

Oregon's public lands — our forests, parks, and beaches — are irreplaceable assets. Keeping the Elliott State Forest in public ownership is critical to fulfilling our fiduciary obligations to the Common School Fund while preserving the habitats of diverse species and public access to the lands for future generations.

Elliott State Forest Bonding Proposal

The Elliott State Forest has contributed nearly \$617 million to the Common School Fund to advance investments in schools and education, while also developing, maintaining, and protecting Oregon's natural resources.

Since 2013, because of harvest limitation prompted by a lawsuit over federally protected species, owning the Elliott has cost the Commons School Fund more than \$4 million. We must change the way we own and manage the forest to honor the Common School Fund (CSF) and protect the Elliott's diverse habitats. This can be achieved while supporting jobs with the sustainable harvest of timber.

- The Elliott is Oregon's first State Forest and has been a State Forest Since 1930. Under m plan, the Elliott State Forest would remain in public ownership, with either the state or tribes owning the land.
- A bond proposal will be developed to include up to \$100 million in state bonding capacity to protect high value habitat, including riparian areas, steep slopes, and old growth stands.
- On the remainder of the forest, we have renewed negotiations with the Federal Services for a Habitat Conservation Plan to allow for sustainable timber harvest, while protecting native, as well as endangered and threatened species that are home to the Elliott Forest.

Habitat Conservation Plan & Adaptive Management

The Habitat Conservation Plan (HCP) framework developed in consultation with the U.S. Fish and Wildlife Service and the National Fisheries Service establishes conservation and mitigation measures that meet the biological needs for the Elliott's native and endangered species.

Together, the HCP and \$100 million in state bonds signify a strong commitment on the part of the state that threatened and endangered species—including marbled murrelet, northern spotted owl, and coastal coho salmon—will be conserved over the long term within a working forest.

- Conservation and mitigation measures will maintain significant acreage of older forests and establish "core areas" to maintain occupied sites, nesting, foraging, and habitat connectivity.
- A rigorous adaptive management plan is key to the long-term success of the HCP. Research and monitoring will inform future forest management decisions, create mechanisms for improved practices, identify needs for course corrections, and will include opportunities for public involvement.

Timber-Related Jobs & Outdoor Recreation

Even in the face of complicated challenges, we must strive to protect the values that Oregonians hold dear. Those include healthy habitats and forest lands; hunting, fishing, and hiking in the woods; and jobs critical to our rural economies.

- In 2016, for western Oregon, there were an estimated 8.9 jobs per million board feet, which provided an average wage of \$61,191. It is anticipated that increased, sustainable harvest on the Elliott State forest will contribute directly to the economy of local communities.
- The public has access to the entire forest year-round, with outdoor recreation opportunities that include deer and elk hunting, winter steelhead fishing, all-terrain vehicle use, horseback riding, hiking, and picnicking. Retaining the Elliott in public ownership continues these opportunities, with the current exceptions in the event of wildfires, active timber management operations, and related restrictions to ensure safety and to protect natural resources.





Department of Forestry

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To: Governor Brown, Chair of the Oregon State Land Board
From: Liz Dent, Oregon Department of Forestry, State Forests Division Chief
Subject: Proposed approach for an Elliott State Forest public ownership option
Date: May 4, 2017

This memo summarizes a proposal to keep the Elliott State Forest in public ownership using the principles you and the State Land Board have set forth. This proposal conserves public access, provides economic benefits, protects older forest stands, and maintains watershed functions. We propose the use of a Habitat Conservation Plan (HCP) combined with \$100 million in state bond capacity.

Background

The Elliott State Forest is a 91,000 acre, healthy, productive forest. It supports some of the highest quality habitat in the Oregon Coast Range for native fish and wildlife and is host to three federally listed species: Northern Spotted Owls (NSO), Marbled Murrelets (murrelets), and Oregon coast coho (coho). Established in 1930, the first year of the Great Depression, there was no funding to manage the Elliott until 1955. Since that time the sale of timber from the Elliott has contributed significant revenue, approximately \$617 million, to the Common School Fund (CSF) to advance investments in schools and education while also developing, maintaining, and protecting natural resources. More recently, the presence of NSO, murrelets, and coho has significantly reduced the ability to generate revenue for the CSF.

The State Land Board (SLB) and Department of State Lands (DSL) have been pursuing solutions and throughout the process have engaged stakeholders with ongoing public discussions. Two dominant themes have emerged from public feedback. First, the public wants the Elliott State Forest to remain in public ownership open to full public access. Second, the public consistently articulated a desire to decouple the Elliott from the CSF. Managing the forest as a CSF asset puts the need to generate revenue at odds with delivering other non-economic public benefits such as conservation and recreation, some of which are protected by federal and state law. A viable solution to the complex challenges of owning and managing the Elliott requires collaboration, a diversity of revenue streams, and assurances that the outcome will be lasting.

The SLB has articulated their goals for the Elliott as conserving public access, providing economic benefits, protecting older forest stands, and maintaining watershed functions. This proposed

ownership and management framework achieves these goals and partially decouples the forest from the CSF in a fiduciarily responsible manner. This public ownership framework is proposed as follows.

- 1. \$100 million in state bond funding to decouple a portion of the forest from the CSF.
- 2. Secure an HCP that:
 - a. Protects threatened and endangered species and assures the state's ability to harvest timber, support timber-related economies, provide broad public access and recreation opportunities, and generate revenue for the CSF.
 - b. Describes a research and monitoring agenda consistent with implementing the HCP.
 - c. Establishes that the HCP remains with the forest should there be a transfer in ownership to another public agency or entity that meets the goals of public ownership, access, and decoupling from the CSF.
- 3. DSL will retain ownership of the Elliott State Forest while Governor Brown, US Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and the Oregon Department of Forestry (ODF) complete the HCP.

Financing and Revenue Streams

The combined HCP and \$100 million creates a mechanism to finance public ownership and generate revenue for the CSF. The remaining fiscal obligations will be met through sustainable timber harvest implemented under an approved HCP. The amount that can be harvested depends on the distribution of harvest activities across the landscape and the effect of harvest on known and potential future distribution of threatened and endangered species.

Habitat Conservation Plan: Conservation and mitigation measures

Oregon's Governor Brown, USFWS, and NMFS have developed an HCP Framework. The HCP Framework establishes conservation and mitigation measures that meet the biological needs for NSO, murrelets, and coho. Conservation and mitigation measures maintain significant acreage of older forests and establish "core areas" to maintain occupied sites, nesting, foraging, and habitat connectivity. Conservation and mitigation measures for coho include maintaining riparian and watershed functions through a combination of riparian buffers for the entire stream network; debris flow prone channels; seeps, springs, wetlands, and bogs; protection measures for steep slopes; and standards for road construction and maintenance standards (attachment 1).

Together, the \$100 million bond and the HCP signify a strong commitment on the part of the state that the threatened and endangered species will be conserved over the long term within a working forest context.

Recreation

The public has access to the entire forest year-round. Exceptions to this include wildfire events, active timber management operations, and related restrictions to ensure safety and protect the natural resources. This framework continues the existing diverse recreation opportunities currently available on the forest. Uses include deer and elk hunting, winter steelhead fishing, all-terrain vehicle use, horseback riding, hiking, and picnicking. Mountain biking and geo-caching are increasing in popularity, and school groups, universities, and forestry organizations use the forest for educational tours. The Bureau of Land Management (BLM) operates and maintains the Loon Lake Recreation Area adjacent to the northeast corner of the Elliott. Loon Lake is one of the more popular destination sites in the Reedsport vicinity, with an average of 70,000 to 80,000 visitors each year.

Timber-related Jobs

It is anticipated that increased harvest on the Elliott State Forest will contribute to the economy of local communities. In 2016, for western Oregon, there was an estimated 8.9 jobs per million board feet with an average wage of \$61,191. The economic benefits for communities in the immediate vicinity of the Elliott may differ from the western Oregon trends.

Adaptive Management

The Elliott HCP Framework will establish funding for adaptive management. The long-term successes of a forest management plan hinges on a rigorous adaptive management program that establishes a critical system to test if strategies effectively achieve stated objectives. Research and monitoring findings inform decisions, create mechanisms for improved practices, and identify needs for course corrections. The Elliott HCP presents a unique opportunity for large-scale, holistic research of legal and social implications, partnership successes and challenges, effectiveness in achieving desired conservation and harvest outcomes, and the role of public involvement.

Liz Dent State Forests Division Chief Oregon Department of Forestry

Attachment: Elliott 2017 Habitat Conservation Plan Framework: Conservation and Mitigation Measures

cc: Jason Miner, Natural Resource Policy Manager, Office of the Governor Peter Daugherty, State Forester, Oregon Department of Forestry Jim Paul, Director, Department of State Lands

Elliott 2017 Habitat Conservation Plan Framework Conservation and Mitigation Measures

Oregon's Governor Brown, the United States Fish and Wildlife Service (USFWS), and the National Marine Fisheries Service (NMFS) have initiated the development of a Habitat Conservation Plan (HCP) that will serve as the Elliott State Forest Management Plan. The HCP is a long-term plan that complies with the Endangered Species Act (ESA) and supports the conservation of threatened and endangered species while providing assurances that the land manager can perform the management responsibilities that provide revenue for the Common School Fund (CSF) over the long term. The goal of the HCP is to establish conservation and mitigation measures that meet the biological needs for Northern Spotted Owl, Marbled Murrelet (Murrelet), and Oregon Coast coho salmon (coho). The framework for the HCP outlined below represents a viable strategy for moving forward with an HCP that conserves the most important habitat areas for these covered species and provides for predictable harvest levels over time.

This document proposes conservation measures that will serve as the basis for the Services to authorize potential incidental take of the covered species under section 10 of the ESA. The Services' ESA authorization will consist of issuance of an "incidental take permit" that will authorize any "take" that may result from the implementation of the activities covered over the life of the HCP. The State will commit to implementing specific conservation measures that will minimize and mitigate impacts of incidental take of the covered species as a result of forest management related activities addressed by the HCP. The State is exploring opportunities to secure \$100 million in bonding authority. The \$100 million bond allows for enhancement of the conservation measures derived from the draft 2010 Elliott HCP while simultaneously offsetting the State's fiduciary responsibilities and providing needed revenue to the common school fund. The combination of the bond and conservation measures should allow for an HCP that is supportable by the Services, the State, and the public.

The content of the final HCP and the Services' final decisions regarding issuance of permits will be contingent on consideration of all public comments on the HCP and NEPA analyses, and their determination regarding whether the HCP meets ESA permit issuance criteria. It will also be contingent on consideration by the Department of State Lands and the State Land Board, and on the state's administrative and public processes for the development, adoption, and approval of a forest management plan to meet the obligations of the HCP.

I. T&E Species Summary

The Elliott State Forest provides habitats for most native species found in Oregon Coast Range forests. The streams, rivers, lakes, and other water bodies in the Elliott State Forest and scattered tracts provide habitats for a variety of fish species. Approximately 209 native fish and

wildlife species are currently known or likely to exist in or adjacent to the Elliott State Forest including: 58 mammals, 103 birds, 23 amphibians and reptiles, and 25 fish.

Threatened and Endangered Birds

Two bird species are listed as threatened or endangered under the federal and state Endangered Species Act (ESA), or under both ESAs.

Marbled Murrelet—Federally and state listed as threatened in Oregon. The marbled murrelet is a seabird that nests in mature or old growth coniferous forests within 50 miles of the ocean. As of 2010, approximately 11,500 acres were protected in Marbled Murrelet Management Areas (MMMAs) in the Elliott State Forest. Additional acres of potential habitat have not been surveyed for marbled murrelets.

Northern Spotted Owl—Federally and state listed as a threatened species. Research on the demographics, habitat use, and habitat characteristics of northern spotted owls on state forest lands, including the Elliott State Forest, took place between 1993 and 1998. Although an apparent loss of territories occurred over the five years of the study, the rate of population change remained relatively steady, largely due to high survival and fecundity. Density surveys of all suitable northern spotted owl habitat in the Elliott State Forest in 2003 and 2010 through 2016 located a similar number of northern spotted owl sites as the last similar survey in 1996.

Threatened and Endangered Fish

One fish species listed under the State and federal ESA inhabits the Elliott State Forest.

Coastal coho- Federally and state listed as a threatened species. Oregon Coast coho salmon evolutionarily significant unit (ESU) were listed as threatened under the ESA several times, most recently listed in 2011. Designation of critical habitat and issuance of protective regulations occurred in 2008.

II. Proposed Conservation Measures for Elliott HCP

A. Terrestrial Species: Norther Spotted Owls and Murrelets

T&E Core Areas

Northern Spotted Owl and Murrelet conservation core areas will have little or no active management. Some expected activities related to forest management include vehicle traffic on forest roads, wildfire suppression and control, road maintenance, minimal road construction, harvest unit guylines or tailholds for nearby harvests, stream rehabilitation work, stream survey work, and animal survey work. Additionally, some trees or snags may be removed for safety reasons in some circumstances, such as when a dead tree is leaning over a forest road. Management activities that further the purpose of the conservation area may also be allowed in some areas, such as management to attain mature forest conditions along streams. The following conservation measures for Northern Spotted Owl and Murrelet are taken from the 2010 HCP draft plan developed by the State and the USFWS. They may need to be modified to address current forest stand conditions and species' occurrences. These conservation measures provide for continued and future suitable habitat distributed across the Elliott State Forest as well as minimize impacts to the Northern Spotted Owl and Murrelet, and are summarized in Table 1.

- 1. Establish 48 core areas with harvest restriction
- 2. Distribute core areas across 13 basins (Table 2 and map: Elliott State Forest Conservation Areas).

Table 1: Northern Spotted Owl and Murrelet Goals and Conservation Measures from the	
2010 Draft Elliott State Forest HCP	

Goals for Marbled Murrelet and Northern Spotted Owl	Conservation Measures*
1) Maintain Occupied Sites	 Establish T&E Cores: Nest area or activity center Northern Spotted Owl: 13 sites (median size 250-300 acres, 6,800 acres total) Murrelet 75 of the 85 occupied sites (median size 122 acres, 9,300 acres total) ✓ 10-year harvest deferral applied to 5 Murrelet sites outside of T&E and SUV areas
2) Maintain Nesting, Roosting and Foraging across the forest through time 3) Maintain Habitat Connectivity	 Establish Advanced Structure Targets and Maintain habitat Manage to retain approximately 30,000 acres in Advanced Structure across the landscape throughout the life of the HCP. Maintain and develop advanced structure targets for habitat outside of T&E cores. Develop and maintain 500 acres of advanced structure incorporating a T&E core area in each basin to ensure habitat connectivity to nesting sites. Apply harvest restrictions articulated in: Conservation Guidelines: Retention Priorities for Marbled Murrelet Habitat Apply seasonal restrictions to Known Murrelet occupied sites and habitat Known Northern Spotted Owl active sites outside of Core areas
4) Increase effectiveness of small core areas; retain and create structural complexity in young stands; reduce edge effects; connectivity	 Legacy Structure: Retain an average of 3 green trees and 3 snags with specificity for diameter; 300 – 600 cubic feet downed wood per acre with specificity for decay class.

* Note: the number and location of some of the Northern Spotted Owl and Murrelet sites and associated acreages have changed since 2010 and are not updated in this table.

Legacy Structure

Structural complexity provides the basis for much of the variety and richness of species, habitats, and ecological processes. The important structural attributes include the size of standing live and dead trees, the condition of those trees, and the size, amount, and condition of downed wood on the forest floor. Active management outside of conservation areas has the potential to provide stand structural complexity while retaining habitat connectivity.

1. Maintain snags, green trees and downed wood in younger stands and regeneration harvest units with specificity around diameter and decay class.

Advanced Structure Targets Outside of Core Areas

Active management outside of core areas has the potential to create stands with Advanced Structure. Advanced Structure stands (both within and outside of core areas) will exhibit a range of characteristics including larger trees, species diversity, and considerable amounts of snags and downed wood. These stands are expected to provide high-quality habitat for Northern Spotted Owl and Murrelet based on the characteristics of older forest stands in the Coast Range and to benefit coho through the maintenance of riparian functions. The purpose of this conservation measure is to prevent T&E core areas from becoming isolated from other advanced structure in a basin. If these areas are managed to provide the appropriate vegetation cover or key structures for species across the landscape, the intervening landscape is not a barrier to dispersal. The Elliott currently has a significant number of stands in older forest conditions (map: Elliott Stand Ages).

- 1. Manage to retain approximately 30,000 acres in Advanced Structure across the landscape throughout the life of the HCP.
- Establish a range of structure targets (e.g. 30 60%) by basin (Table 2). Evaluate where
 on the landscape this strategy will best mitigate fragmentation, and other management
 impacts to increase the likelihood of the survival and recovery of Murrelet and Northern
 Spotted Owl.

Table 2. Individual Basins on the Elliott State Forest with goals to achieve advanced structureover the Term of the Habitat Conservation Plan

Basin Number	Basin Name
1	Mill Creek
2	Charlotte-Luder
3	Dean Johanneson
4	Scholfield Creek
5	Big Creek
6	Benson-Roberts
7	Johnson Creek
8	Palouse Larson
9	Henrys Bend
10	Marlow-Glenn
11	Millicoma Elk
12	Trout Deer
13	Ash Valley

B. Aquatic Conservation Measures

Streams are classified as Fish-bearing, Non-fish bearing, or Debris Flow Prone. In addition, streams are also classified as Perennial, Seasonal, Small, Medium, or Large based on streamflow. The Elliott State Forest contains approximately 771 miles of stream and 10,419 acres of RMAs. The majority of stream miles are classified as small, perennial, non-fish-bearing streams. However there is a greater proportion of riparian acreage associated with fish-bearing streams and large and medium non-fish-bearing streams (map: Elliott Stream Buffers and SUV).

"Fish Watersheds" and "Timber Watersheds" will be established based on the relative likelihood that conservation or mitigation will provide the greatest benefit to the likelihood of the survival and recovery of coho (map: Fish and Timber Watersheds). Increased conservation measures in Fish Watersheds and a suite of mitigation measures will enhance specific functions, stream habitat conditions, and forest characteristics in these watersheds.

Aquatic conservation measures are based on ODF and NMFS negotiations in February 2015. These proposed conservation measures restrict harvest around aquatic features in order to minimize impact to coho. They are described below and summarized in Table 3.

Aquatic features include stream channels and associated aquatic habitat features, beaver ponds, stream-associated wetlands, side channels, and the channel migration zone. Riparian Management Areas (RMAs) are established near streams and other aquatic features. The RMAs are measured from the outer edge of these aquatic features.

Fish (all) and Large and Medium Non-fish Streams

2017 Elliott HCP Framework

The RMA supports most riparian functions including aquatic shade, wood recruitment to streams and organic inputs (leaves and tree litter) to the stream. The RMAs maintain riparian structure and functions, stabilize stream banks, contribute to floodplain functions, nutrient cycling, and influence sediment routing processes. Vegetation within this area also contributes to riparian micro-climate. A high priority is placed on management decisions in this area. The RMA extends 120 feet, is measured from the outer edge of the aquatic feature, and exists on both sides of a stream.

1. <u>Timber and Fish Watersheds</u>: 120 foot wide no-harvest buffer all Fish and Large and Medium Non-fish streams.

Small Non-Fish Bearing Streams

A variety of small Type N streams exist across the forest landscape, and these streams differ in their physical characteristics, dominant functional processes, and contributions to watershed-level processes. As a result, conservation measures for these Small Type N streams should be designed and implemented in accordance with their contributions to maintaining water quality, supplementing wildlife habitat, and contributing to on-site and downstream sediment, nutrient, and wood routing functions.

Small Perennial Non-fish Streams

Riparian vegetation on these streams protects stream bank stability, provides leaf litter input, and maintains water temperature that can contribute cool water sources to downstream reaches. Wood recruitment to these streams will function as localized sites to sort and store sediments and as a supply of smaller diameter wood to downstream reaches during high magnitude, low-frequency storm events. Wood enhances fine sediment and leaf litter (nutrient) storage and routing processes. These streams are often recognized as providing important habitats for some sensitive amphibian species. The RMA is measured from the outer edge of the aquatic feature, and exists on both sides of a stream.

- 1. <u>Timber Watersheds</u>: 30 foot no-harvest buffer.
- 2. <u>Fish Watersheds</u>: 100 foot no-harvest within 500 feet of all Fish, Medium, and Large Nonfish streams, in debris flow track, or where there isn't topographic shade. 50 foot no-harvest everywhere else with mitigation logs.

Small Seasonal Non-fish Streams

The small size, morphology, physical setting, and seasonal flow pattern limits the potential of these streams to influence downstream water temperatures or to transport large wood to downstream reaches. The functions of these streams are assumed to be the recruitment, routing, and processing of leaf litter, and to a lesser extent the processing, transport, sorting, and storage of fine sediments. Management along these streams should primarily be designed to maintain some of the functions associated with leaf litter and sediment storage and routing processes. The RMA is measured from the outer edge of the aquatic feature, and exists on both sides of a stream.

1. <u>Timber Watersheds</u>: 30 foot equipment exclusion and maintain sub-merchantable trees and shrubs.

 Fish Watersheds: 50 foot no-harvest within 300 feet of all Fish, Medium, and Large Non-fish streams. Everywhere else - 30 foot equipment exclusion zone, mitigation if >10% surface area soil disturbed.

Seasonal Potential Debris Flow Streams

Debris-flow prone seasonal streams originate at specific sites and headwalls that are subject to initiation of shallow, rapidly moving landslides and have the potential for a channelized debris flow. The physical setting and characteristics of these streams indicates a high probability of large wood delivery to downstream fish-bearing waters should slope failure events occur. During these events, it is assumed that vegetation retained along the debris flow track will reduce the energy of the event, cause the materials to become temporarily stored within the channel, or become entrained within the debris wedge for delivery to downstream reaches. Management should focus on maintaining vegetation that has a high probability of interacting with debris flows along this track. The emphasis should be on maintaining large trees that can provide the functional habitat-forming elements of these natural disturbance events. Vegetation along these channels also supports stream functions and processes during the period when debris flow events do not occur. Riparian vegetation provides nutrient (leaf litter) and wood recruited to these channels, sorts and stores coarse sediments, and influences channel morphology. The RMA is measured from the outer edge of the aquatic feature, and exists on both sides of a stream.

- 1. <u>Timber Watersheds</u>: 50 foot no-harvest buffer
- 2. <u>Fish Watersheds</u>. 100 foot no-harvest within 500 feet of all Fish, Medium, and Large Non-fish streams, where there isn't topographic shade. 50 foot no-harvest everywhere else with mitigation logs used.

Sensitive Aquatic Areas: Seeps, Springs, Lakes, Ponds, Wetlands, and Bogs

The Elliot State Forest contains aquatic habitats other than streams, such as seeps, springs, wetlands, lakes, ponds, and bogs. These waters support diverse plant and animal communities, are connected to other waters in a basin, and can play a significant role in the hydrologic patterns and functions of watersheds. Some species have adapted to, or are dependent on, the conditions found in and near these other aquatic habitats. These areas can also be sensitive to land management activities. The strategies for other aquatic habitats will maintain the productivity of these habitats, protect the integrity of these sites, maintain hydrologic functions, provide suitable habitats for fish and wildlife dependent on these unique habitats, and contribute to habitat conditions needed for maintaining other native wildlife species of concern.

Seeps and Springs

These aquatic features are incorporated into RMAs of adjacent streams and vegetation retention should be provided according to the riparian prescription. In practice, this may simply require adjusting the boundary of a stream's RMA to fully encompass the spring or seep. In other instances, if not associated with another aquatic feature, conservation circles will be maintained and centered on the feature.

- 1. <u>Timber Watersheds</u>: Incorporate into buffer for associated aquatic feature. If not associated with another aquatic feature maintain understory and shrubs in 25 foot circles centered on the feature.
- 2. <u>Fish Watersheds</u>: 50 foot no-harvest circles.

Lakes, Ponds, Wetlands, and Bogs:

The strategies for these aquatic features will maintain productivity of these habitats, protect the integrity of these sites, maintain hydrologic functions, and provide suitable habitats for fish and wildlife dependent on these unique habitats. For Stream Associated Wetlands- the RMA is afforded the same boundaries of the associated stream. The boundary of the RMA is measured from the outer edge of the stream-associated wetland.

1. <u>Timber and Fish Watersheds</u>: Size dependent combination of no-harvest buffers, specific basal area retention, or understory, shrub and hardwood retention.

Landslides Hazard and Steep Slopes

High Hazard Landslide Location and Steep Slopes

High landslide hazard locations are specific sites that are subject to initiation of shallow, rapidly moving landslides. Landslides can have significant effects on watersheds, including aquatic and riparian areas. The objective in relation to landslides and slope stability management is to minimize the occurrence of management-induced slope failures and mitigate potential negative impacts on aquatic and riparian habitats. Minimizing road-related landslides and chronic erosion (sedimentation to streams) is fundamental to this objective. This will be accomplished through application of risk-based management principles and best management practices. Hazard assessment and risk-based management for in-unit slides will promote properly functioning conditions for current and future aquatic habitat.

1. <u>Timber and Fish Watersheds</u>: Avoid operations on potential unstable slopes and retain intact buffers adjacent to and upslope of headwater stream channels.

Steep slopes, Unique and Visual Resources

Steep, unique, or visual (SUV) areas constitute 6,433 acres of the forest and are among some of the steepest slopes on the Elliott. SUV resources are almost exclusively associated with steep, rocky slopes on either side of major rivers or streams. To a lesser extent they include areas where scenic values are the primary values to be maintained, including areas buffering recreational areas, highway corridors, river corridors, lakeshores, and other scenic attractions. Although these areas are not specific to wildlife habitats, these lands can provide valuable wildlife habitats in addition to their primary function. In 2005, approximately 47 percent of the area within the SUV classification met the criteria for advanced structure.

1. <u>Timber and Fish Watersheds</u>: Little or no management is expected.

<u>Roads</u>

The goal of road-related conservation measures is to prevent water quality problems and associated impacts on aquatic and riparian resources, minimize disruption of natural drainage patterns, provide for adequate fish passage where roads cross fish-bearing streams, and minimize road-related landslides. Best practices for road construction and maintenance is applied as well as a road inventory to identify and prioritize actions that minimize impacts to water quality, fish habitat, and fish passage. An annual report will be prepared for NMFS.

1. <u>Timber and Fish Watersheds</u>: Inventory new roads and identify problems, opportunities for road, drainage, or passage improvement, potential for traffic control or decommissioning.

Table 3: Aquatic feature, goals and proposed conservat	tion measures.
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Stream	Goals	Proposed Conservation Measure
Туре		
Type F (all) Large and Medium Type N	Protect and Maintain: Large Wood Recruitment, shade, sediment routing, and nutrient cycling functions	 Timber and Fish Watersheds 120 foot horizontal no-harvest buffer Management will only occur under collaboration with NOAA Fisheries within established sideboards
Small Perennial Type N	Protect and maintain nutrient cycling, sediment routing and stream temperature to downstream reaches	 Timber Watersheds 30 foot horizontal no-harvest buffer Applies to 90% of stream Trees removed for yarding or roads in this zone retained in stream channel
		 Fish Watersheds 100 foot no-harvest within 500 feet of all Fish, Medium, and Large Non-fish streams, in debris flow track, or where there isn't topographic shade. 50 foot no-harvest everywhere else with mitigation logs.

Stream Type	Goals	Proposed Conservation Measure
Small Seasonal & Intermittent Type N	Protect and maintain nutrient cycling, sediment routing	 Timber Watersheds 30 foot exclusion zone for ground-based equipment Maintain shrubs, understory, and sub- merchantable trees Mitigation if soil disturbed for >10% surface area up to 10% of buffer length Fish Watersheds 50 foot no-harvest within 300 feet of all Fish, Medium, and Large Non-fish streams. Everywhere else - 30 foot equipment exclusion zone, mitigation if >10% surface area soil
Small Debris Flow Prone Type N	Maintain large wood in the track of potential debris slides to promote properly functioning conditions in the debris flow channel and in downstream fish-bearing streams.	disturbed. Timber Watersheds • 50 foot no-harvest buffer • 90% of the stream length Fish Watersheds • 100 foot no-harvest within 500 feet all Fish, Medium, Large, and Non-fish streams. 50 feet no-harvest everywhere else with mitigation logs used.

Stream	Goals	Proposed Conservation Measure
Туре		
Sensitive Aquatic Areas: Seeps, Springs, Lakes, Ponds, Wetlands, and Bogs	Maintain and protect physical integrity, hydrologic functions, habitats for fish and wildlife dependent on these unique habitats.	 Seeps and Springs Timber Watersheds Incorporate into buffer for associated aquatic feature. If not associated with another aquatic feature maintain understory and shrubs in 25 foot circles centered on the feature Fish Watersheds 50 foot no-harvest circle centered on the seep or spring. Lakes, Ponds, Wetlands, and Bogs Timber and Fish Watersheds Lakes, ponds, wetlands > 1 acre, and Bogs: 100 foot no-harvest RMA Lakes, ponds, wetlands ¼ acre – 1 acre, and type F <1/4 acres : 25 foot retention of 50% BA or 110 square foot (whichever is greater) Lakes, ponds, wetlands type N <1/4 acres: hardwood and shrub retention Stream-associated wetlands: managed according to the prescriptions afforded the associated stream
Roads	Prevent water quality problems and associated impacts on aquatic and riparian resources; minimize disruption of natural drainage patterns; provide for adequate fish passage where roads cross fish-bearing streams; and minimize acceleration of road-related landslides.	 Timber and Fish Watersheds Inventory road system completed after adoption of HCP to determine areas of concern, opportunities for road, drainage, or passage improvement, potential for traffic control or decommissioning. Prioritize roads for appropriate management (e.g., gates, decommissioning, haul restrictions) to minimize effects from roads (sediment delivery or barriers to fish passage) on aquatic species Annual report to NMFS on road management

Stream Type	Goals	Proposed Conservation Measure
High Landslide Hazard Area	Minimize the occurrence of management-induced slope failures and mitigate potential negative impacts on aquatic and riparian habitats. Applies to roads and harvest units.	 Timber and Fish Watersheds Avoid operations on potential unstable slopes and retain intact buffers adjacent to and upslope of headwater stream channels Harvest Evaluation Licensed Engineering Geologist or Engineer Utilize LIDAR to identify landslide prone areas Develop formal criteria to be used on a sale-by- sale basis to evaluate risk of landslide Apply management as directed by Area Geotechnical engineer to minimize effects to aquatic resources.
Steep Unique & Visual	Protect and maintain visual corridors, uncommon watershed features, and protect steep slopes	Timber and Fish WatershedsMinimal to no Harvest approximately 6,433 acres
Stream Mitigation	Promote aquatic habitat and properly functioning aquatic conditions at the landscape level.	 Timber and Fish Watersheds Up to 1.5% of net harvest revenue generated for the common school fund is invested in enhancement and restoration projects. Utilize inventory previously conducted along with completed projects to determine a schedule of projects to be completed Restoration projects will include: road surfacing, decoupling riparian associated roads, wood and/or boulder placement, bridge construction, and/or culvert replacement. These restoration projects will occur outside of routine requirements and standards implemented with timber sale activities.

III. Forest Management

Forestry prescriptions are expressed as averages designed to minimize the potential effect of incidental taking of listed species to the maximum extent practicable and at a level that will not appreciably reduce the likelihood of the survival and recovery of the species. Harvest prescriptions and locations will be implemented within the parameters of the conservation measures and to meet forest structure goals, protect Northern Spotted Owl and Murrelet occupied areas, nesting, roosting, and foraging habitat, and maintaining habitat connectivity. Harvest layout will apply conservation measures designed to protect, maintain and restore habitat for coho.

In 2015, the forest management plan, within the context of the aforementioned conservation measures, was estimated to generate an annual average timber harvest on the Elliott of 23-27 mmbf throughout its implementation. This annual yield will be expressed as an average, enabling both higher and lower annual yield amounts depending on variable environmental and market conditions from year to year.

IV. Mitigation

Northern Spotted Owls and Murrelets

Incidental take of Northern Spotted Owl associated with timber harvesting activities will be mitigated for within the range of the Northern Spotted Owl and could include participation in barred owl management studies.

Incidental take of Murrelet associated with timber harvest activities will be mitigated for within the range of the Murrelet and could include funds for scientific research from a credible third party on Murrelet status and protections.

<u>Coho</u>

Incidental take of coho associated with timber harvesting activities will be mitigated within the current coho Evolutionarily Significant Unit (ESU) with preference for mitigation within the same watershed.

Fish and Timber Watersheds

Fish and Timber Watersheds will be established to support prioritization of mitigation measures. The suite of enhanced conservation measures have been identified and will be applied in Fish Watersheds and Timber Watersheds. This approach will enhance specific functions, stream habitat conditions, and forest characteristics of the watersheds most critical for coho protection.

Stream restoration

Stream restoration projects will be funded for up to 1.5% of net harvest revenue to the CSF. The watershed analysis identified over 40 miles of streams that would benefit from wood placement. These opportunities are identified within both Fish and Timber Watersheds.

Road Mitigation

Incidental take of coho associated with new and necessary road construction will utilize off-set mitigation actions on other roads. This will occur in both Fish and Timber Watersheds.

Terrestrial Conservation Measure: Contribution to Mitigation Impacts to Coho

Stream reaches that flow through SUV, Murrelet, and Northern Spotted Owl T&E core areas benefit from forest conditions that are maintained in those areas that effectively

result in minimal to no harvest around those streams. In 2015, it was estimated that 72% of all stream buffers were within these terrestrial conservation areas. However, the location and extent of Murrelet and Northern Spotted Owl conservation acres is expected to shift with the adoption of an HCP, and thus so will the percentages of stream miles.

Monitoring Commitments

Over the life of the HCP, the state will commit to evaluate potential impacts of forestry operations on Murrelets, Northern Spotted Owls, and coho. Studies will also evaluate terrestrial and aquatic habitat and functions. Priorities will include scientific research from a credible third party on Murrelet status and protections. A priority is to explore the likelihood that management around Small Perennial and Seasonal Non-Fish streams will reduce the likelihood of the survival and recovery of coho.











UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE West Coast Region 1201 NE Lloyd Boulevard, Suite 1100 Portland, OR 97232

May 4, 2017

Governor Kate Brown Office of the Governor 160 State Capitol 900 Court Street Salem, Oregon 97301-4047

Dear Governor Brown:

I am writing you to indicate our support for the development of a Habitat Conservation Plan (HCP) for the Elliott State Forest that would address habitat needs of the federally-listed Oregon Coast Coho salmon (*Oncorhynchus kisutch*). The draft *Elliott 2017 Habitat Conservation Plan Framework: Conservation and Mitigation Measures*, recently shared with the National Marine Fisheries Service (Service), outlines a reasonable framework of forest management goals and strategies for conserving areas occupied by this salmon species while also meeting other goals such as timber harvest and recreation. Should the State decide to develop an HCP, these goals and strategies could serve as the basis for developing conservation measures to inform an incidental take permit from the Service for any incidental take that could not otherwise be avoided.

We are prepared to offer our assistance in the development of an HCP for the Elliott State Forest. By working together, we believe that such an HCP, with appropriate public review and comment, has the potential to successfully meet our permit issuance criteria. We endorse the framework of goals and strategies as a foundation for developing significant conservation measures and creating a viable path forward to manage the Elliott State Forest for future generations to enjoy and appreciate.

Sincerely,

Kim W Kratz, Ph.D. Assistant Regional Administrator Oregon/Washington Coastal Office

cc: Peter Daugherty, State Forester Liz Dent, State Forests Division Chief Jason Miner, Natural Resource Policy Manager Jim Paul, Department of State Lands Director





United States Department of the Interior

FISH AND WILDLIFE SERVICE Oregon Fish and Wildlife Office 2600 SE 98th Avenue, Suite 100 Portland, Oregon 97266 Phone: (503) 231-6179 FAX: (503) 231-6195

TS Number: 17-447

Governor Kate Brown Office of the Governor 160 State Capitol 900 Court Street Salem, OR 97301-4047

MAY 3 2017

Dear Governor Brown:

I am writing you to indicate our support for the development of a Habitat Conservation Plan (HCP) for the Elliott State Forest that would address habitat needs of the federally-listed northern spotted owl and marbled murrelet as well as other forest dependent species. The draft *Elliott 2017 Habitat Conservation Plan Framework: Conservation and Mitigation Measures*, recently shared with the U.S. Fish and Wildlife Service (Service), outlines a reasonable framework of forest management goals and strategies for conserving areas occupied by these species while also meeting other goals such as timber harvest and recreation. Should the State decide to develop an HCP, these conservation measures would serve as the basis for receiving an incidental take permit from the Service for any incidental take that could not otherwise be avoided.

We are prepared to offer our assistance in the development of an HCP for the Elliott State Forest. By working together we believe that such an HCP, with appropriate public review and comment, could successfully meet our permit issuance criteria. We endorse the framework as it provides significant conservation measures and creates a viable path forward to manage the Elliott State Forest for future generations to enjoy and appreciate.

Sincerely,

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Paul Henson, Ph.D. State Supervisor

cc: Jason Miner, Gov's office Peter Daugherty, ODF Liz Dent, ODF Jim Paul, DSL