roads associated with operation projects not maintained through the road maintenance contract are included in timber sale contracts. All road maintenance complies with the OFPA, and associated guides put out by the Oregon Department of Forestry (ODF).

Road Construction, Improvement, Maintenance, and Vacating

Project areas included in this plan are selected to leverage the existing road network for access. No new road construction is planned during the period of this plan. If road improvements or temporary roads are needed to facilitate activities associated with a project area, ESRF staff will coordinate with the timber sale purchaser or other project managers to ensure impact is minimal and in compliance with the FMP and HCP.

Routine road maintenance has been ongoing on the ESRF pursuant to DSL's road maintenance contract. There are no major deferred maintenance projects currently. Routine road maintenance will continue along designated mainline roads with pre- and post-haul maintenance to ensure that the roads are prepared for increased truck traffic associated with timber harvesting, other treatment activities, and wildfire protection. ESRF intends to continue to contract for road maintenance work to efficiently handle routine road maintenance projects. No road vacation projects are planned during the 2027-2029 operating period. ESRF will coordinate with potential partners to begin the road assessment (FMP Ch. 6.6.2 & Ch. 6.6.4) that would identify and prioritize roads for future vacation and upgrade projects (HCP 3.6.1.5).

The existing ESRF road system has been inventoried and assessed through various past efforts (FMP Ch. 6.6.1 & Ch. 6.6.3) and is generally in good condition. In addition, DSL completed a pre-inventory assessment pursuant the Forest Road Inventory and Assessment (FRIA) and submitted results to ODF. DSL will follow commitments in that plan and continue to work with ODF to ensure the plan meets or exceeds the Private Forest Accord-based FRIA process in the revised OFPA.

Road Access Management

Most access requiring easements are in place and have been transferred to DSL from ODF. During the 2027-2029 biennium temporary road use agreements may be needed to access projects. ESRF will process any easement, hauling permit, tailhold permit or authorization requests on a case-by-case basis.

Hydrologic Connectivity

Hydrological connectivity occurs when the road prism routes water directly from the road to waters of the state without filtering through forest floor first. OFPA roads rule (OAR 629-625-0000 through 629-625-0920) requires all roads and landings to be hydrologically disconnected from waters of the state. DSL will conduct hydrologic connectivity assessments of landings, roads, and haul routes associated with harvest activity prior to operations and manage any drainage issues prior to the rainy season to ensure road runoff infiltrates onto stable forest floor soil rather than reaching streams. DSL will prioritize road maintenance projects that address hydrologic connectivity issues and fish migration barrier issues with culverts. Road improvement and maintenance investments are made to support forest operations, protect existing road infrastructure and water quality, as well as to provide for safety improvements and aquatic species passage.

DSL also closely monitors road conditions on active haul routes and performs additional patrols and assessments during and after inclement weather events. Any operations that require log hauling from October 1 through May 30 will require monitoring of haul routes and maintained road surface drainage structures to ensure hydrologic disconnection between the road network and adjacent streams to protect water quality and aquatic species. If wet weather conditions generate road-related sediment delivery to streams or it becomes imminent, operations, including active road use and log hauling will be restricted, modified, or suspended until corrective mitigation measures effectively avoid any further sediment or turbid runoff from reaching nearby streams.

Roadside Vegetation Management

Roadside vegetation management protects existing infrastructure from damage from vegetation growth, controls the spread of noxious weeds, and increases safety by reducing roadside fire hazards and increasing clear line-of sight for road users. Roadside vegetation will be managed using motorized brushing equipment. Spot treatment of noxious and invasive species may utilize chemical treatment. To avoid potential harm to wildlife, fish, or non-target native plants, use of chemical treatment will abide by OAR chapters 629-620-0000 through 629-620-800 and utilize specific operational precautions which will be taken for prevention of negative impacts to non-target species include

consideration of timing and seasonality, weather and environmental conditions, targeted application methods, and buffers and setbacks.

Young Stand Management

The ESRF FMP authorizes supporting management activities (FMP Ch. 6.1.5) that may be implemented before or after management actions. All services for young stand management will be secured through contracts or agreements. The following includes supporting activities relevant to this BOP period. See appendix A Table 5 for planned silviculture projects.

Seedlings and Nurseries

The ESRF makes sowing requests to nurseries through ODF and may purchase seedlings on the open market. Orders for seedlings happen two years ahead of planting. Due to the nature of timber sale contracts, it is difficult to plan ahead as the timing of the harvest fluctuates. However, there are generally surplus seedlings available on the open market each year that can be purchased when needed. Surplus seedlings in quantity and species necessary for the immediate reforestation season can be purchased annually from reputable sources.

Seedlings planted for reforestation will be sourced from local nurseries and grown from improved seed from the appropriate seed zones, defined by ODF's Forest Tree Seed Zones for Western Oregon (1996). Wild or unimproved seed may be used for some species when improved seed is not available. Allowances may be made for adjustment to seed zone preferences as part of climate adaptation efforts and other research activities (FMP 6.1.5.4).

Site Preparation

Intensive treatments are eligible for chemical or manual site prep treatment as prescribed by ESRF staff to ensure successful regeneration. Site prep treatments, if needed, are generally completed post-harvest and prior to reforestation. Landing piles will be burned in accordance with Coos Forest Protective Association (CFPA) burn permits and ODF smoke management rules to abate slash hazards and promote reforestation.

Reforestation

Reforestation is accomplished by natural or artificial regeneration methods following a decrease in tree stocking due to harvest activity or disturbance events on the landscape. Both natural regeneration and artificial regeneration will be used widely on the ESRF.

Artificial regeneration can be in the form of spreading seed, planting stakes, or tree planting nursery-grown seedlings. Land management goals and objectives along with site assessments and state law determine how reforestation will be accomplished. On the ESRF, research questions may also drive reforestation strategies. Most artificial regeneration on the ESRF will be tree planting following regeneration harvest in intensive and extensive land use allocations.

Reforestation will follow the schedule and stocking requirements set forth in OFPA OAR chapters 629-610-0000 through 629-610-0100. If the land use allocation objectives or research objectives do not align with the free-to-grow policy (OAR 629-610-0020) a written plan for alternative practice will be submitted to the State Forester for review. Species mix and stock type will depend on land use allocation and site conditions. See FMP chapters 6.2, 6.3, and 6.4 for more information on planting prescriptions (FMP 6.1.5.4).

Interplanting occurs when initial planting did not reach the free-to-grow stocking standards (OAR 629-610-0020). No initial reforestation efforts were conducted in the 25-27 biennium; therefore, no interplanting is anticipated. Enhancement planting will occur following some thinning harvests in restoration thinning and extensive land use allocations. Enhancement planting is intended to restore species diversity and structural diversity in a stand. Enhancement planting is not required by OFPA as stocking thresholds are typically not reduced far enough in a thinning to require planting. These types of plantings are optional and generally a low number of trees per acre.

Natural regeneration methods may be used across land use allocation types to meet land management or research objectives. If natural regeneration is determined to be a viable reforestation method in a unit with reforestation requirements a written plan for alternative practice will be submitted to the State Forester for review (OAR 629-210-0030).

Tree Protection

Animal damage on newly planted seedlings reduces growth and vigor, prolongs achievement of free-to-grow status, causes a need for interplanting, and may affect land management and research goals. The ESRF will employ various mitigation efforts including but not limited to mesh tubing, bud caps, seedling bole protectors, stock selection, and slash management. Animal damage control methods will be site specific depending on animal populations in the area.

Vegetation Management

Vegetation management practices will be utilized to control noxious weeds and vegetation where needed and in accordance with the FMP and HCP. It may be necessary to combine chemical and manual release treatments with a preference for manual

treatments where possible. An assessment of stands younger than 15 years old was conducted prior to the 2027-2029 biennium and candidates for vegetation management treatment will be addressed in this biennium (Appendix A Table 5). Timing of these treatments will be prioritized based on budget allocation.

Integrated Pest Management

An integrated pest management (IPM) approach will be used to address invasive or noxious species, pests or other animal damage found to be causing damage to trees or seedlings on the forest. The IPM approach includes the following steps:

- Setting action thresholds: defining a threshold at which action should be taken.
- Monitor for and identification of the pest: ensure the pest has accurately been identified to define the proper course of action.
- Prevention: research to look for possible alternatives to using chemical applications.
- Control: evaluate and determine the proper control method for effectiveness and risk. Control methods may include manual, chemical, and hazing techniques as appropriate.

ESRF will look to and work with partner organizations whenever possible to inform the IPM methodology and assist where available in the control and/or eradication of noxious or invasive species on the forest. Additionally, post-harvest assessments will be conducted to determine if mountain beaver removal is necessary prior to planting. If required, a site-specific treatment plan will be developed to address the problem areas. Rodenticides will not be used on the ESRF.

Pre-Commercial Thinning

Pre-commercial thinning (PCT) assessments will be completed for all stands following a final harvest and reforestation. Stands are generally planted at higher stocking levels during reforestation, and PCT allows the remaining trees to grow more vigorously as they have better access to water, soil nutrients, and light. PCT is a silviculture activity used to guide the density, structure, and species composition of young forest stands towards the desired future condition. Management and research goals and objectives vary based on the treatment type allocation. The stocking target is typically between 200-and 300 trees per acre at ages 10 to 18 and typically favors dominant Douglas-fir saplings. Other species may be favored where biodiversity is a key management objective, and target densities may be lower where resilience to drought is an objective.

The ESRF assessed the backlog of stands under 15 years-old in the 2025-2027 BOP period. A portion of that backlog received PCT treatment in the previous biennium. The

remainder of the 2025-2027 backlog is rolled over into the 2027-2029 biennium. An assessment of remaining backlog and additional stands younger than 15 years old has been conducted and candidates for pre-commercial thinning treatment have been summarized in Appendix A Table 5. Timing of these treatments will be prioritized based on budget allocation.

Stocking Surveys

Stocking surveys will be completed after reforestation on all stands. Any stands or portions of stands with less than 200 trees per acre will be scheduled for interplanting as soon as possible. Additional surveys are conducted up to six years after reforestation occurs to ensure the stands meet the OFPA for green up. Stocking surveys also provide valuable information to determine future PCT needs, release treatment needs, and stand trajectories.

Other Integrated Forest Management Projects

Firewood Cutting Program

Firewood permits are issued on an annual basis for firewood cutting in the ESRF. Firewood cutting is allowed, by permit, outside of the Coos Forest Protection Association (CFPA) declared fire season. This allows firewood cutting generally from mid-October through mid-June each year. Firewood permits are sold for \$20/cord and max 2 cords per person. In 2025, 31 firewood permits were issued on the ESRF, and 18 permits were issued in 2026. The permittee must carry the permit with them when collecting firewood. Instructions and stipulations are included in the permit as below.

Firewood on DSL property may be removed from down trees and roadside debris within 10 feet of road shoulders and landings, or within 25 feet of recent clearcut units. No standing trees may be cut.

- Permittee must be present during woodcutting activities. This permit must accompany all wood being removed.
- Removal of material from state land without lawful authority is a violation of ORS 273.241.
- No winching logs from harvest units or beyond 10 feet of road shoulders.
- No removal of wood from slash piles is allowed.
- Any violation of the permit regulations will result in a two-year suspension from receiving a firewood permit.
- Permittee must obey all posted “No Woodcutting” signs.
- Be aware that there is ongoing road maintenance throughout the forest.

- Please do not litter. Dumping or leaving garbage, trash, fuel containers, or debris on State lands is strictly prohibited under ORS 164.805.
- Do not block any roads while gathering firewood.
- Keep debris out of streams, roads, and ditch lines.

Non-Timber Forest Products

Mushrooms, cedar boughs, and greenery: collection for personal use is allowed. The ESRF currently does not have a commercial use permit for these non-forest products.

Grazing

The grazing lease on the ESRF is 43 acres and 67 AUMs (Animal Unit Months) of riparian meadow in the Big Creek drainage. The lease area is used in conjunction with the adjacent private lands and was established to help facilitate winter habitat for elk. It has been under lease since 2007 and the current lease expires in February 2034, with the option of a 10-year renewal term, extending the lease to 2044.

Planning

Forest Inventory

Currently the ESRF relies on data from the 2016 ground-based forest inventory effort. In 2021 a LiDAR inventory was established. DSL staff are working with creators of that dataset to extract a usable dataset from that LiDAR inventory effort.

In the 2027-2029 biennium DSL intends to develop a LiDAR-based inventory that can inform management decisions and illuminate changes in the forest through time (FMP 10.1.1). In addition, DSL intends to conduct ground-based surveys and pre-sale cruises of near-term project areas. As a part of this inventory modernization DSL intends to explore forest planning modeling software applications to plan future operations plans.

Land Surveying

Approximately four miles of project areas are adjacent to the ESRF forest boundary. DSL intends to evaluate these boundaries to determine where land survey is needed. In the 2027-2029 biennium DSL will procure a land survey project to address the shared boundaries in this biennium and the anticipated boundary work needed in the 2029-2031 biennium. DSL may consider developing a property boundary policy to address all future project work along the ESRF boundary.

Archaeological, Historical, and Cultural Resources

Each timber sale will be screened against DSL's Cultural Resource Inventory of the Elliott State Forest, published June 2016, to ensure all known archeological, historical, and cultural resources are identified and protected as stated in FMP Ch. 6.1.6. Coordination

with State and Tribal cultural resource and historic preservation staff will occur prior to and as part of relevant BOP project implementation.

Geographic Information Systems

A Geographic Information System (GIS) will be used to store all spatial data on the forest. Data layers used in the planning and initial analysis of the forest will continue to be refined and updated as new information is collected.

Research Activities

Overview

Timber operations conducted in alignment with the FMP and HCP support answering the ESRF's unifying research question of how a societal demand for wood products can be met while also balancing multiple other societal values of forests (FMP Ch. 4.2). The diversity of stand-level allocations—ranging from conservation reserves to those intensively managed for timber production—affords a broad spectrum of research in support of the unifying research question. Given that the ESRF is early in its establishment phase, the primary consideration in planning 2027–2029 biennium timber operations to support research is determining where harvests will not occur. Silviculture harvest treatments will be postponed for several years in the early implementation subwatersheds identified in FMP Ch. 4.3.3 "Phased Implementation Approach". Baseline monitoring data collection in these subwatersheds provide strong pre-treatment data for future scientific analysis. To implement the phased research approach all 2027-2029 BOP project areas are outside of selected early implementation subwatersheds.

Intentionally postponing timber harvests for several years in early implementation subwatersheds allows data collection prior to silvicultural harvest treatments to provide strong scientific evidence on the effects of those treatments. The provisional research plan described below will propose research priorities compatible with timber operations described in this plan.

Research Program Development

At their 2023 meeting the State Land Board affirmed their commitment to creating the ESRF and directed DSL to explore research models. Following this 2023 meeting, DSL staff engaged the ESRF Board and partners in conversations about the design of an appropriate model while furthering foundational research on the forest. With the hiring of the Research Coordinator in October of 2025, this work stream has seen added capacity. Research models will be developed and evaluated during the 2027-2029 biennium, following development and evaluation, the ESRF Board will make a recommendation of a

research model to DSL for implementation. DSL staff will work to develop the research program under the advice and oversight of the ESRF Board with opportunities for public input at board meetings.

Provisional Research Plan

Given the projected timeline for research program development, a provisional research plan will be developed to prioritize early research efforts and provide temporary administrative structures to approve, fund, and coordinate research on the forest during the research program development period. Research priorities for this provisional plan may include but are not limited to:

- Understanding the past and current conditions of the ESRF as they relate to the five thematic research areas specified in the FMP. These areas are biodiversity and at-risk species, climate change adaptation and forest carbon, natural and human-caused disturbance, socio-cultural intersections, and aquatic habitats and water in relation to forest management (FMP Ch. 4.2)
- Small-scale pilot studies that may inform the design of large-scale research projects.
- Post-hoc data collection on units harvested prior to approval of the provisional research plan.
- Establishing a foundation for future research to build upon.

This provisional period may also include the establishment of monitoring under the five thematic research areas called for in the FMP (Ch. 10) and utilize early timber operations for pilot studies to support future research.

Current Research Projects

Forestry Research Infrastructure

Principal Investigator – Dr. Kathleen Kavanaugh, Oregon State University

Forest Research Infrastructure, previously referred to as “Baseline Monitoring” in the 2025-2027 BOP is funded by a congressional appropriation that is administered by the US Forest Service State and Private Forestry. This project develops and deploys a sensor network and associated data management system to collect and transmit environmental data from across the ESRF. The sensor network will contribute to the ESRF’s long-term monitoring (FMP Ch. 10) and provide a backbone for future research by measuring the breadth of forest conditions on the ESRF. Oregon State University (OSU) has done extensive consultation, design and testing of sensor network architecture and components. The first three measurement stations (nodes) were deployed early in the 2025-2027 biennium with the full network deployment of 20 stations to be completed over the remainder of the

biennium. Early deployments are successfully relaying and streaming continuous real-time data from riparian to upland locations back to servers at OSU. The data management system is being developed in parallel with the sensor network and will be implemented along with a plan for long-term maintenance of the system into the 2027-2029 biennium, with the grant period ending in May 2028.

River corridor restoration experiments at the Elliott State Research Forest

Principal Investigator – Dr. Dana Warren, Oregon State University

This large-scale field experiment will evaluate river restoration efforts that encompass the entire river corridor—both instream and riparian forests—with the goal of improving ecological function, hydrological connectivity, and biodiversity. This project has particular focus on potential benefits to coho salmon and Pacific lamprey populations, and on the establishment and ultimate regeneration of western red cedar as a key riparian species. This study was incorporated into the FMP (Ch. 7 and 10) and permitted within the HCP. Pretreatment data collection was funded by the ESRF at the beginning of the 2025-2027 biennium. The research team selected treatment locations and began their data collection during the 2025-2027 biennium. The team secured an additional \$126k in funds from OSU's Fish and Wildlife Habitat in Managed Forests Program to expand their pretreatment data collection to include terrestrial biota – including, ungulates, amphibians and birds. Pretreatment data collection will continue through the 2027-2029 biennium, with river corridor restoration treatments that include increases in both in-stream, and riparian forest structural complexity are planned once pretreatment data collection is complete and additional research funding is secured.

Investigating positive and negative edge effects on marbled murrelet occupancy in Oregon's Coast Range forests

Principal Investigator – Dr. Meg Krawchuk, Oregon State University

This study includes two projects related to marbled murrelet conservation and ecology. The first project examines the effects of forest edge on marbled murrelet habitat through measurements of canopy microclimate, branch epiphyte load, and predator calls at sites designed as potential habitat adjacent to harvest units of varying ages—with the goal of informing conservation and forest management decisions related to this threatened wildlife species. This study was directly incorporated into the FMP (Ch. 9, 10, and 11) and taken into consideration with the HCP. The ESRF funded this study at the beginning of the 2025-2027 biennium and is supporting a master's student. Field data were collected through the spring and summer of 2026, and data analysis will take place through the end of the 2026-2027 biennium. The second project examines stand development and

disturbance history using tree ring science at eleven previously identified marbled murrelet nest sites to reconstruct disturbance-succession pathways necessary to develop strategies for recruitment of marbled murrelet habitat. This study expands baseline information incorporated in the FMP (Ch. 12, Appendix J). The ESRF funded this study at the beginning of the 2025-2027 biennium and supports researcher and technician effort. Field data were collected through spring and summer 2026 and will continue into fall 2026, and data analysis will take place through the end of the 2026-2027 biennium.

Habitat Conservation Plan Monitoring and Compliance

Aquatic Monitoring

The aquatic monitoring program required by the HCP is focused upon monitoring trends in aquatic habitat quality associated with reserve restoration, extensive, and intensive forestry treatments (including road development and other related covered activities) on the ESRF. Temperature and turbidity of water at designated sites will be tracked year-round as well as assessments of instream habitat features every third year for those same stream reaches. This aquatic monitoring effort, including site selection, equipment purchases and deployment is anticipated to be launched or expanded during 2027-2029 biennium in addition to any sites where aquatic and riparian monitoring were initiated during the previous BOP to inform adaptive management (HCP 6.3). Aquatic and riparian monitoring, once commenced, will be ongoing the duration of this BOP period. While the research-based monitoring outlined in chapter 10 of the FMP for aquatic and riparian systems is distinct from the above HCP commitments to aquatic monitoring, both will be utilized to assess, protect and restore the Elliott's aquatic and riparian systems through experimental and adaptive approaches. Results from all monitoring efforts will be used to inform implementation of management priorities and potential research experimentation in riparian restoration treatments and in-stream habitat enhancements. The scope and scale of the ESRF's research-related monitoring effort is contingent upon funding availability.

Aquatic Restoration

Based on the FMP framework (FMP Ch. 3-Partnership, FMP Ch. 7.5-Aquatic Restoration) and underlying local and regional coho salmon planning and partnership work, this BOP intends to support aquatic restoration and monitoring efforts led by Coos Watershed Association (CoosWA) on the ESRF. Other potential future projects and actions, including with other watershed restoration partners (e.g. Partnership for the Umpqua Rivers, Tenmile Lakes Basin Partnership), will be explored during the BOP period. For planning, authorization, and implementation purposes during this BOP period, projects will

focus on those associated with the Strategic Action Plan for Coho Salmon Recovery – The Coos Basin and Coos Model Watershed Program Supplemental Action Plan for the Millicoma Forks Coho Restoration Partnership. The type, number, location(s) and stream miles treated of aquatic restoration projects completed within the ESRF during each fiscal year will be included in the annual HCP report.

Materials provided by ESRF for instream restoration projects, including boulders and logs, will be selected after evaluation for potential resource concerns to ensure compliance with the HCP. Trees not sourced directly from the riparian zone adjacent to the treatment reach will be obtained from designated management activity areas, including restoration thinning, timber harvest operations, special projects such as communication site maintenance, or locations where tree removal is required for road renovation or hazard mitigation.

Barred Owl Management

The HCP (5.4.4) commits DSL to manage barred owls for a minimum of 15 years and to determine if those efforts provide a population benefit to northern spotted owls. Management of barred owls on the ESRF will follow the U.S. Fish and Wildlife Service's (USFWS) Barred Owl Management Strategy (BOMS) and the corresponding Final Environmental Impact Statement (FEIS) and Biological Opinion accompanying the ESRF HCP as required under the National Environmental Policy Act (NEPA). As there is currently no practicable alternative to control barred owls at a landscape scale, lethal removal will be utilized on the ESRF adhering to the methodology outlined in Appendix 2 of the BOMS. While barred owl management will occur forest-wide on the ESRF, removal efforts will prioritize currently and recently active sites, defined as any area with spotted owl detections within the last five years (BOMS 8.4.1.2). Effectiveness monitoring and analysis of the program will be conducted by researchers with the [Oregon Cooperative Fish and Wildlife Unit](#) through an agreement with Oregon State University in coordination with removal specialists under contract with DSL to perform wildlife work for ESRF. Barred owl removal and corresponding monitoring will be initiated once permitting by ODFW and USFWS has been accomplished, which is anticipated for autumn 2026 and will be ongoing the duration of this BOP period.

The Barred Owl Management Strategy (BOMS) can be found here:

<https://www.fws.gov/media/final-barred-owl-management-strategy>

The Final Environmental Impact Statement (FEIS) can be found here:

<https://www.fws.gov/media/final-environmental-impact-statement-barred-owl-management-strategy>

Threatened and Endangered Species Surveying

Candidate Species

The Oregon Department of Fish and Wildlife (ODFW) was awarded a U.S. Fish and Wildlife grant on behalf of ESRF to fund survey efforts and species status reports on the northwestern pond turtle and western ridged mussel, which are two candidate species for listing under the Federal Endangered Species Act. If either candidate species is listed, that may require the HCP to be amended and results from these survey efforts would inform that potential update. This project spans September 30, 2026 – September 30, 2028, with field surveys anticipated for summer 2027. All related project work will be concluded during the following BOP period (2029-2031).

Marbled Murrelets

Surveys spanning two marbled murrelet breeding-seasons are required in potential murrelet habitat before management activities that could affect the species are implemented. Therefore, surveys will be conducted where 2027-2029, 2029-2031, and 2031-2033 harvest projects are proposed that overlap with potentially occupied marbled murrelet habitat (HCP 5.5.8). In areas surveyed during this BOP period that meet the Pacific Seabird Group's 2024 protocol, and where the Services confirm a likely absence of nesting marbled murrelets, projects may proceed for up to five years before additional surveys are required.

Northern Spotted Owls

Forest-wide call-back surveys for northern spotted owls following the USFWS endorsed 2012 protocol will be conducted during the 2026 and 2027 breeding seasons to establish a baseline estimate of the population within the ESRF. Unless funding allows for additional coverage, annual spotted owl monitoring in 2028 and thereafter will be reduced to a third (seven to ten) of the 22 historic nesting territories designated in the ESRF HCP as well as areas or sites where occupancy was confirmed or suspected from previous years' results. This reduction following the initial baseline period is HCP-compliant and necessary to balance all survey and monitoring commitments within budgetary limitations. Monitoring at least a third of the spotted owl nesting, roosting, foraging and dispersal habitat within the ESRF annually will ensure that one-third of northern spotted owl nesting territories (i.e., home range, which includes habitat within a 1.5-mile radius of a circle centered on the activity center of the owl site) are covered every third year as required (HCP 6.4.2.1).

Habitat Conservation Plan Reporting

HCP reporting for the previous fiscal year is due to the USFWS and National Marine Fisheries Service (NMFS) annually on November 15, including habitat monitoring that tracks progress toward the biological objectives for each terrestrial species and any habitat removed through harvest or other management activities. Annual reports as well as six-year summaries and twelve-year comprehensive reviews will provide required content necessary to assess whether the HCP is being implemented properly, to present information on any detectable trends and determine whether any program-level or systemic changes need to occur (HCP 7.3). In addition to submission to the Services, annual HCP reports will be made available to the public on the ESRF website once finalized.

Recreation, Education, and Public Access

The FMP (FMP Ch. 3.2) commits DSL to the development of a formal recreation and education plan for the ESRF, using the Visitor Use Management Framework (VUMF). These plans are intended to bring proactive planning and organization to these existing uses on the forest, build partnerships, and address opportunities and conflicts. DSL has developed an initiation plan to begin the planning process during the current biennium and work on the plans will continue into the 2027-2029 biennium. Next steps include developing and issuing a Request for Proposals (RFP) to secure a qualified planning contractor, followed by the formation of planning committees, which will provide opportunities for public involvement as the plans are developed.

Until these plans are completed, recreation and education management will continue under current management practices on the forest, with potential restrictions or temporary closures to address safety situations as they arise (e.g., restrictions during timber harvest or restoration operations; wildfire suppression or weather-related risk; or situations of resource damage).

Governance & Partnerships

As described in this plan's introduction, the ESRF Oversight Structure outlines the roles and responsibilities of the forest's three primary governing bodies: the State Land Board, DSL, and the ESRF Board. From 2027 through 2029, ESRF staff will continue work to formalize two additional governance bodies, the forest's Implementation and Adaptive Management Committee (IAMC) and Science Advisory Committee (SAC) (HCP 7.2.7, FMP 2.2.3.1). The IAMC is charged with providing input and advice on the effectiveness of the ESRF HCP and FMP implementation including adaptive management thresholds, monitoring integration, and overall progress made toward conservation and research

objectives. The SAC is charged with review and approval of research activities on the ESRF, broad research guidance, and advocacy for the ESRF. Integration of these two additional bodies within the ESRF's current governance structure will require the development of internal processes, policies, and communication pathways to ensure effective, equitable, and transparent governance. These bodies dually serve as primary mechanisms for institutional partnerships.

Chapter 3 of the ESRF FMP (2024) prioritizes the development of research, Tribal, community, and agency partnerships. In 2025 and 2026, ESRF staff furthered Tribal integration and partnership for the Elliott through government-to-government consultation and staff-to-staff relationship building with the five Western Oregon Tribes. During this period, ESRF also explored options for the ESRF Research Program by convening partner work groups to evaluate research governance options. In parallel, staff assessed state agency interests, initiated discussions with federal and state partners, and maintained relationships with local and regional NGOs, and other key partners to support ESRF research, policy, restoration, and implementation goals.

From 2027 through 2029, ESRF will continue stewarding Tribal relationships and integration by supporting consultation, formalizing agreements, recruiting and convening the IAMC and SAC. ESRF staff will expand coordination with state and federal agencies to align research, restoration, monitoring, recreation, and education efforts across the landscape; evaluate governance and engagement pathways for agency partners; and strengthen data-sharing and collaborative planning. Ongoing work will also focus on maintaining and expanding partnerships with non-governmental organizations, supporting philanthropy and legislative coordination, sharing research and monitoring outcomes, and advancing community, recreation, and implementation partnerships that contribute to the long-term success of the ESRF. The public is also an important partner in the ESRF, with ongoing opportunities to provide input, participate in public processes, and engage with forest planning, research, and implementation.

Staffing

In 2025 and 2026, ESRF staff were hired including the ESRF Forest Manager who oversees a team of four:

- Policy & Partnerships Coordinator
- Research Coordinator
- Biologist
- Forester

DSL is in the process of hiring a GIS analyst that will be assigned to the ESRF.

DSL is also working with ODF to develop an interagency agreement to provide additional capacity for forest operations.

Administration, Facilities, and Infrastructure

Forest staff continue to work out of DSL's Shutter Creek Facility in North Bend Oregon. Facility redevelopment planning will span the 2027-2029 biennium, including detailed design and engineering work, with the project proceeding as additional funding becomes available. Redevelopment plans include office and operational space for the ESRF in addition to a conference center, Tribal and partnerships spaces, public benefit areas and research facilities.

Budget

At their July 2026 meeting the ESRF Board recommended a proposed 2027–2029 ESRF Current Service Level (CSL) budget of approximately \$10 million (to be adjusted for COLA/inflation). The proposed budget:

- Is consistent with the ESRF mission and management policies (Section 1 of the Oversight Structure);
- Distributes funding across all major ESRF program areas in a manner that reflects the breadth of the ESRF's mission;
- Supports continued ESRF operations during the start-up phase while longer-term revenue sources (timber, carbon) become available and additional revenue sources are developed;
- Is consistent with the Board's recommendation role under Section 3(2)(A) of the Oversight Structure.

This proposed budget was submitted in DSL's Recommended Agency Budget and is subject to legislative approval for the 2027-2029 Biennium. If approved, the ESRF Board will make recommendations on the allocation of the \$10 million CSL budget at their May 2027 meeting.

Appendices

Appx. A. – Summary Tables

Appx. B. – Project Maps

Appx. C. – Glossary of Terms

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Appendix A- Table 1. Project Detail Table

Project Name	Project ID	Allocation Treatment Type	Silviculture Rx	Acres	Age 2027	Retention (%)
Cold Socks	27-1	Extensive	VDT	118	53	48
	27-1	Intensive	Regen	44	64	5
			Total	162	56	38
Fish Ridge	27-2	Intensive	Regen	40	63	5
Elk Glen	27-3	Intensive	Regen	135	62	5
Eleven	27-4	Intensive	Regen	177	63	5
John Doe	27-5	Restoration Thinning	VDT	103	53	54
Schumacher	27-6	Intensive	Regen	146	67	5
Larkspur	27-7	Extensive	VDT	157	51	56
Early Bird	27-8	Restoration Thinning	VDT	112	49	62
Shaky Boots	27-9	Extensive	VDT	122	52	39
Nobel Salmon	27-10	Restoration Thinning	VDT	159	51	53
Little Ben	27-11	Extensive	VDT	100	52	55
	27-11	Intensive	Regen	19	60	5
			Total	119	55	35
Johannenson	27-12	Restoration Thinning	VDT	336	60	41
Salamander	27-13	Extensive	VDT	122	50	59
Puckett	27-14	Intensive	Regen	80	64	5
Ocean View	25-15	Extensive	VDT	139	51	39
Grand Total				2110		

VDT = Variable Density Thin, Regen= Regeneration Harvest

Retention % subject to change to fit research needs or stand conditions.

Summary of Acres By Treatment Allocation Type

Allocation Treatment	Total
Extensive	757
Intensive	641
Restoration Thinning	712
Grand Total	2110

Appendix A- Table 2. Alternate Projects Detail Table

Project ID	Treatment	Silviculture Rx	Acres	Age 2027	Retention%
27-Alt-1	Extensive	VDT	63	48	55
27-Alt-1	Intensive	Regen	12	62	5
27-Alt-2	Extensive	VDT	44	60	31
27-Alt-3	Extensive	VDT	31	57	39
27-Alt-4	Extensive	VDT	59	61	57
27-Alt-5	Extensive	VDT	80	55	53
27-Alt-6	Extensive	VDT	139	54	46

VDT = Variable Density Thin, Regen= Regeneration Harvest

Retention % subject to change to fit research needs or stand conditions.

Appendix A- Revenue Summary
Table 3. Elliott State Research Forest 2027-2029 Candidate Projects with Expected Net Revenue

					Total		
Project ID	Treatment	Acres	Vol/Ac	Retention	Volume	% Ground	Net Revenue
27-1	Extensive	118	32.2	38%	2,353	10%	\$755,469
27-1	Intensive	44	31.7	5%	1,340	0%	\$428,905
27-2	Intensive	40	23.2	5%	886	5%	\$232,676
27-3	Intensive	135	22.0	5%	2,819	30%	\$779,261
27-4	Intensive	177	22.4	5%	3,763	0%	\$581,467
27-5	Rest. Thin	103	18.6	54%	884	5%	\$165,287
27-6	Intensive	146	21.5	5%	2,980	0%	\$584,822
27-7	Extensive	157	23.5	56%	1,627	10%	\$398,297
27-8	Rest. Thin	112	16.4	62%	700	0%	\$62,867
27-9	Extensive	122	22.0	39%	1,633	0%	\$380,622
27-10	Rest. Thin	159	17.8	53%	1,335	0%	\$181,658
27-11	Extensive	100	20.8	35%	1,354	20%	\$374,924
27-11	Intensive	19	28.7	5%	518	40%	\$198,278
27-12	Rest. Thin	336	19.3	41%	3,824	0%	\$740,588
27-13	Extensive	122	28.9	59%	1,438	0%	\$468,812
27-14	Intensive	80	25.2	5%	1,924	0%	\$321,005
25-15	Extensive	139	28.8	39%	2,440	0%	\$783,930

Projects Summary			
Treatment	\$	Acres	Volume
Intensive	\$3,126,414	641	14,231
Extensive	\$3,162,054	757	10,846
Rest. Thin	\$1,150,400	712	6,743
	\$7,438,868	2,110	31,820

Appendix A. Table 4. Revenue Summary
Elliott State Research Forest 2027-2029 Alternate Projects with Expected Net Revenue

					Total		
Project ID	Treatment	Acres	Vol/Ac	Retention	Volume	% Ground	Net Revenue
27-Alt-1	Extensive	63	20.8	55%	588	0%	\$89,235
27-Alt-1	Intensive	12	18.5	5%	205	0%	\$25,856
27-Alt-2	Extensive	44	16.2	31%	495	0%	\$55,596
27-Alt-3	Extensive	31	21.0	39%	391	0%	\$84,593
27-Alt-4	Extensive	59	22.1	57%	560	0%	\$88,907
27-Alt-5	Extensive	80	18.6	53%	700	0%	\$121,507
27-Alt-6	Extensive	139	20.2	46%	1,511	0%	\$296,092

Alternate Projects Summary			
Treatmen	\$	Acres	Volume
Intensive	\$25,856	12	205
Extensive	\$735,929	415	4,244
Rest. Thin	\$0	-	-
	\$761,785	427	4,450

APPENDIX A

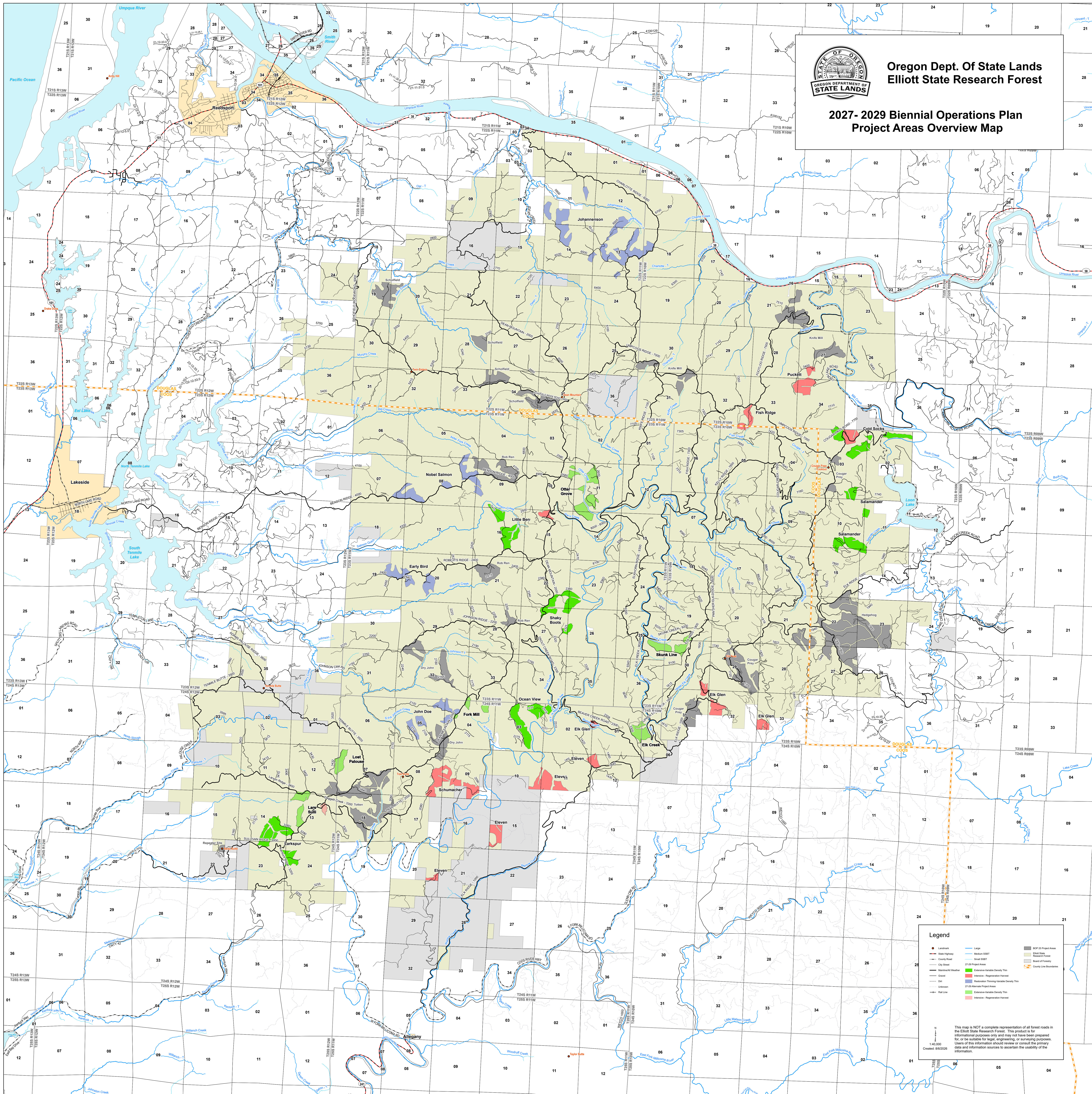
Table 5. ESRF Silviculture Project Summary 2027-2029

Backlog Silviculture Projects				
Activity	ACRES	RATE	SUBTOTAL	Notes
PCT 13yo and under at 2025	578	\$275	\$158,950	Reduce stocking to 200 TPA
PCT 14yo+ at 2025	1109	\$325	\$360,425	Reduce stocking to 200 TPA
Manual Maintenance	0	\$225	\$0	Non-chemical release treatment
Interplant	0	\$500	\$0	Planted stands with low stocking (under 200 tpa)
Stocking Survey	143	\$200	\$28,600	Stocking surveys to determine stand tending needs
			\$547,975 Total Backlog Silviculture Expense	

Silviculture Projects Related to 2025-2027 Biennium Timber Sales				
Activity	ACRES	RATE	SUBTOTAL	Notes
Initial Reforestation	535	\$700	\$374,500	Expected reforestation acres
Stocking Survey	535	\$200	\$107,000	
Release	535	\$225	\$120,375	
			\$601,875 Costs already accounted for in net revenue estimates in 25-27 BOP Appendix A.	



2027- 2029 Biennial Operations Plan Project Areas Overview Map



Appendix C - Glossary of Terms

Term	Definition
Commercial Thinning	Thinning in a stand that occurs between intensive treatments (clearcuts) to maintain stand densities at levels that provide vigorous tree growth and maintain high wood production.
Ecological forestry	Recognition that forests are ecosystems with diverse biota, complex structure, and multiple functions, and not simply collections of trees valuable primarily for production of wood. Ecological forestry seeks to maintain the fundamental capacities (integrity) of the forest ecosystems to which it is applied.
Ecological silviculture	An approach for managing forest ecosystems, including trees and associated organisms and ecological functions, based on emulation of natural models of development and that explicitly incorporates principles of <i>continuity</i> (legacy management), <i>complexity/diversity</i> (variety and heterogeneity of structure, diversity of species), timing (basing actions on ecological queues) and context (considering landscape context) into prescriptions.
Ecosystem function	Refers to the various ecological processes, such as water and nutrient cycling, primary productivity, and decomposition, which occur in an ecosystem.
Extensive (Allocation and treatment)	Extensive allocations are characterized by partial retention, more time between harvests, and reliance on natural tree regeneration. Extensive treatments are intended to increase forest complexity to help achieve multiple values across the landscape. These treatments are intended to research management approaches that fall along the continuum between intensive treatments and unlogged reserves.
Financial self-sufficiency	Management and operations are expected to be funded by forest activity revenue, including timber harvest and carbon revenue.
Intensive (Allocation and treatment)	Intensive allocations are those of traditional production forestry (i.e., clearcutting) commonly applied on private timber lands. Intensive forestry is typically characterized by plantation-based timber production, with shorter time between harvests. treatments that remove all or nearly all trees in a stand (per Oregon FPA requirements about live tree retention). Intensive treatments are intended to maximize timber production.
Partial Harvest	A silvicultural practice where only a portion of the trees in a forest stand are cut and removed, leaving the remaining trees to maintain canopy cover and ecosystem structure.

Regeneration Harvest	A silvicultural cutting method designed to end an existing forest rotation and establish the conditions necessary for a new age class or cohort of trees to grow.
Reserve (Allocations)	Reserve allocations are managed for biodiversity conservation, which means no silvicultural interventions or interventions that are limited only to that which will improve biodiversity and related attributes.
Restoration Thinning	Treatments intended to alter stands towards more complex forest structure. Goals include increasing forest resilience, addressing legacy effects (e.g., road sedimentation, invasives or reduced native plant diversity), and supporting disturbance dynamics that would naturally result in multi-aged stands
Retention Harvest	Silvicultural method that retains forest structural elements, such as large living and dead trees, at the time of harvest to serve as biological legacies in the resulting forest or cohort.
Silvicultural prescription	A planned series of treatments designed to change current forest stand structure to one that meets management goals and objectives. The prescription normally considers ecological, economic and social constraints.
Stand	A contiguous community of trees sufficiently uniform in composition, structure, age, size, distribution, spatial arrangement, condition, or location on a site of uniform quality to distinguish it from adjacent communities.
Thinning	Thinning prescriptions remove a portion of the trees from a stand in a generally uniform pattern, with the exception of restoration thinning and extensive treatments, where variable density thinning is used.
Treatment	Treatments define what harvest types and methods will be permitted in the permit area allocations and consist of four broad categories: intensive treatments, extensive treatments, restoration thinning treatments.
Variable Density Thinning (VDT)	A silvicultural strategy designed to accelerate development of late-successional habitat by applying a variety of harvest intensities within a stand.
Variable Retention Harvest (VRH)	The method of ecological forestry used in extensive treatments where a portion of the stand is converted into openings to promote new stand establishment. The remaining portion of the stands are also retained in dispersion or aggregates using variable-density thinning.