

**Draft Safe Harbor Agreement
for the
Northern Spotted Owl**

between

U.S. Fish and Wildlife Service

and

Weyerhaeuser Company

**in the Oregon Coast Ranges Study Area
for the Barred Owl Removal Experiment**

January 2016

1. INTRODUCTION

The U.S. Fish and Wildlife Service (“USFWS”) is conducting a Barred Owl Removal Experiment (the “**Experiment**”) to test benefits to the threatened northern spotted owl (*Strix occidentalis caurina*) (“spotted owl”) by implementing Recovery Action 29 of the 2011 Revised Recovery Plan for the Northern Spotted Owl (USFWS 2011). The Experiment will be conducted on two study areas in Oregon, one in the Oregon Coast Ranges west of Eugene, Oregon, and one in the forest lands around Canyonville, Oregon. While the experiment is focused on Federal lands, the study area contains interspersed private land including lands owned by Weyerhaeuser Company (“**Weyerhaeuser**”). Through this Safe Harbor Agreement (also referred to herein as the “**Agreement**”), Weyerhaeuser will contribute to the implementation of the experiment on the Oregon Coast Ranges Study Area (the “**Study Area**”) allowing the researchers legal access to and through Weyerhaeuser lands in the Study Area for conducting barred owl surveys and subsequent barred owl removal work, in accordance with the provisions of the Road Access License to be issued by Weyerhaeuser (Appendix 1). This information and access is crucial to efficient and effective implementation of this experiment by the USFWS. Information from this experiment is critical to the development of a long-term management strategy to address the barred owl threat to the spotted owl.

1.1 Background on the barred owl effect on spotted owls

Because this Safe Harbor Agreement is specific to the implementation of the Experiment, understanding the approach to and value of the Experiment is important to understanding the conservation value of the Agreement.

The USFWS noted in their FEIS for the Experiment that spotted owl populations have been declining for many years, particularly in the northern part of their range (USFWS 2013a, p. 325). Spotted owl populations on the Cle Elum Demography Study Area in the Washington Cascades declined 85 percent between 1990 and 2012. In the Oregon Coast Ranges, spotted owl populations fell by 73 percent between 1997 and 2012. Even in southern Oregon, on the Klamath Demography Study Area, spotted owl populations have declined 45 percent from 2002 to 2012. While some of the declines are likely driven by habitat loss, not all areas experienced significant declines in habitat during these decline timeframes.

Many of these declines appear to correlate with the invasion by, and increase in the numbers of, barred owls. Barred owls are not native to the Pacific Northwest, arriving from the eastern United States sometime after the 1950s. Recent spotted owl population demography analysis show that barred owls have a strong negative effect on spotted owl survival and colonization of new sites on some study areas. (For more background information, see USFWS 2013a).

While maintenance and development of spotted owl habitat is important to the long-term conservation of the spotted owl, habitat management alone will not recover the spotted owl. In particular, the effects of barred owl competition on spotted owls may

overwhelm habitat management efforts in the short term, and may result in the extirpation of the spotted owl from large portions of its range. Thus, management of barred owl populations in the Pacific Northwest is crucial to the conservation of the spotted owl.

As early as 2005, scientists, biologists, and managers began exploring options for managing barred owl competition with spotted owls (Buchanan et al. 2007). After several workshops and publications, the option that appeared most likely to succeed was the removal of some barred owls in designated areas to increase spotted owl populations (Gutiérrez et al. 2007, Johnson et al. 2008). The USFWS identified the need to conduct an experiment to test this option in Recovery Action 29 of the 2011 Revised Recovery Plan for the Northern Spotted Owl.

In September 2013, the USFWS signed the Record of Decision to conduct experimental removal of barred owls to benefit threatened northern spotted owls (USFWS 2013b). The Experiment is being conducted on four study areas distributed across the range of the spotted owl, including the Study Area where certain Weyerhaeuser lands are located. The Experiment involves dividing the Study Area into treatment and control areas. Barred owls will be removed from the treatment area and not from the control area. If spotted owl populations respond positively to the removal of barred owls, USFWS anticipates spotted owls will reoccupy historic sites that are currently unoccupied within the treatment area. If that occurs, spotted owl populations will increase in the treatment area. Spotted and barred owl population trends in the control area are not anticipated to change as a result of the experiment.

To conduct the Experiment, researchers will survey the entirety of each study area for barred owls. Barred owls will be removed by the USFWS from the treatment portion of the Study Area during the non-breeding season (approximately September to March). Ongoing spotted owl surveys in the Study Area being conducted under the Northwest Forest Plan Monitoring program will continue. USFWS will use the data from these ongoing efforts to determine the effect that the removal of barred owls has on spotted owls.

Weyerhaeuser lands are intermingled with Federal and other lands in the Study Area. While the Experiment can be conducted by conducting owl surveys from public roads and public lands, and by removing barred owls on Federal lands, the results would be stronger and the efficiency and safety of the work by the USFWS would be greatly enhanced by access to Weyerhaeuser lands.

1.2 Goals and Objectives

1.2.1 USFWS goals and objectives

The goal of the USFWS is to contribute to the conservation of the threatened northern spotted owl by rapidly implementing experimental research in accordance with Recovery Action 29 of the Recovery Plan (USFWS 2011, p. III-65).

The purpose of the Experiment is to implement experimental research necessary for conservation of the spotted owl in accordance with Recovery Action 29 of the Recovery Plan (USFWS 2011, p. 111-65). This action should provide needed information regarding:

- the effects of barred owls on spotted owl vital rates of occupancy, survival, reproduction, and population trend through experimental removal of barred owls;
- the feasibility of removing barred owls from an area and the level of effort required to maintain reduced barred owl population levels for the duration of the experiment;
- the cost of barred owl removal; and
- the evaluation of this technique to contribute to developing future options for potential management of barred owls as expeditiously as possible.

The Experiment will gather information essential to the development of a barred owl management strategy, thereby assisting the USFWS in implementing Recovery Action 30: Manage to reduce the negative effects of barred owls on spotted owls so that Recovery Criterion 1, a stable or increasing spotted owl population trend over 10 years, can be met.

1.2.2 Weyerhaeuser goals and objectives

Weyerhaeuser manages its timberlands primarily for timber production providing economic, community and stewardship values on a long term sustainable basis while meeting all applicable state and federal regulatory requirements.

Weyerhaeuser recognizes the Experiment is recommended by the USFWS as set forth in the Revised Recovery Plan, and that the USFWS work plan has been federally funded and is scheduled for implementation. Weyerhaeuser's ownership footprint and operational considerations within the Study Area requires cooperation.

Weyerhaeuser recognizes:

- The potential for significant changes and fluctuations regarding spotted owl occupancy status of well surveyed sites and areas on or near Weyerhaeuser lands in the treatment area after barred owl removal occurs.
- The potential for short term regulatory impacts to its operational plans after barred owl removal in the treatment area occurs.

The purpose of Weyerhaeuser participation is to demonstrate good faith cooperation with USFWS regarding this recovery action while being held harmless by the USFWS and, to the maximum extent allowable under the Endangered Species Act, ensuring that adjacent landowners are also held harmless by the USFWS, through maintaining a reasonable level of certainty regarding the regulatory impacts on Weyerhaeuser's management activities resulting from an anticipated biological response during and after the experiment period.

1.3 Contents of this Safe Harbor Agreement

This Safe Harbor Agreement is submitted in support of the issuance by the USFWS of an Enhancement of Survival Permit (“**Permit**”) under Section 10(a)(1)(A) of the Endangered Species Act (“**ESA**”) and will include information about the following:

- Conservation measures, including baseline for the spotted owl within the Safe Harbor Agreement covered lands and actions that would be undertaken by Weyerhaeuser to support the Experiment;
- Contribution to recovery of the spotted owl;
- Net conservation benefits;
- Assessment of incidental take during the term of the Safe Harbor;
- Monitoring and reporting requirements;
- Responsibilities of Weyerhaeuser and USFWS;
- Landowner assurances;
- Duration of the Permit;
- Process for land additions, amendments, dispute resolution, and permit termination, transfer, and renewal; and
- Consistency of the Safe Harbor Agreement with applicable federal, state, and local laws and regulations.

2 AUTHORITY AND PURPOSE

2.1 Regulatory Environment

2.1.1 Federal - Sections 2, 7, and 10 of the ESA authorize USFWS to enter into this Safe Harbor Agreement. Section 2 of the ESA states that encouraging interested parties to develop and maintain conservation programs, through Federal financial assistance and a system of incentives, is a key to safeguarding the nation’s heritage in fish, wildlife, and plants. Section 7(a)(1) of the ESA requires USFWS to review programs that it administers and to use such programs to further the purposes of the ESA. By entering into this Safe Harbor Agreement, USFWS will use its programs to promote such conservation. Section 10(a)(1)(A) of the ESA authorizes the USFWS to issue enhancement of survival permits for listed species. This Safe Harbor Agreement is entered into pursuant to the Final Safe Harbor Policy, Final Rule (U.S. Department of the Interior 1999), and Revisions to the Regulations for Safe Harbor Agreements and Candidate Conservation Agreements With Assurances (U.S. Department of the Interior 2004), and implements the intent of the applicant (Weyerhaeuser) and the USFWS to follow the procedural and substantive requirements of section 10(a)(1)(A) of the ESA.

The purpose of this Safe Harbor Agreement is for USFWS to provide assurances to Weyerhaeuser that, in allowing the USFWS to remove barred owls from Weyerhaeuser lands as part of the Experiment, Weyerhaeuser will not be encumbered with additional regulatory requirements that may affect the management of their lands beyond the current baseline condition if spotted owls reoccupy currently unoccupied sites. By permitting the USFWS and its contractors/agents to survey for and remove barred owls

from Weyerhaeuser lands within the Study Area, Weyerhaeuser will contribute greatly to the strength and quality of data from this experiment. The information from this Experiment is crucial for the development of a barred owl management strategy to support the conservation of spotted owls. Weyerhaeuser will receive a permit that authorizes incidental take of any spotted owls that reoccupy currently unoccupied sites as a result of the removal of barred owls under the experiment.

2.1.2 State of Oregon - The Oregon Forest Practices Act (ORS 527.610) identifies forest practices as any operation conducted on or pertaining to forestland, including but not limited to: (a) reforestation of forestland; (b) road construction and maintenance; (c) harvesting of forest tree species; (d) application of chemicals; (e) disposal of slash; and (f) removal of woody biomass. The rules specifically state that compliance with the forest practices rules does not substitute for or ensure compliance with the ESA and nothing in the rules imposes any state requirement to comply with the ESA. Landowners and operators are advised that federal law prohibit a person from taking threatened or endangered species, which are protected under the ESA.

Forest management operations require submission of a written plan to the State Forester under ORS 527.670(3) before any operations requiring notification under OAR 629-605-0140 may be conducted, including those operations within (1) 300 feet of a specific site involving threatened or endangered wildlife species, or sensitive bird nesting, roosting, or watering sites; or (2) 300 feet of any resource site identified in OAR 629-665-0100 (Sensitive Bird Nesting, Roosting and Watering Resource Sites on Forest lands), OAR 629-665-0200 (Threatened and Endangered Species that use Resource Sites on Forest lands), or OAR 629-645-0000 (Significant Wetlands), or (3) 300 feet of any nesting or roosting site of threatened or endangered species listed by the USFWS or by the Oregon Fish and Wildlife Commission by administrative rule. Written plans required under OAR 629-605-0170 must contain a description of how the operation is planned to be conducted in sufficient detail to allow the State Forester to evaluate and comment on the likelihood that the operation will comply with the Forest Practices Act or administrative rules.

Landowners that enroll in a Safe Harbor Agreement for barred owl control will receive regulatory assurances under the Forest Practices Act under OAR 629-665-0210(5): "Exceptions to the requirements for protecting northern spotted owl nesting sites are allowed if the operator is in compliance with, and has on file with the State Forester, an applicable incidental take permit issued by Federal authorities under the Endangered Act." In other words, if a spotted owl establishes a territory on or near Weyerhaeuser's enrolled lands in the study area during the term of the Safe Harbor Agreement, OAR 629-665-0210(5) will apply and Forest Practices Act regulations will not be required for nearby operations during the term of the Agreement.

3 BACKGROUND

3.1 Description of Covered Area

This section describes the lands and species covered under the Agreement and the species baseline conditions of Weyerhaeuser lands.

3.1.1 General Area

Oregon Coast Ranges Study Area: The Study Area is located along the western coast of Oregon, west of Eugene and south of Highway 20 in Lincoln, Benton, Douglas, and Lane Counties (Map 1). The study area includes a total of 418,000 acres. Barred owl removal would occur on approximately 150,000 acres of the total study area. This area is one of the eight long-term ongoing spotted owl demography study areas under the Northwest Forest Plan Effectiveness Monitoring Program.

The area consists of a mixture of Federal, State, and privately owned lands. The Siuslaw National Forest and Salem and Eugene Districts of the BLM administer approximately 67 percent of the study area. Oregon Department of Forestry includes 5 percent of the study area. Weyerhaeuser owns or manages 10 percent of the study area. The remaining 18 percent of the study area is in private ownership.

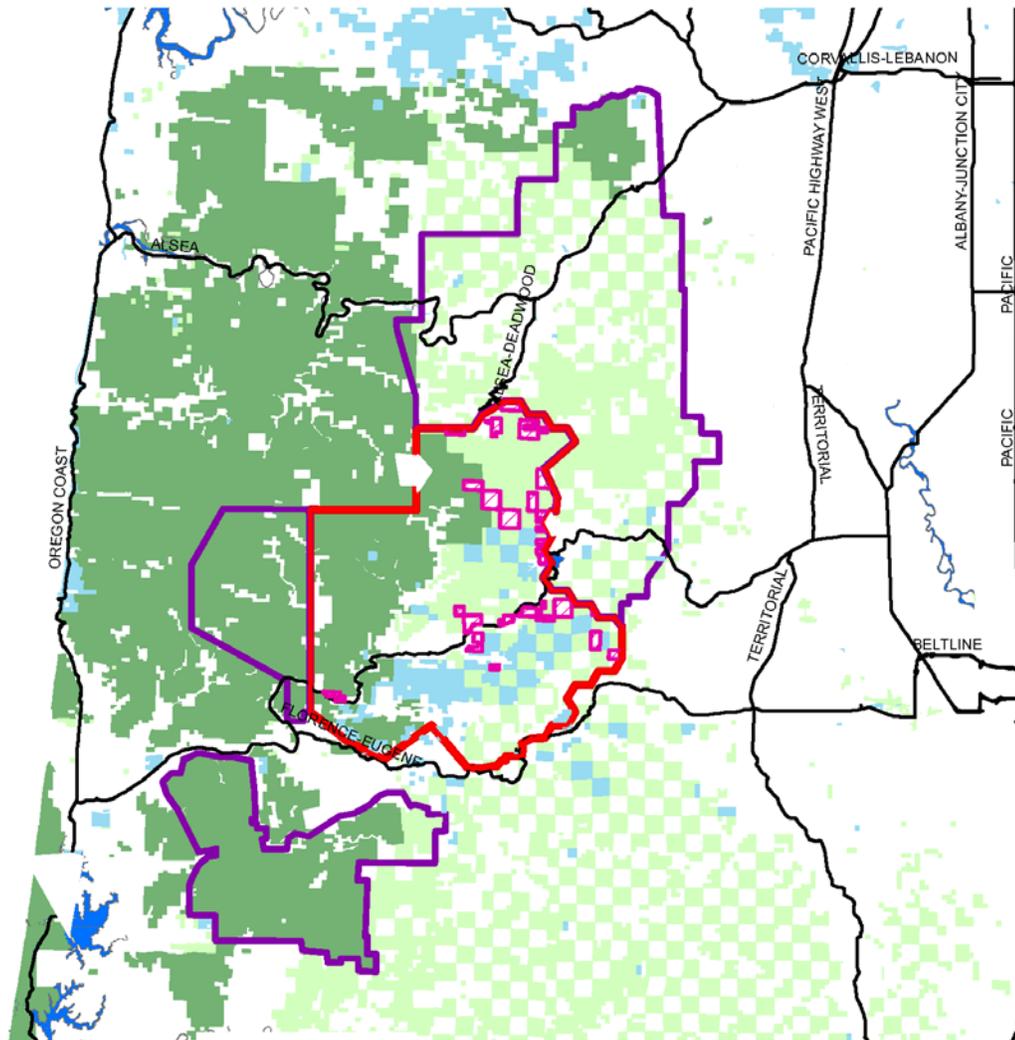
The treatment portion of the study area includes lands managed by the Siuslaw National Forest and Salem and Eugene Districts of the BLM, Oregon Department of Forestry, Weyerhaeuser, and other private landowners. Federal lands represent 57 percent of the treatment area, State lands represent 12 percent of the treatment area, Weyerhaeuser lands represent 5 percent of the treatment area, and other private lands represent 26 percent of the treatment area.

3.1.2 Enrolled lands

Weyerhaeuser owns approximately 7,489 acres of forest lands within the treatment portion of the Study Area in Lane County, Oregon (Map 1). All Weyerhaeuser lands within the sections listed in Table 1, column 3 shall be the enrolled lands under this Safe Harbor Agreement and the associated Permit, should it be issued.

Map 1. Land ownership for Oregon Coast Ranges Study Area, including treatment and control areas, with Weyerhaeuser lands in the treatment area identified.

Land Ownership - Oregon Coast Ranges Study Area



Legend

- Study Area Boundaries - September 2015**
- Treatment
 - Control
 - Highways
 - Weyerhaeuser Ownership
 - US FOREST SERVICE
 - BLM
 - STATE
 - PRIVATE
 - WATER

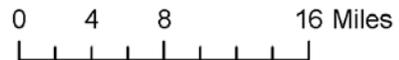
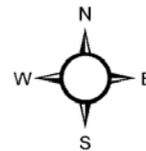


Table 1. Sections within the treatment portion of the Study Area where Weyerhaeuser owns and manages lands.

Location of Weyerhaeuser Ownership		
Township	Range	Sections
15S	7W	7,30,32
15S	8W	2,8,10,12,28,34,36
16S	7W	6,7,18,31,32,34
16S	8W	2,32,36
17S	7W	10,14
17S	8W	2,4,9,15
17S	9W	29,30

Weyerhaeuser-owned lands within the sections identified in Table 1 are enrolled lands under this Safe Harbor Agreement and the associated Permit. In addition, the lands identified in Table 1 include easements and related agreements appurtenant to such lands that are used by Weyerhaeuser and its contractors to access the lands for timber and other forest products hauling and other management purposes. These easements and agreements allow for a wide variety of activities on the easement areas, including but not limited to road use, road construction, road maintenance and the normal management activities associated with managing private forestland for timber production such as planting, spraying, fertilizing, monitoring, measuring patrolling and fighting wildfire. These activities could, depending on the specific circumstances, result in the disturbance of nesting spotted owls or the loss of some spotted owl habitat. Any activities conducted by Weyerhaeuser, its timber purchasers, and any of their contractors or permittees conducted under existing agreements, easements, or other conveyances of rights in relation to accessing and managing the enrolled lands are also covered by this Agreement and are considered covered activities for the purposes of the Permit.

3.1.2 Adjacent Landowners

In the treatment portion of the Study Area, Weyerhaeuser lands are intermingled with federal lands managed by the U.S. Forest Service and Bureau of Land Management, Oregon Department of Forestry lands, as well as lands owned by various timber companies and small landowners (Map 2). BLM and State lands are immediately adjacent to many of these lands in the treatment area.

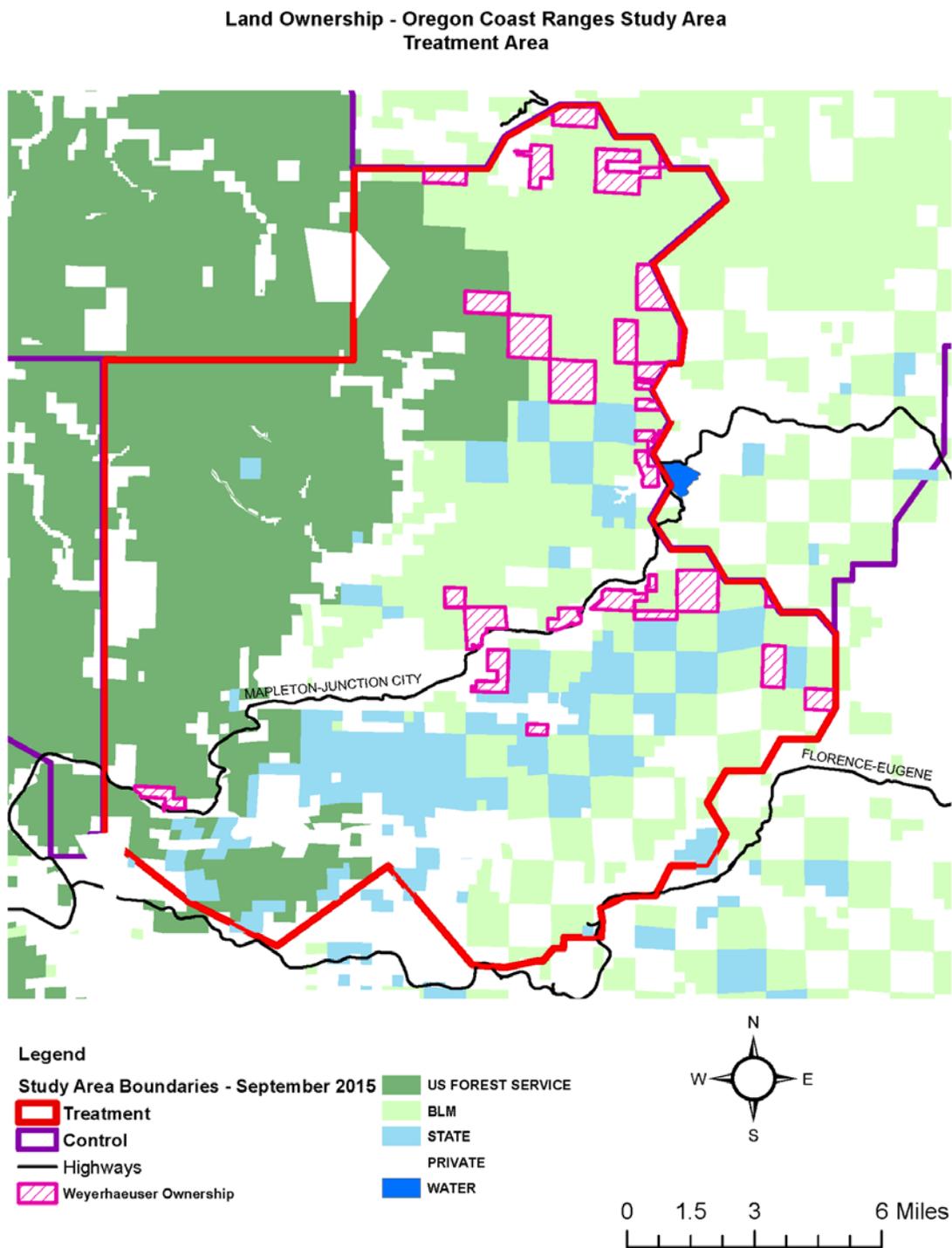
Flexible regulatory assurances for non-participating neighboring landowners could contribute to increased enrollment by other landowners and ultimately increased conservation for the northern spotted owl by helping to maintain good relations with neighbors and by demonstrating that northern spotted owl recruitment during this study will not significantly limit land use, except as agreed by cooperating landowners. For

this reason, USFWS will, to the maximum extent allowable under the ESA, implementing regulations and Final Safe Harbor Policy, extend incidental take coverage to non-participating landowners should spotted owls reoccupy non-baseline sites (sites currently unoccupied by spotted owl for at least three years) that affect their land use as a result of the conservation efforts made pursuant to this SHA.

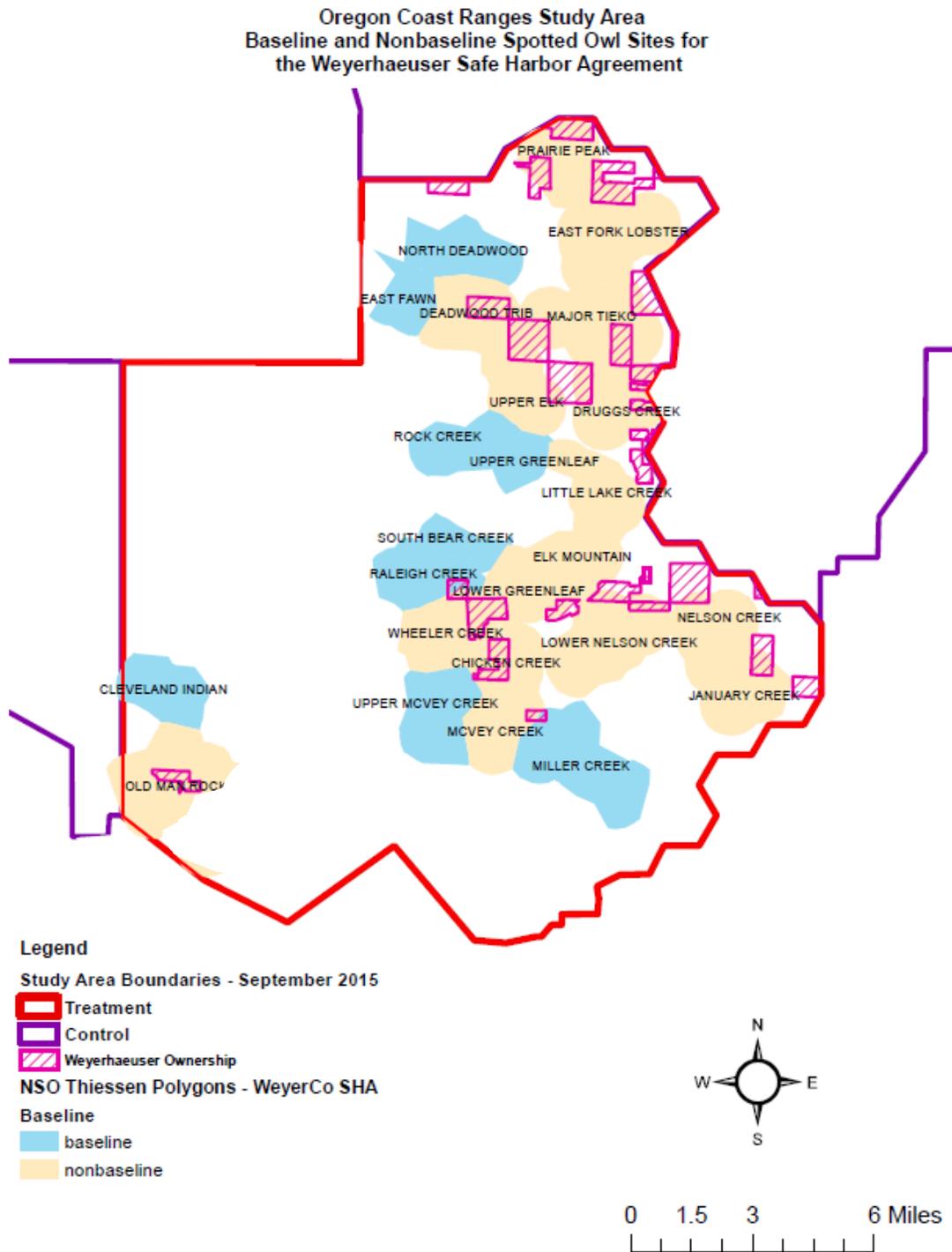
If the Experiment results in the re-occupancy of non-baseline spotted owl sites that affect neighboring private landowners not covered by a Safe Harbor Agreement or Habitat Conservation Plan, the USFWS will use the flexibility allowed under the ESA in addressing neighboring properties under Safe Harbor Agreements and associated take authorizations (USFWS 1999). The implications to neighboring landowners and any actions or conditions needed to meet the requirements of the ESA for neighboring lands not enrolled under this Agreement will be determined on a case-by-case-basis at the time of a voluntary request for coverage. To receive incidental take authorization, neighboring landowners would only be required to agree to such conditions as would be necessary to ensure that the Agreement meets the requirements for issuance of such permits contained in the ESA, implementing regulations and Final Safe Harbor Policy. Neighboring landowners would be required to sign an agreement that would define the baseline condition (occupied and unoccupied spotted owl sites) and any necessary conditions in order to receive take authorization at that time.

For this Safe Harbor Agreement, we define neighboring properties as private lands within the spotted owl site Thiessen polygons in which Weyerhaeuser also owns lands (Table 3) and grants access to conduct barred owl surveys and remove barred owls for the Barred Owl Removal Experiment, and so may contribute to the temporary re-occupancy of the area by spotted owls, and where landowners of neighboring lands containing spotted owl habitat may be affected by the change in spotted owl occupancy. Based on the conditions in the Study Area treatment area and location of private lands within the Thiessen polygons (Map 3), the USFWS anticipates that any actions or conditions needed to meet the requirements of the ESA for neighboring landowners could include some or all of the responsibilities listed in Section 5.1, but would not be anticipated to exceed these responsibilities. The level of contribution necessary to meet the requirements of the ESA would be determined on a case by case basis, taking into consideration the existing contributions of Weyerhaeuser under this Safe Harbor Agreement and any other similar agreements with third parties in place within the Study Area at that time.

Map 2. Ownership within the treatment area of the Oregon Coast Ranges Study Area.



Map 3. Baseline and non-baseline spotted owl sites, showing coverage of Thiessen polygons, in the treatment portion of the Oregon Coast Ranges Study Area.



3.2 Covered Species

3.2.1 Northern Spotted Owl

Status – The spotted owl was federally-listed as threatened under the ESA on June 26, 1990 (USFWS 1990a). Detailed accounts of the taxonomy, ecology, reproductive characteristics, and status and trends of the spotted owl are found in numerous federal documents (Courtney et al. 2004, USFWS 2008, USFWS 2011, Davis et al. 2011).

The USFWS originally listed the spotted owl primarily because of widespread loss of suitable habitat across the spotted owl's range and the inadequacy of existing regulatory mechanisms to conserve the spotted owl. Past habitat loss and current habitat loss continue to threaten the spotted owl, though loss of habitat due to timber harvest has been greatly reduced on federal lands for the past two decades. Some populations of spotted owls continue to decline even with extensive maintenance and restoration of suitable habitat in recent years, especially in the northern parts of the subspecies' range. The spotted owl has become rare in British Columbia, much of Washington, and the northern coastal ranges of Oregon. Managing sufficient habitat for the spotted owl now and into the future is still considered essential for its recovery (USFWS 2011). However, securing habitat alone may not recover the spotted owl. Based on recent scientific information, competition from the barred owl poses a significant and complex threat to the spotted owl that will need to be further investigated.

On May 16, 2008, the FWS announced the release of the Final Recovery Plan for the Northern Spotted Owl (USFWS 2008, entire). The Plan was revised in 2011. The Revised Recovery Plan (USFWS 2011, entire) identified past habitat loss, current habitat loss, and competition from the recently arrived barred owl as the most pressing threats to the northern spotted owl (USFWS 2011, p. I-6.). Concern for the effects of competition from barred owls resulted in 10 recovery actions in the Revised Recovery Plan, including Recovery Action 29 – Design and implement large-scale control [removal] experiments to assess the effects of barred owl removal on spotted owl site occupancy, reproduction, and survival and Recovery Action 30 – Manage to reduce the negative effects of barred owls on spotted owls.

The Revised Recovery Plan states, “Barred owls reportedly have reduced spotted owl site occupancy, reproduction, and survival. Limited experimental evidence, correlational studies, and copious anecdotal information all strongly suggest barred owls compete with spotted owls for nesting sites, roosting sites, and food, and possibly predate spotted owls.... Because the abundance of barred owls continues to increase, the effectiveness in addressing this threat depends on action as soon as possible” (USFWS 2011, p. III-62). Given the continuing range expansion and population growth of barred owl populations in the western United States and concurrent decline in northern spotted owl populations, information on the effectiveness of a removal program is urgently needed.

Recovery Action 29 focuses on acquiring the information necessary to help identify potential effective management approaches and contribute to future decisions on the

implementation of appropriate management strategies for barred owls. It proposes experimental removal of barred owls on a scale sufficient to determine if the removal would increase spotted owl site occupancy and improve population trends (USFWS 2011, pp. III-62, III-65), which in turn would contribute toward recovery of the species. Results from these experiments would be used to inform future decisions on potential long-term management strategies for barred owls.

Ecology – The current range of the spotted owl extends from southwest British Columbia through the Cascade Mountains, coastal ranges, and intervening forested lands in Washington, Oregon, and California, as far south as Marin County (USDI FWS 1990a, p. 26115). Northern spotted owls generally rely on structurally complex forest habitats because they contain the structures and characteristics required for nesting, roosting, foraging, and dispersal. These characteristics include the following: (1) a multi-layered, multi-species canopy dominated by large overstory trees; (2) moderate to high canopy closure; (3) a high incidence of trees with large cavities and other types of deformities; (4) numerous large snags; (5) an abundance of large, dead wood on the ground; and (6) open space within and below the upper canopy for flight (Thomas et al. 1990; USFWS 1990b).

3.3 Current Conditions

3.3.1 Northern Spotted Owl

3.3.1.1 Spotted owl population dynamics

Spotted owl populations have been monitored at eight long-term study areas on Federal lands in Washington, Oregon, and California and additional study areas on State, private, and Tribal lands during the same period. These studies were initiated between 1985 and 1991 (Lint et al. 1999, entire), and have continued through the present. Data from these areas have been analyzed and region wide analyses have been conducted approximately every 5 years with the most recent completed in 2014 (Dugger et al. 2016).

The 2014 analysis indicated that since monitoring began in the early 1990s, spotted owl populations declined 55-77 percent in Washington, 31-68 percent in Oregon and 32-55 percent in California (Dugger et al. 2016). In addition, population declines are currently occurring on study areas in southern Oregon and northern California that were previously experiencing little to no detectable decline through 2009 (Forsman et al. 2011). For the meta-analysis of all 11 areas combined, the analysis showed a 3.8 percent average annual decline during the 20 plus year time period, which is an increased rate of decline (3.8% vs. 2.9%) from previous meta-analysis conducted in 2009 (Forsman et al. 2011).

In 2014, an occupancy analysis was added to the demographic analyses. Over the period from 1993-2013, modeled occupancy estimates showed 44 to 74 percent, 22 to 47 percent and 32 to 37 percent declines in spotted owl occupancy in Washington, Oregon and California, respectively (Dugger et al. 2016). As demonstrated in the

individual study area annual reports, the empirical occupancy rates across individual territories have been in decline for years on most of the areas throughout the range of the northern spotted owl. Factors likely influencing occupancy included competition with barred owls and/or the interactive effects of barred owls and habitat loss on a spotted owl territory (Dugger et al. 2016).

3.3.1.2 Threats

The northern spotted owl was listed as a threatened species under the ESA in June of 1990, primarily due to the widespread habitat loss throughout the subspecies' range. Since 1990, conservation efforts have focused primarily on securing forest habitat with characteristics essential for the spotted owl's survival.

In the initial listing, competition from the barred owl was identified as a potential threat, though the level of this threat was unknown. By 2004, scientists involved in the status review for the 5-year review of the spotted owl noted that the understanding of the barred owl threat had improved, raising it from an issue of concern to a primary threat of greater imminence. Scientists were already convinced that barred owls were having a negative impact on spotted owls in at least some geographic areas (Gutiérrez et al. 2004:7-43).

The 2008 Northern Spotted Owl Recovery Plan identified two predominant threats: increasing competition from barred owls, and habitat loss from timber harvest and fire (USFWS 2008). The 2011 Revised Recovery Plan confirmed barred owl competition as a predominant threat and noted that barred owls pose perhaps the most significant short-term threat to spotted owl recovery (USFWS 2011, p. II-4).

4 CONSERVATION AGREEMENT

4.1 Conservation Measures

4.1.1 Baseline

This Safe Harbor Agreement defines the baseline condition, prior to any barred owl removal actions, as habitat that currently supports resident spotted owls. Conversely, the term “non-baseline” is used in the Agreement to describe areas that have not been occupied for at least three years. The USFWS has determined the baseline spotted owl territories for this Agreement based on annual spotted owl survey data and forest stand/habitat information according to the process in the discussion that follows. Thanks to continued monitoring of spotted owls on Weyerhaeuser lands as part of the ongoing spotted owl surveys conducted under the Northwest Forest Plan Monitoring program, we have strong annual survey data for most of the area that would be included in the Agreement, and can establish a baseline based on the estimated current occupancy status of each spotted owl site.

Approach to defining baseline: All protocol surveys to date include at least two years of survey data to support a firm determination of current spotted owl presence.

Multiple years of data are preferred as the spotted owl's response to the presence of barred owls may have further reduced their propensity to respond to call surveys. Therefore, for the purposes of this Agreement, spotted owl sites on which annual surveys detected the presence of at least one resident spotted owl over the last three year period from 2013 through 2015 will be considered to support current spotted owls in the Study Area and are considered as baseline sites.

USFWS biologists delineated both currently occupied and historic spotted owl using Thiessen polygons. USFWS used these territories to define spotted owl sites within the treatment area (Map 3). To delineate the Thiessen polygons, USFWS biologists located annual site centers (i.e. the most biologically important location from each year based on the following hierarchical ranking: 1) active nest, 2) fledged young, 3) primary roost location, 4) diurnal location, and 5) nocturnal detection) for each spotted owl site. They then used the Euclidean Allocation Distance tool in ArcGIS (ESRI 2011) to delineate a Thiessen polygon around all annual center locations for each spotted owl territory. Thus, the Thiessen polygon represents the estimated cumulative area of use by a single or pair of spotted owls during the survey period (March to August). The Thiessen polygon encompasses all the annual territory center locations, and extends outward to a maximum of one half the median nearest neighbor distance, or midway between the annual territory center locations of spotted owls occupying adjacent territories, whichever distance is shorter.

For Weyerhaeuser lands that lie outside of any Thiessen polygon, the USFWS examined habitat maps and forest inventory information, as well as general survey information, and has determined these lands are not likely to support undetected resident spotted owls.

Baseline: USFWS analyzed data for all spotted owl sites within the treatment portion of the Study Area. The determination of baseline status for each site applies to all areas within the Thiessen polygon delineated for that site. The spotted owl sites listed in Table 2 are the baseline sites for this Safe Harbor Agreement. These sites all have a response from at least one resident spotted owl between 2013 and 2015 and are located on or near (e.g. within 1.5 mi provincial home range radius) Weyerhaeuser lands.

Table 2. Baseline spotted owl sites (9) for the Safe Harbor Agreement.

BASELINE SPOTTED OWL SITES	
Master Site #	Spotted Owl Site Name
0765	Cleveland Indian
1761	East Fawn
0160	Miller Creek
1760	North Deadwood
3553	Raleigh Creek
2721	Rock Creek
3913	South Bear Creek

4680	Upper Greenleaf
4474	Upper McVey Creek

Non-Baseline: The spotted owl sites on Table 3 have been well surveyed, and no resident spotted owls have been found between 2013 and 2015. Accordingly, these sites would not be in the baseline for this Agreement. That is, if any of these territories are re-occupied by spotted owls during the term of the Permit (at either the historic nest site, historic activity center or elsewhere within the Thiessen polygon), Weyerhaeuser will be permitted to take any such spotted owls under the terms of this Agreement and the Permit. In addition, Weyerhaeuser lands in Table 4 that lie outside of any Thiessen polygon are not likely to support undetected resident spotted owls, and are therefore, not considered part of the occupied baseline for this Safe Harbor Agreement. If they become occupied by spotted owls during the term of the Permit, Weyerhaeuser will be permitted to take any such spotted owls under the terms of this Agreement and the Permit.

Table 3. Spotted owl sites (16) that are not baseline sites, in which territories Weyerhaeuser owns lands.

NON-BASELINE SPOTTED OWL SITES		
Master Site #	Spotted Owl Site Name	Last Year With Spotted Owl Response
4491	Chicken Creek	2010
0087	Deadwood Trib	2010
2543	Druggs Creek	2008
0183	East Fork Lobster	2012
0524	Elk Mountain	2011
2549	January Creek	2012
2552	Little Lake Creek	2007
2313	Lower Greenleaf	2010
4492	Lower Nelson	2011
4651	Major Tiek	2008
4088	McVey Creek	2012
3554	Nelson Creek	2003
0814	Old Man Rock Canyon	2009
0188	Prairie Creek	2002
0086	Upper Elk	2010
2722	Wheeler Creek	2011

Table 4. List of Sections containing Weyerhaeuser lands located outside of Thiessen polygons that USFWS has determined are not likely to support current spotted owls, and that are therefore, not considered baseline for this Safe Harbor Agreement.

Location		
Township	Range	Sections
15S	7W	30
15S	8W	8
16S	7W	6,7
16S	8W	2
17S	7W	10,14

4.1.2 Weyerhaeuser Contributions

To support the Experiment, Weyerhaeuser will:

- Provide access (gate keys) and permission for USGS and USFWS biologists to access Weyerhaeuser roads and lands to survey barred owls throughout the Study Area, in accordance with the provisions of the Road Access License (Appendix 1) (Map 1).
- Provide access to Weyerhaeuser roads and permission for USGS and USFWS biologists to remove barred owls located on Weyerhaeuser lands within the treatment portion of the Study Area, in accordance with the provisions of the Road Access License (Appendix 1) (Map 2).
- Provide access and permission for USGS and USFWS biologists to use roads owned or managed by Weyerhaeuser to access sites for the removal of barred owls located on Federal lands, and any other lands for which USFWS has landowner permission to remove barred owls within the treatment area of the Study Area.
- During the nesting and rearing season (March 1 to September 30 of the year), refrain from removal or alteration of habitat within a 70-acre core, designated based on the “nearest, best most contiguous habitat”, which in all cases will include the nest trees or activity center. The intent is to allow spotted owls that initiate nesting to complete nesting and fledge young. At any time that biologists determine the pair is no longer nesting, this seasonal restriction would no longer be in effect. Actual habitat to be maintained will be determined by mutual agreement of the USFWS and Weyerhaeuser. Determination of nesting failure will follow the process described in Appendix 2.

4.2 Contribution to Recovery

The 2011 Revised Recovery Plan for the Northern Spotted Owl (USFWS 2011) identified competition from barred owls as one of the primary threats to the spotted owl. In the Recovery Plan, 10 of the 33 recovery actions address the barred owl threat,

including Recovery Action 29 concerning a barred owl removal experiment.

Recovery Action 29: Design and implement large-scale control experiments to assess the effects of barred owl removal on spotted owl site occupancy, reproduction, and survival.

We [USFWS] believe removal of barred owls would provide benefits to spotted owls in the vicinity of the removal and may have larger population effects. Given the rapidity and severity of the increasing threat from barred owls, barred owl removal should be initiated as soon as possible in the form of well-designed removal experiments. These experiments will have the potential to substantially expand our knowledge of the ecological interactions between spotted owls and barred owls (Dugger et al. 2016) and the effectiveness of barred owl removal in recovering spotted owls. Removal experiments should be conducted in various parts of the spotted owl's range, including a range of barred owl/spotted owl densities, to provide the most useful scientific information. (USFWS 2011, p. III-65)

4.3 Net Conservation Benefits

This Safe Harbor Agreement supports implementation of Recovery Action 29. As USFWS noted in developing the experiment (USFWS 2013), barred owl competition has the potential to result in continuing and increasing impacts to northern spotted owl.

“Although northern spotted owl populations have been declining for many years, the presence of barred owls exacerbates the decline. Recent studies (Olson et al. 2005, p. 918; Forsman et al. 2011, pp. 69-70, 75-76) have established negative relationships between barred owl presence and declines in spotted owl population performance across the range of the subspecies. This could result in the extirpation (local extinction) or near extirpation of the northern spotted owl from a substantial portion of their historical range, even if other known threats, such as habitat loss, continue to be addressed. Given the continuing range expansion and population growth of barred owl populations in the western United States and concurrent decline in northern spotted owl populations, information on the effectiveness of a removal program is urgently needed (USFWS 2013a (FEIS) p. xxiv).” As scientists note, “there are no grounds for optimistic views suggesting that Barred Owl impacts on Northern Spotted Owls have been already fully realized” (Gutiérrez et al. 2004:7-38).”

To develop a barred owl management strategy that will conserve northern spotted owls, the USFWS needs information on feasibility of potential management tools. Scientists, biologists, and managers have identified barred owl removal as the most realistic and practical tool described to date for such management. Given the controversy around any removal of wildlife, particularly raptors, the USFWS needs clear and credible information on effectiveness and cost of removal as a management tool.

To gather the strongest, most credible information from a removal experiment, USFWS

will conduct the Experiment on ongoing spotted owl demography study areas using more than a decade of pre-treatment data. While these study areas are focused on federal lands in most cases, they still contain significant interspersed non-federal lands. To complete the Experiment in the most efficient and complete manner, USFWS requires access on non-public roads and the ability to remove barred owls on the non-federal lands within the treatment area. While the Experiment is possible without access to non-federal lands, failure to remove barred owls from portions of the treatment area could reduce the power of the Experiment to detect any changes in spotted owl population dynamics resulting from the removal of barred owls and potentially extend the duration of the Experiment. The USFWS has repeatedly indicated the need to gather this information in a timely manner. Failure to access non-federal lands could delay the results.

Weyerhaeuser own lands in the treatment portion of the Study Area. Access to Weyerhaeuser lands in this area, are important to the efficient and effective completion of the Experiment within a reasonable timeframe.

All of the currently occupied spotted owl sites are considered occupied baseline under this Safe Harbor Agreement and no take of spotted owls or habitat degradation or removal on these sites is authorized under this Agreement. There are nine (9) baseline spotted owl sites associated with Weyerhaeuser lands or easements/agreements within the treatment area (Table 2).

If barred owl removal does allow spotted owls to reoccupy sites that are not currently or recently occupied or other areas not associated with baseline sites (i.e., non-baseline), Weyerhaeuser will be permitted to take these spotted owls. It is highly unlikely that these sites would ever be re-occupied by spotted owls while barred owls are present.

The USFWS anticipates removing barred owls on the treatment portion of the study areas for four years and that scientifically credible results can be reached in these four years. However, the Record of Decision (USFWS 2013b) for the experiment does allow for up to 10 years of barred owl removal if needed to reach significant results or for a shorter duration of removal if such results are achieved earlier. In all cases, the removal of barred owls on the study areas will end within 4 to 10 years. The USFWS anticipates that, once released from the removal pressure, barred owl populations will rebound to pre-treatment levels within 3 to 5 years. This is likely to result in the loss of the newly reoccupied sites. Therefore, any occupancy of these non-baseline sites is likely to be temporary and short term.

Under this Safe Harbor Agreement, Weyerhaeuser will be authorized to take spotted owls on 16 non-baseline sites (Table 3) and on other lands identified in Table 4 starting with the initial year of the study and extending for 10 years. Take resulting from disturbance and not habitat loss is temporary and is not anticipated to so disrupt the spotted owl sites to a level that would affect the results of the Experiment. Potential take occurring outside baseline areas as a result of both disturbance and habitat loss may have some effect on the study. Disturbance with no habitat loss is a temporary effect and is not anticipated to disrupt the spotted owl sites to a level that would affect the

results of the experiment. Take resulting from habitat loss has longer term effects, and the degree to which habitat loss may affect the study depends on the amount of potential habitat loss and the condition of the spotted owl site. In addition, there is a low likelihood of take associated with use of road easements used to access and manage the enrolled lands, but take associated with such use is also authorized.

Based on the information in Section 4.4, the removal of habitat from the Weyerhaeuser lands may result in the incidental take of spotted owls associated with up to 16 spotted owl sites, but only if these non-baseline sites are reoccupied during the Experiment. However, on these sites, the effect of the take is unlikely to impact the study results due to the low percentage of extant suitable habitat that could be harvested in any event.

The primary conservation value of the Experiment is the information it provides on the efficacy of removal as a tool to manage barred owl populations to support the conservation of the spotted owl. This information is crucial to the development of a long-term barred owl management strategy, itself essential to the conservation of the northern spotted owl. Thus, the take of spotted owls on the temporarily-reoccupied sites is more than offset by the value of the information gained from the experiment and its potential contribution to a long-term barred owl management strategy. This Safe Harbor Agreement advances the recovery of the spotted owl.

4.4 Incidental Take - Northern Spotted Owl

There are a total of 113 current and historic spotted owl territories in the Oregon Coast Ranges Study Area, of which 18 directly overlap some portion of Weyerhaeuser lands and operation base in the treatment portion of the Study Area (see Map 3). The currently occupied sites listed in Table 2 are part of the occupied baseline for the Agreement. Incidental take will not be authorized for these spotted owl sites through the permit. The experimental removal of barred owls from the treatment areas are likely to result in some currently unoccupied (non-baseline) sites or lands outside of historic sites becoming reoccupied by spotted owls. Spotted owls that reoccupy these non-baseline sites (Table 3) or lands located outside of Thiessen polygons (Table 4) could be taken as part of Weyerhaeuser's ongoing forest operations and management activities. It is highly unlikely these sites would be re-occupied by spotted owls without the experimental removal of barred owls. It is also likely that these sites will become unoccupied again once the experiment ends and barred owls are allowed to expand back into the treatment area.

Incidental take of spotted owls under this Safe Harbor Agreement would likely be in the form of harm from forest operation activities that result in habitat degradation, or harassment from forest management activities that cause disturbance to spotted owls. USFWS has concluded that noise disturbance from barred owl removal on the treatment area does not rise to the level of take (USFWS 2013a). Incidental take in the form of harassment by disturbance is most likely to occur near former spotted owl nest sites if they become reoccupied. Harm and harassment could occur during timber operations and management that will continue during the permit term. Weyerhaeuser will perform

routine harvest, road maintenance and construction activities, including rock pit development, spraying and fertilization that may disturb spotted owls. The permit terms and conditions of incidental take are described in Section 5.

If currently unoccupied spotted owl sites in the Study Area are re-occupied by spotted owl pairs and those pairs initiate nesting, Weyerhaeuser will alter harvest unit configurations and potentially harvest scheduling necessary to maintain sufficient habitat in a 70-acre core, designated based on the “nearest, best most contiguous habitat”, which in all cases will include the nest trees or activity center either on or adjacent to Weyerhaeuser lands only during the nesting and rearing season (March 1 to September 30 of the year). Actual habitat to be maintained will be determined by mutual agreement of the USFWS and Weyerhaeuser. The intent is to allow spotted owls that initiate nesting to complete their nesting and fledge young, so that these young may contribute to the spotted owl population. At any time that biologists determine the pair is no longer nesting, this seasonal restriction will no longer be in effect.

Beyond nesting spotted owl pairs, Weyerhaeuser may continue to conduct their normal forest operations and management activities, including removal of spotted owl habitat within the non-baseline spotted owl sites. The permit authorizes the incidental take, via habitat removal or harassment of spotted owls, of spotted owls that may occupy the 16 non-baseline sites (as defined by the Thiessen polygons) listed in Table 3 and 4 and area outside of the Thiessen polygons shown on Map 3. Take would occur throughout the term of the permit.

The potential effect of the removal of spotted owl habitat under this Safe Harbor Agreement on the experiment depends on the amount of habitat lost relative to the available habitat. The 16 non-baseline sites in the treatment area (Table 3) where take is authorized under this Safe Harbor Agreement include varying amounts of Weyerhaeuser lands. There is a total of 817 acres of nesting-roosting habitat on Weyerhaeuser lands on the 16 non-baseline sites. Weyerhaeuser is a minor owner on 7 of these Thiessen polygons with less than 10 percent of the land ownership and less than 5 percent of the remaining suitable habitat on these sites.

On the remaining 9 sites, Weyerhaeuser owns between 10 and 29 percent of the land within the Thiessen polygon. However, on 6 of 9 sites, Weyerhaeuser owns less than 7 percent of the remaining suitable habitat. Again, Federal lands make up a significant portion of one of these sites, and contain the majority of remaining suitable habitat on all of these 9 sites.

4.5 Monitoring and Reporting

As part of the ongoing spotted owl demography studies and the Experiment, all sites within the Study Area will be surveyed for spotted owls each year. Currently, most of the spotted owl surveys are conducted under the Northwest Forest Plan and the USFWS and USGS will access this data to track conditions on each spotted owl site. If Weyerhaeuser conducts surveys of spotted owls on the study area, USFWS and USGS will have access to these data.

Weyerhaeuser will provide the following information to USFWS annually by the first day of March:

- Data collected on Weyerhaeuser NSO Surveys within the Study Area, if any are conducted.
- The total amount of forest acres harvested within the treatment area of the Study Area.

USFWS, or their contractor USGS, will provide barred owl survey data collected on Weyerhaeuser lands to Weyerhaeuser annually.

5. RESPONSIBILITIES OF THE PARTIES

5.1 Weyerhaeuser Responsibilities

To support the Experiment, Weyerhaeuser will:

- 5.1.1 Provide access (gate keys) and permission for USGS and USFWS biologists to access Weyerhaeuser lands to survey barred owls throughout the Study Area, in accordance with the provisions of the Road Access License (Appendix 1)
- 5.1.2 Provide access to Weyerhaeuser roads and permission for USGS and USFWS biologists to remove barred owls located on Weyerhaeuser lands within the treatment portion of the Study Area, in accordance with the provisions of the Road Access License (Appendix 1) (Map 2).
- 5.1.3 Provide permission for USGS and USFWS biologists to use roads owned or managed by Weyerhaeuser to access sites for the removal of barred owls located on Federal lands, and any other lands for which we have landowner permission to remove barred owls within the treatment area of the Experiment.
- 5.1.4 Maintain habitat in a 70-acre core, designated based on the “nearest, best most contiguous habitat”, which in all cases will include the nest trees or activity center to support nesting spotted owls that may reoccupy non-baseline sites during the nesting and rearing season (March 1 to September 30 of the year). Actual habitat to be maintained will be determined by mutual agreement of the USFWS and Weyerhaeuser. At any time that biologists determine the pair is no longer nesting, this seasonal restriction would no longer be in effect. Determination of nesting failure will employ the protocol in Appendix 2.

5.2 U.S. Fish and Wildlife Service Responsibilities

- 5.2.1 Upon execution of the Safe Harbor Agreement and satisfaction of all other

applicable legal requirements, USFWS will issue an enhancement of survival permit to Weyerhaeuser in accordance with ESA section 10(a)(1)(A), authorizing take of the covered species as a result of lawful activities on the enrolled lands in accordance with the term of such permit. The Permit will run from the date it is issued to August 31, 2025.

- 5.2.2 The USFWS or its contractor, USGS, will provide annual reports on the activities within the Study Area to Weyerhaeuser.

5.3 Shared Responsibilities

- 5.3.1 Weyerhaeuser and USFWS will ensure that their respective activities under the Safe Harbor Agreement are consistent with applicable federal, state, and local laws and regulations.
- 5.3.2 Nothing in this Safe Harbor Agreement will be construed to limit or constrain Weyerhaeuser or USFWS, or any other entity from taking additional actions at its own expense to protect or conserve the covered species.
- 5.3.3 Nothing in this Safe Harbor Agreement will limit the ability of Federal and State conservation authorities to perform their lawful duties, and to conduct investigations as authorized by statute and by court guidance and direction.
- 5.3.4 Weyerhaeuser and USFWS will have all remedies otherwise available to enforce the terms of the Safe Harbor Agreement and the permit, except that neither will be liable in damages for (1) any breach of this Safe Harbor Agreement, (2) any performance or failure to perform and obligation under this Safe Harbor Agreement, (3) termination of the Permit or Safe Harbor Agreement, or (4) any other cause of action arising from this Safe Harbor Agreement.
- 5.3.5 Weyerhaeuser and USFWS agree to work together in good faith to resolve any disputes, using dispute resolution procedures agreed upon by the parties.

6 LANDOWNER ASSURANCES

Through this Safe Harbor Agreement, USFWS provides Weyerhaeuser with assurances that the USFWS may not require additional or different management activities to be undertaken by Weyerhaeuser without the future consent of Weyerhaeuser. If USFWS finds that additional or different conservation measures may be necessary, USFWS may request that Weyerhaeuser agree to such measures, but only if they are limited to modifications within the enrolled lands, if any, for the covered species and these measures maintain the original terms of the Safe Harbor Agreement. Further, any such additional conservation measures are still subject to agreement from Weyerhaeuser.

Further, the USFWS and Weyerhaeuser may agree to revise or modify the management

measures set forth in a Safe Harbor Agreement if the USFWS determines that such revisions or modifications do not change the prior determination that the Safe Harbor Agreement is reasonably expected to provide a net conservation benefit to the listed species, or result in additional incidental take. These assurances allow Weyerhaeuser to alter or modify their enrolled lands, even if such alteration or modification results in the authorized incidental take of the covered species consistent with the Safe Harbor Agreement and permit. These assurances depend on compliance with the obligations in the Safe Harbor Agreement and in the permit.

The assurances provided herein apply only to this Safe Harbor Agreement, only if the Safe Harbor Agreement is being properly implemented by Weyerhaeuser, and only with respect to the covered species.

7 IMPLEMENTATION

7.1 Safe Harbor Agreement Term

The term of the Safe Harbor Agreement and permit is 10 years from the initiation of barred owl removal on the Oregon Coast Ranges Study Area. The removal will start on September 1, 2015 on the Oregon Coast Ranges Study Area. The permit will start on the date of issuance and end on August 31, 2025.

7.2 Safe Harbor Agreement Renewal

The Safe Harbor Agreement can be extended only upon the mutual written agreement of both Weyerhaeuser and USFWS, and in compliance with all laws then applicable. If barred owl removal on the experiment extends beyond 4 years, for a maximum of 10 years as described in the Record of Decision (USFWS 2013b), the USFWS intends to extend the Permit to 5 years after the final removal season. The extended Permit would be based on continuation of the current baseline.

The Experiment may change the occupancy of spotted owl sites within the treatment area. The USFWS expects the return of barred owls within 3 to 5 years which will likely mitigate this change. If a different removal program is initiated in this same area during the initial term of this Safe Harbor Agreement, or if barred owl populations do not recover as anticipated, the USFWS will strongly consider extending this Safe Harbor Agreement using the current baseline under either of these circumstances. The USFWS will also consider extending this Safe Harbor Agreement if removal of barred owls is continued beyond the current Experiment. This may require an amendment of the Safe Harbor Agreement.

The first case for extending the Agreement might occur if, for example, a landowner or manager in the area decides to conduct removal as a mitigation measure for other impacts to spotted owls. This would require the project proponent apply for a separate Migratory Bird Treaty Act permit (as the Experiment would be completed and the associated permit no longer in effect) and they would have to conduct any additional analyses required for the permit. The second case may occur if barred owl populations

do not respond and recover within 3 to 5 years as anticipated in the Final EIS (USFWS 2013b, p. 172-3).

7.3 Safe Harbor Agreement Modifications and Amendments

Either party may propose minor modifications to the Agreement or the Permit by providing written notice to the other party. Weyerhaeuser and USFWS will have thirty (30) days to evaluate proposed modifications. Minor modifications must be approved in writing by both parties.

7.4 Transfer of Safe Harbor Agreement Benefits

Weyerhaeuser agrees to notify USFWS in writing if ownership of all or a portion of the enrolled lands is to be transferred to another owner. If Weyerhaeuser transfers full or partial ownership of the enrolled lands, USFWS will regard the new landowner as having the same rights and obligations as Weyerhaeuser under this Safe Harbor Agreement, providing the new landowner agrees in writing to become a Party to the original Agreement, Permit, and any subsequent amendments.

7.5 Land Acquisitions & Dispositions

Weyerhaeuser may enroll, at its discretion, forest lands it acquires within the boundary of the treatment portion of the Study Area under the Safe Harbor Agreement. Baseline for new lands will be determined by USFWS using the same approach as the original Safe Harbor Agreement, except that the determination of occupancy will be based on an evaluation of available data for the 3 survey seasons previous to the application for enrollment, not the years used in the initial baseline development. Weyerhaeuser must notify USFWS of the proposed enrollment of additional lands and USFWS will have an opportunity to review, establish the baseline, and concur or object to the enrollment, following which Weyerhaeuser may elect not to enroll some or all of the lands in question. The USFWS will make a determination as to whether the enrollment of the lands would provide a net benefit to the spotted owl, would be consistent with the Permit, and not increase the take authorized in the permit. In evaluating the net conservation benefit to the conservation of the spotted owl, the USFWS will consider how the enrollment complement and support the totality of the Experiment. The contribution will be considered in the context of Weyerhaeuser's entire contribution to the Experiment and not strictly on the value of enrolling specific parcels, consistent with the analysis described in Section 4.3 This action will not require an amendment or modification of the Agreement if the amount of incidental take does not increase.

7.6 Safe Harbor Agreement Termination

Weyerhaeuser can relinquish this Safe Harbor Agreement by providing USFWS with 30 days written notice. Weyerhaeuser acknowledges that terminating the Safe Harbor Agreement will result in a corresponding termination of the permit and loss of the regulatory assurances provided by the Safe Harbor Agreement and permit for the covered species.

8 SIGNATURES

Rhonda Hunter, Senior VP Timberlands
Weyerhaeuser Company

Date

Paul Henson, Ph.D.
State Supervisor, US Fish and Wildlife Service

Date

DRAFT

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Appendix 1. Draft Form of Road Access License

ROAD ACCESS LICENSE -Coast Range Experimental Area-

THIS ROAD ACCESS LICENSE (the “License”) is made as of the [___] day of [____], 201[___] (the “**Effective Date**”), between Weyerhaeuser, an Oregon corporation (hereinafter “Licensor”) and **The United States of America**, acting by and through the **Department of the Interior**, through the **U.S. Fish and Wildlife Service**, a federal agency (“USFWS”), and the **U.S. Geological Survey**, a federal agency (“USGS” and together with the USFWS hereinafter the “Licensees” and each a “Licensee”).

For and in consideration of the covenants and mutual promises contained herein, and in that certain [Agreement] dated [_____, 2015] between Licensor and USFWS (as amended, the “Safe Harbor Agreement”), Licensor and the Licensees agree as follows:

1. THE LICENSE.

Licensor grants to each Licensee the right to use all currently-existing roadways (including improved and maintained all weather surfaced and natural surfaced roadways) located on and within the portions of Licensor’s real property generally depicted in the gross areas shown on attached Exhibit A. The specific portions of Licensor’s property which are subject to this License are more particularly defined as the “Study Area” in the Safe Harbor Agreement and depicted on Map 1 included in the Safe Harbor Agreement (such area, for purposes of this License, the “License Area”). This License is granted for the limited purpose of providing Licensees with vehicular ingress and egress on and over the existing roads, limited foot travel access on existing unimproved roads and lands (solely for the purpose of survey and removal of barred owls) for safe and efficient operational purposes within the License Area to facilitate Licensee’s biological survey and removal needs as stated under the Safe Harbor Agreement only, and for no other purpose whatsoever. The Licensees bear all responsibilities to ensure that any permissions required from third parties have been obtained prior to Licensees’ use of Licensor roads in situations where the Licensor’s lands and roads within the License Area are accessed through third party easements or permits. Licensees acknowledge that the rights granted under this License are temporary and non-possessory and are not in any way intended by Licensor to create in Licensees any easement, leasehold or other estate in the real property of Licensor or otherwise be coupled with any interest whatsoever. Licensor reserves for itself, its successors and assigns the unrestricted right to use the roads and Licensor’s other property for any and all purposes whatsoever. Licensees may permit their employees, agents and contractors to exercise the rights granted to them under this License during the term hereof provided such use is directly related to the limited purposes for which this License is granted and such use is in compliance with the terms of this License.

2. TERM.

The term of this License shall commence as of the Effective Date first written

above and shall expire [_____, 20[___]].

3. FIRE PREVENTION AND SUPPRESSION.

Licensees will exercise the highest degree of care to prevent fires on the License Area and the adjacent Licensor lands, and will comply with all applicable laws, lawful rules and regulations pertaining to fire protection and suppression and any Licensor regulations pertaining to fire protection and suppression that are now or hereafter in effect during the term of this License. Each Licensee further agrees as follows:

- A. Smoking- No smoking is allowed on Licensor lands outside an enclosed vehicle during fire season. No exceptions.
- B. Reporting and Control of Fires- Licensee will exert every reasonable effort to control, extinguish and prevent the spread of fire on, to, or from Licensor lands. Licensee will immediately report any fire which may arise upon or threaten Licensor lands or adjoining lands to Licensor and the applicable state fire official.

4. MAINTENANCE.

Licensees shall be solely responsible for damages caused to the property of Licensor caused by use of the roadways or exercise of their rights under this License. Licensees shall instruct all employees, agents, contractors or other persons operating under Licensees' authority of this License that no littering or dumping on Licensor's property is permitted, and if caught littering the person will no longer be permitted entry to Licensor's property.

5. ROADWAYS & GATES.

Licensor makes no express or implied warranties or representations as to the condition of any roadways or the suitability of such roadways for Licensee's intended use. Licensees shall inspect the roadways and assure themselves of the suitability thereof at the commencement of the term hereof and as reasonably required during the term hereof. Each Licensee, on behalf of itself, its employees, contractors, and agents, assumes the risk of any and all latent or patent dangers or hazards on or about Licensor's property. Some roadways may be gated. Licensees will be issued keys to gate locks, however Licensor makes no express guarantee that keys and locks will be fully functional at all times. During the term of this License, all Licensor gates will be locked controlling public access during fire season. Licensees will ensure all gates are locked after their use of Licensor's roadways. In situations where Licensees find gates in an altered or disrepair condition, Licensees will notify Licensor immediately.

6. ADJACENT LANDS.

Licensees shall not travel by vehicle off the improved roadways in areas which have been planted with tree seedlings or on roads with dead grass or brush in the running surface and/or obviously not maintained for current use. Repeated failure, in Licensor's opinion, by Licensees to enforce this provision with Licensees' respective employees, contractors and agents shall give Licensor the right to terminate this License upon ten (10) days notice notwithstanding any right to cure granted to Licensee in paragraph 9 below.

7. INSURANCE

At all times while this License is in effect, Licensees shall cause any private contractors or agents exercising any rights of Licensees hereunder to carry insurance coverage of the types, with the minimum limits and otherwise meeting the insurance requirements set forth on attached Exhibit B, which policies shall name Licensor as an additional insured and expressly provide or be endorsed to provide Licensor with the same scope and coverage of insurance and the same limits of liability as are afforded to the named insured under such policies. Licensor shall be provided a certificate of insurance stating that 10 days written notice shall be given to Licensor prior to any cancellation or material change of coverage.

8. INDEMNITY

Each Licensee, in a manner and to the fullest extent provided by applicable law, including but not limited to the Federal Tort Claims Act, as amended (28 U.S.C. §§ 1346, 2671-2680), shall be liable for, and shall indemnify and hold Licensor harmless from claims for damage or loss of property, personal injury or death caused by the negligent or wrongful acts of omissions of any employee of the Federal government while acting within the scope of his or her office or employment in the performance of the rights granted under this License; *provided*, that in the event that the Federal government has to pay for any loss, such payment shall not entail expenditures which exceed appropriations available at the time of the loss; provided further, that nothing herein shall be interpreted as implying that the United States Congress will, at any later date, appropriate funds sufficient to meet any deficiencies. Licensees shall not be liable to indemnify Licensor for damages incurred by the Licensor to the extent such damages are finally determined to have been caused by the negligence of the Licensor.

9. NON-COMPLIANCE

Should either Licensee (or any person exercising any right of either Licensee under this License) fail to comply with any of the terms and conditions contained herein, Licensor may give Licensees written notice of such non-compliance. If, after ten (10) days from the date of such notice, the applicable Licensee has not corrected or caused the applicable person to correct the default or condition identified in such notice, Licensor may terminate this License by giving oral or written notice to Licensees, and such termination shall be effective upon the giving of such notice. However, such termination shall not relieve the Licensees of any liability, consistent with paragraph 8, for such breach or default occurring prior to the effective time of such termination or impair or prevent the Licensor from exercising any right or remedy available to Licensor for such default or breach.

10. SUSPENSION OF LICENSE

Licensor may suspend Licensees' use of all or any part of the roadways in the License Area at any time during the term hereof upon oral or written notice to Licensee to enable Licensor to remove forest products from its land, to construct or maintain roads on its lands, to protect its lands from rutting or potential fire hazard or otherwise if, in Licensor's sole opinion, it is necessary to suspend use of the roadway. In such event, Licensor shall endeavor to give Licensee as much advance notice as possible.

11. COMPLIANCE WITH LAWS.

Each Licensee shall at all times during the term hereof comply, and cause its respective employees, agents, invitees, and contractors to comply, in all respects, with all applicable federal, state and local laws, rules and regulations, which in any way relate to this License or the activities of such persons acting under this License. This License shall be construed in accordance with applicable Federal law and the laws of the State of Oregon as appropriate.

12. ATTORNEY'S FEES.

In the event that any suit, action or other proceeding is instituted by either of the parties hereto to enforce or interpret any of the terms or provisions of this License, attorney fees will be governed by applicable federal law.

13. MERGER; WAIVER.

Failure by either party to allege a default or breach or seek remedies for a default or breach of this License shall not be deemed a waiver by said party to subsequently claim a default or breach hereof. This License and the provisions of the Safe Harbor Agreement relating to road access (including the provisions of Section 4.1.2 of the Safe Harbor Agreement, which are incorporated by reference herein) constitute the entire understanding of the parties hereto with respect to the use of Licensor's roads, and all previous negotiations, representations, and understandings with respect to such subject matter are merged herein.

14. CONTACT INFORMATION AND VEHICLE DESCRIPTIONS.

Prior to Licensees' commencement of operations in the License Area and appropriately thereafter when material changes occur during the License term, Licensee agrees to provide Licensor with a complete list of all employees, contractors and agents of the Licensees exercising any rights of Licensees under this License together with contact information, vehicle descriptions and license plate numbers to aid in Licensor communication with local enforcement and interpretation of camera surveillance data.

15. GENERAL.

This License may be executed in one or more counterparts, each of which will be deemed an original, and all of which will together constitute the same License. The terms, conditions and provisions of this License may be modified, changed, terminated, waived, amended or supplemented only in a writing signed by each party hereto.

[Signature Page(s) Follow]

IN WITNESS WHEREOF, the parties hereto have executed this Road Access License as of the Effective Date first written above.

LICENSOR:

LICENSEES:

Weyerhaeuser Company.

UNITED STATES OF AMERICA, acting by and through the **Department of the Interior**, through the following agencies:

By: _____

U.S. Fish and Wildlife Service

Printed: _____

By: _____

Title: _____

Printed: _____

Title: _____

U.S. Geological Survey

By: _____

Printed: _____

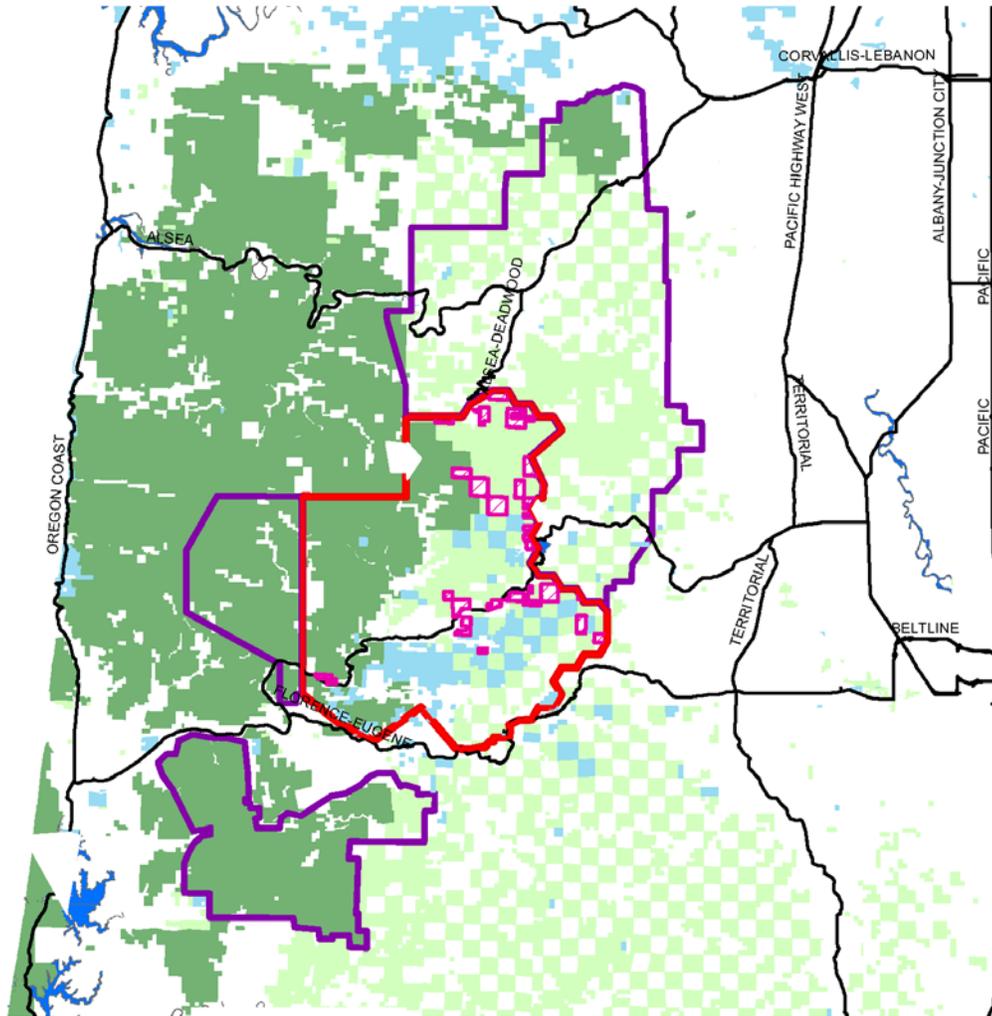
Title: _____

DRAFT

EXHIBIT A

Map of Oregon Coast Ranges Study Area

Land Ownership - Oregon Coast Ranges Study Area



Legend

- Study Area Boundaries - September 2015
- Treatment
 - Control
 - Highways
 - Weyerhaeuser Ownership
 - US FOREST SERVICE
 - BLM
 - STATE
 - PRIVATE
 - WATER

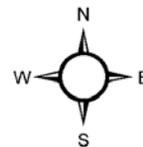


EXHIBIT B

Insurance Required for Private Contractors and Agents of Licensees

- (i) Commercial general liability against liability imposed by law or assumed under contract, for injury to or death of any person or persons or for loss of or damage to property, with occurrence limits at least \$1,000,000 per occurrence.
- (ii) Business automobile liability insurance with a combined bodily injury and property damage liability limit of \$1,000,000 each accident.
- (iii) Statutory Workers Compensation insurance covering all employees as required by law.

Appendix 2. Draft Determination of Spotted Owl Site Nesting Failure

Protocol for determining if spotted owl nesting has failed where nesting status has been established using existing protocols. This would apply to spotted owl sites where monitoring surveys concluded that the pair was nesting. USFWS and Weyerhaeuser would mutually examine the data and determine whether the nesting attempt has failed for the year based on that data and the following approach.

Failure of nesting attempt:

To avoid undue disturbance to the spotted owls, conduct no more than 4 visits to determine continued nesting status.

Early Season – before June 1 (fledging). This is the period when the adults should still be tending the nest and the young should be near, if not in, the nest.

Failure of nesting determination is appropriate if, on 2 visits, separated by at least 1 week, between the initial determination of nesting and June 1 one of the following is found:

1. The female is observed roosting and away from the nest for at least 60 minutes on two occasions (Be aware that nesting females with large nestlings often roost outside the nest during warm weather.); **OR**
2. Prey is offered to 1 or both members of the pair and they cache the prey, sit with prey for an extended period of time (60 minutes), or refuse to take additional prey beyond the minimum of 2 prey items. To be considered a valid nesting survey, an owl must take at least 2 prey items. Surveys where the bird(s) leaves the area with prey and it is not possible to determine the fate of the prey do not count toward the required 2 visits because nesting status could not be classified.

Mid-Season – Approximately June 1 to August 1. During this period, the young begin to move around and the adults range farther and farther to provision them. As the young get older, one parent (or even both) may end up roosting far from the nest site. Young are usually reasonably close the nest at this time, moving more as they become better flyers.

Failure of nesting determination is appropriate if, on 2 visits, separated by at least 1 week, between the June 1 and August 1, the following is found:

Prey is offered to 1 or both members of the pair in the vicinity of the nest area and they cache the prey, sit with prey for an extended period of time (60 minutes), or refuse to take additional prey beyond the minimum of 2 prey items. To be considered a valid nesting survey, an owl must take at least 2 prey items.

Because at this time of year, young are likely still somewhere near the nest area, adults found far from the core area may not be inclined to take small prey to the young, especially during the day when temperatures are high. Therefore, failure of adults to transport mice to the nest area, if they are a significant distance from that nest area is not evidence that the nesting attempt has failed.

During the **Late Season** (August 1 to September 30) adult spotted owls may not be roosting with the young, or take prey to young. There is no way to reliably determine whether the spotted owls are still feeding young. Therefore, nesting status cannot be reliably determined at this time. However, coupled with one of the above results, and after examination of the survey details, a determination may still be made by mutual agreement of USFWS and Weyerhaeuser.