

**SAFE HARBOR AGREEMENT
WITH THE VAN ECK FOREST FOUNDATION
FOR VOLUNTARY ENHANCEMENT/RESTORATION ACTIVITIES
BENEFITTING NORTHERN SPOTTED OWL
IN FIELDBROOK AND WESTHAVEN, CALIFORNIA**

1. INTRODUCTION

This Safe Harbor Agreement (Agreement) is made and entered into as on the day of August 18, 2008, by and among The Fred M. van Eck Forest Foundation (Permittee) and the U.S. Department of the Interior, Fish and Wildlife Service (Service), hereinafter collectively called the "Parties." The purpose of this Agreement is to facilitate the development of high quality Northern spotted owl (*Strix occidentalis caurina*) (NSO) habitat and provide regulatory assurance that in doing so the landowner will not be subject to additional regulations related to the NSO. This Agreement follows the Service's Safe Harbor Agreement final policy (FR 64:32717) and final regulations (FR 64:32706), and implements the intent of the Parties to follow the procedural and substantive requirements of section 10(a)(1)(A) of the Endangered Species Act (ESA). This Agreement covers proposed management activities affecting the 2,163 acres of land owned by the Permittee (Enrolled Lands) and covers only the NSO.

The Permittee will enhance and maintain approximately 2,163 acres of forested NSO habitat by managing the Enrolled Lands in accordance with the terms of this Agreement. This Agreement also incorporates the terms of the perpetual working forest conservation easement (WFCE) granted to Pacific Forest Trust (PFT) in 2001. (The Grant Deed for the WFCE is attached as Appendix A.) Under the terms of the WFCE, late seral habitat will be developed and perpetually maintained over time while selective harvesting management continues.

The WFCE includes performance goals and restrictions that create a multi-storied uneven aged condition with a large tree component that is recognized by the Service as high quality NSO habitat. In particular, the WFCE directs silviculture activities "to restore and maintain through time

the late seral to mature, complex native coastal redwood ecosystem.” (WFCE, Ex. C, at § Q.1 (Appendix A)). The WFCE also recognizes that the “forest exhibits a high degree of spatial and temporal scale heterogeneity in habitat structure and species composition, with variation exhibited through time, from stand to stand and from acre to acre.”

This Agreement encourages proactive conservation efforts by the Permittee while providing it certainty that future property-use restrictions will not be imposed if those efforts attract NSO to the Enrolled Lands. In return for voluntary conservation commitments, the Permittee is afforded assurances through the 10(a)1(A) Permit allowing future alteration or modification of the Enrolled Lands during the 90-year term of the Agreement. This cooperative government/private effort provides an incentive for the Permittee to increase the quantity of high quality habitat available on the Enrolled Lands for utilization by NSO in the foreseeable future.

When signed, this Agreement will serve as the basis for the Service to issue a Permit under ESA section 10(a)(1)(A) for the take of covered, listed species associated with operations conducted during the Agreement. The protection measures contained in the Agreement minimize the likelihood that take will occur. Permit issuance will not preclude the need for the Permittee to abide by all other applicable Federal, State, and local laws and regulations that may apply.

2. LIST OF COVERED SPECIES

Northern spotted owl (*Strix occidentalis caurina*), federally listed as threatened on July 23, 1990.

3. DEFINITIONS

Activity Center. A point on a map representing an NSO location, around which management is constrained at various spatial and temporal scales. The daytime location where the most biologically meaningful behavior has been observed shall be considered the current activity center. In order of priority, use the following types of locations: nest site; locations of young birds with no known nest; pair roost sites; single female roost sites; and single male roost sites. Currency also needs to be considered (e.g., an active nest location from the previous year would take precedence over a single male roost for the current year). When multiple roost sites exist, sites most consistently used are given priority; indicators such as regurgitated

pellets and whitewash should be considered when evaluating use of roost sites.

Breeding Season. February 1st to August 31st of each year.

Harvest Operations. Includes all operations associated with timber harvest, including felling and bucking of trees, yarding logs, hauling logs, and construction and maintenance of roads, stream crossings, or skid trails, and mining of material for road construction or maintenance. Does not include tree marking, surveying or placement of any flagging.

Nesting and Roosting Habitat. Nesting and roosting habitat (also referred to as “nest/roost habitat”) on the Enrolled Lands means stands with a dominant diameter at breast height of at least 16” and a total canopy closure of at least 60%.

Survey Protocol. All spotted owl surveys shall be consistent with the existing protocol entitled “Protocol For Surveying Proposed Management Activities That May Impact Northern Spotted Owls” dated 7 March 1991, revised 17 March 1992.

4. BACKGROUND

Species Recovery

NSO was federally listed as a threatened species throughout its range in Washington, Oregon and Northern California effective July 23, 1990 (USDI 1990a). NSO was listed in response to widespread habitat loss across its entire range and to the inadequacy of existing regulatory mechanisms to provide for its conservation. NSO biology and ecology are well known and are described in numerous publications and, therefore, this information is not repeated here. For examples, see Forsman *et al.* (1984), the Interagency Scientific Committee (ISC) report (Thomas *et al.* 1990), the 1990 status review (USDI 1990b), the final rules for listing and critical habitat (USDI 1990a and 1992a), the final draft spotted owl recovery plan (USDI 1992b), the report of the Scientific Analysis Team (SAT; Thomas *et al.* 1993), the Forest Ecosystem Management Assessment Team report (FEMAT; USDA 1993) and recent demographic reports (Forsman *et al.* 1996 and Franklin *et al.* 1999).

The Enrolled Lands are located in the northern portion of the Coast Province of northern California as described in the Final Draft Recovery Plan

for the Northern Spotted Owl (USDI 1992b). The California Coast Province contains all or portions of Del Norte, Humboldt, Mendocino, Trinity, Sonoma, Napa and Marin Counties, and encompasses approximately 40% of the NSO range in California (USDI 1992a).

Importance of Private Lands

Since the listing of NSO, all large-scale conservation efforts have recognized that contributions from non-federal lands were important to the goal of achieving its conservation and recovery (Thomas *et al.* 1990 and 1993, USDI 1992a). Non-federal lands provide core areas and habitat throughout the species range, but are particularly important in areas where public lands are lacking. Private lands can play several roles in owl conservation, such as: helping reduce the risk of local or widespread extirpation of NSO populations by maintaining owl pairs and the variety of habitat conditions throughout their range; providing for the survival and movement of local populations by protecting core areas and maintaining habitat conditions and spacing between local populations.

Approximately 92% of the California Coast Province is in non-Federal ownership (USDI Fish and Wildlife Service 1992a). Gould (1995) reported that 978 NSO activity centers were known in the three California coastal counties of Del Norte, Humboldt and Mendocino. Sixty-seven percent (67%) of these sites were on privately owned timberlands that had been subject to timber management for decades.

5. DESCRIPTION OF ENROLLED LANDS

The Enrolled Lands for this Agreement are owned by the Permittee. The parcels total 2,163 acres and are located in portions of Sections 1, 2, 21, 27, 28, 31, 32, 33, 35, 36 of Townships 6, 7 and 8 North, Range 1 East, Humboldt Meridian, including Humboldt County Assessors Parcel numbers: 504-071-08; 504-071-13; 511-161-02; 511-171-02; 511-171-16; 512-051-18; 512-051-19; 512-171-09; 512-181-11; 512-181-17; 512-181-38; 512-181-39; 512-191-04; 512-241-10; 512-242-05; 513-111-35; 513-111-36; 513-111-42; 513-181-01; 513-181-02; 516-011-06; 516-011-10; 516-011-14; 516-011-15; 516-011-19; and 516-011-20.

Management Unit Characteristics

The Enrolled Lands include four management units. Three of those units are located in the Lindsay Creek watershed within about one mile of the town of Fieldbrook. Those units are Lindsay Creek, Squaw Creek and Fieldbrook, which are all part of the Mad River watershed. The fourth unit, Moonstone, is located in the Luffenholtz Creek watershed, about one-half mile east of the community of Westhaven. (See Appendix B, Map 1.)

The Enrolled Lands are dominated by gentle and moderate slopes. Approximately 75% of the forest is less than 35% slope. Most of the van Eck Forest soils are identified as having moderate erosion hazard ratings. Under the van Eck Non-industrial Timber Management Plan (NTMP #1-96 NTMP-012 HUM) (attached as Appendix C) areas of Hely soils are waterbarred in accordance with the extreme Erosion Hazard Rating (EHR) specifications to eliminate adverse erosion.

Harvest History

The Enrolled Lands have been harvested several times, including between 1900 and 1920. Attempts to convert the land to grazing followed the early logging. When grazing proved unsuccessful, forests on the property regenerated between 1930 and 1950. Harvesting resumed in the 1950's. Monterey pine was also planted during that time period, primarily in the Squaw Creek and Moonstone units. Between 1970 and 1972 the property was harvested using "diameter limited silviculture," which limited harvest to trees 16" diameter breast height (dbh) and greater. In 1977 and again between 1989 and 1996, the Lindsay Creek unit was logged using the "1/3 stand improvement cut" method, which allows for up to 1/3 of the timber volume to be thinned from a stand every 7 to 10 years providing that poorly growing, poorly formed and exotic trees are primarily selected for cutting. Also in 1996, ten acres of forest north of Murray Road were clearcut in the Lindsay Creek unit yielding approximately 350 thousand board feet of timber.

In 1996, the van Eck NTMP was approved. (See Appendix C.) This plan is based on the 1/3 stand improvement cut method discussed above. Sustained yield harvests are planned for all the management units to be conducted in a "round robin" fashion.

In 2001, the Fred M. van Eck Forest Trust granted a WFCE to PFT, which further restricts management activities on the property. (See

Appendix A.) The Forest Management Performance Goal, as described in the WFCE, guides silvicultural operations and is generally:

to restore and maintain through time the late seral to mature, complex native coastal redwood ecosystem. This forest exhibits a high degree of spatial and temporal scale heterogeneity in habitat structure and species composition, with variation exhibited through time, from stand to stand and from acre to acre.

(Appendix A, WFCE, Ex. C, at p. C3.)

Specific provisions of the WFCE necessary to this Agreement are listed in Section 7, Responsibilities of the Parties, Permittee Responsibility 2.

Since 2001, Enrolled Lands have been managed according to the WFCE, which is much more restrictive in terms of the rate of harvest and other parameters, than the NTMP. As described in the Landscape Planning on the van Eck Forest document (Appendix B) for the Enrolled Lands, harvesting activities cycle through the management units on a periodic basis. The 20-40 acre stands within each management unit are generally harvested every 15 years.

The silviculture activities described in the WFCE will lead toward 90% of the stands (20-40 acre units) in the forest being identified as permanent nesting/roosting habitat for NSO. The average diameter of the trees in each management unit will continue to increase over the term of the agreement, excepting unforeseen circumstances such as wildfire, windfall, and pests. The continual increase in diameter will lead to fewer, but bigger, trees per acre in these stands. The average height of the trees will continue to increase over the term of the Agreement.

Snags and downed logs are important structural components for other organisms that depend on them for food or shelter. These structural elements will increase over time as management activities under the WFCE are implemented.

6. BASELINE INFORMATION

Suitable NSO habitat is generally described as: forest stands with multiple canopy layers and a variety of tree species; moderate to high canopy closure (i.e. at least 40%); substantial decadence in the form of live trees with deformities (e.g., cavities, broken tops) and snags; and a large accumulation of logs and woody debris (Thomas *et al.* 1990). Habitat suitability generally increases with increased tree diameter and canopy closure. Moderate and high quality foraging habitats within the redwood forest type are generally found in stands with trees greater than 11" dbh.

Nesting and roosting habitat is found in stands with larger tree sizes and high canopy closure. These stands are typically conifer-dominated or mixed conifers and hardwoods.

Habitat value for the Enrolled Lands was determined from a sampling process within each stand that enables the determination of species dominance, size and canopy closure. The sampling methodology and habitat determination is described in Appendix B.

The Enrolled Lands are currently approximately 80% nest/roost habitat for NSO (See Appendix B, Map 3). Most of the van Eck Forest consists of trees that are greater than 16" dbh and have dense canopy cover. Silviculture activities will retain the habitat status, with the exception of forest openings to 0.5 acres (group selections). These small openings are below typical minimum mapping size for habitat designation. They will, however, provide elements of habitat diversity, including patches of foraging habitat in the forest.

Field surveys for NSO have been conducted as part of ongoing management activities. Permanent survey stations have been established and monitored since 1997 (see Appendix D). Field surveys incorporate the protocol endorsed by the United States Fish and Wildlife Service on March 7, 1991 and revised on March 17, 1992. This protocol can be found on the California Department of Fish and Game (DFG) website.

The surveys have resulted in the detection of NSOs between 1997 and the present in the Lindsay Creek and Squaw Creek area. Survey stations and a summary of survey results for the Enrolled Lands are included in Appendix D. NSO presence has been irregular and actual nesting has not been documented on the Enrolled Lands. In 2006 a roosting female was located on an adjacent landowner, and in 2007 a roosting pair was located within the Lindsay Creek management unit (Appendix D, Map 2). Current

breeding status at this activity center was not determined in 2007 due to insufficient survey data. The Permittee agrees to maintain a minimum baseline of 6.5 acres of nest/roost habitat protected by a no-harvest strategy on Enrolled Lands around this or another activity center for the duration of the Permit period. See Section 7, Responsibilities of the Parties, Permittee Responsibilities for conservation measures associated with this baseline activity center, and any additional activity centers that occur in the future on Enrolled Lands.

7. RESPONSIBILITIES OF THE PARTIES

In addition to the following stipulations, the Parties will work cooperatively on other issues as necessary to further the purposes of the Agreement. Moreover, nothing in this Agreement shall limit the ability of Federal and State conservation authorities to perform their lawful duties, and conduct investigations as authorized by statute and by court guidance and direction.

Permittee shall:

- (1) Manage the Enrolled Lands in compliance with: (a) this Agreement; (b) the WFCE (Appendix A); and (c) the van Eck NTMP (1-96-NTMP-012 HUM) (Appendix C) or a subsequently approved long-term timber management plan with at least as stringent management requirements with respect to habitat creation for species covered by this Agreement for the 90-year term of the Agreement.
- (2) With respect to management of Enrolled Lands in compliance with the WFCE, continued compliance with the provisions listed below are of particular importance in accomplishing the goals of this Agreement.¹

¹ / The language below summarizes and paraphrases the WFCE provisions. In the event of a discrepancy between the language below and the WFCE itself, the WFCE (attached as Appendix A) shall govern.

a. Management Performance Goals:

- A mix of dominant tree species including redwood, Douglas-fir, grand fir, western hemlock, and Sitka spruce, and to a lesser extent, western redcedar, with associated species including tanoak, red alder, big leaf maple and vine maple;
- Stocking target of 100,000 board feet per acre;
- Multi-story canopy of variable densities with generally no less than 80% closure;
- A range of age classes from 1 to 600 years, with 20% over 200 years and 50% in 80-200, and 25% in 1-80 year classes;
- An average of 15 dominant conifers 36" dbh or greater per acre, with at least 6 conifers exceeding 48" dbh; and
- Sufficient volumes of standing dead trees, down logs and large woody debris as is commonly found in late seral forests (typically at least 4 standing snags per acre of at least 30" dbh with 1,600 cubic feet of down and rotten logs per acre).

(WFCE, Ex. C, § Q(1)(a)-(e) (Appendix A).

b. Restrictions on Harvest:

- A 200-foot slope distance Waterbody, Watercourse and Riparian Forest Management Zone (WRMZ) along each side of all year-round fish bearing streams, measured from the annual high water mark. A 100-foot slope distance WRMZ buffer zone along each side of intermittent streams with flows that support aquatic life, measured from the annual high water mark. Trees may be cut within these zones pursuant to a riparian habitat restoration and maintenance plan;
- Openings of less than 0.5 acre, except for restoration actions where non-native species or species composition occur. Openings shall not exceed 2.5 acres or comprise more than 10% of the forest area of the property in a 10-year period;
- Timber harvests may not exceed 15% per decade of net merchantable forest inventory or 50% of growth, whichever is greater. After stocking target achieves an average of

70,000 board feet per acre, harvest may not remove more than 15% of inventory per decade;

- Timber harvest prohibited in areas of severe erosion potential; and
- No harvesting within identified sensitive habitat areas.

(WFCE, Ex. C, § Q(6)(a) - (f) (Appendix A).

c. Road Construction and Maintenance:

- Construction of new roads or expansion of existing roads is restricted to roads as may be directly required for uses and activities permitted in the WFCE. Roads shall be constructed and maintained so as to minimize erosion and sedimentation and ensure proper drainage, utilizing Best Management Practices as recommended by the U.S. Natural Resources Conservation Service. Roads that are abandoned, permanently closed and/or decommissioned shall be revegetated with native species, stabilized and ensured of proper drainage. In no event shall the total extent of roads, landings and parking areas exceed 5% of the property's area.

(WFCE, Ex. C, § H (Appendix A).

(3) Retain all snags not constituting a hazard under the California Forest Practice Rules (Cal. Pub. Resources Code, §§ 4511 *et seq.*; 14 Cal. Code Regs., §§ 895 *et seq.*) and down cull logs wherever feasible during harvest operations.

(4) Conduct protocol surveys for NSO to locate activity centers and establish reproductive status as necessary within the Enrolled Lands, and within a 500-foot radius around the Enrolled Lands (this area will establish the "area of interest") as follows:

- a. Permanent call points will be established at the density of one call point per 100 acres within the area of interest. All call points will be established at locations agreed upon by the Permittee, the Service and the DFG. (See Appendix D.)

- b. Surveying will occur on the Lindsay Creek, Squaw Creek and Fieldbrook management units annually unless otherwise agreed by the Service. With respect to the Moonstone unit, the Permittee shall initiate surveys at least one year prior to commencing harvesting activities, unless otherwise agreed by the Service.
- c. The surveys will commence March 1st and be completed no sooner than April 1st of each year.
- d. The number of surveying events per calling station and the follow-up response upon a positive detection will follow standard protocols.
- e. If Service surveying protocols change from that described in (a)-(d) above, Permittee shall modify its surveys accordingly, provided the required level of effort is similar to the protocol described above.
- f. Permittee shall submit survey reports to the Service each year they are conducted.

(5) Conduct the following protection measures for NSO, which will provide the basis for the NSO management strategy. Any departure from these measures will require the review and approval of the Service through technical assistance prior to their implementation.

- a. Permittee shall be responsible for implementing protective measures as described in Permittee Responsibilities 5(b) through 5(g) below for no more than five activity centers on the Enrolled Lands. In the event that more than five activity centers are present on Enrolled Lands and the Permittee wishes to manage one or more of the additional activity centers in a manner that could result in incidental take, the Permittee shall consult with the Service to determine which activity centers should be considered part of the designated five centers, and which centers in excess of the designated five may be subject to take. Reproductive history and status will be used to prioritize which activity centers will be part of the designated five; those activity centers with higher levels of reproduction will be given priority for retention as part of the designated five.

- b. A 300' no harvest buffer shall be maintained on no more than two activity centers on or within 300 feet of Enrolled Lands. In the case of more than two activity centers being identified on the Enrolled Lands, the Permittee shall consult with the Service on selection of which two activity centers will be afforded the 300' no harvest buffer protection. Reproductive history and status will be used to prioritize which activity centers will be afforded 300' no harvest buffers; activity centers with higher levels of reproduction will be given priority for 300' buffers. In the case that only two activity centers are present, both shall receive the 300' no harvest buffer designation. If there are no activity centers on or within 300 feet of Enrolled Lands, there is no requirement to manage any portion of Enrolled Lands with a 300' no harvest buffer.
- c. A 100' no harvest buffer shall be maintained on no more than three activity centers on or within 300 feet of Enrolled Lands, in addition to those described in Permittee Responsibility 5(b) above. Within 100' to 300' of these activity centers, harvest will be limited to single tree selection that retains a stand with an average diameter of at least 16" and does not reduce the canopy cover below 80% with no harvest operations occurring during the breeding season except for management and use of existing haul roads as outlined in Permittee Responsibility 5(e) below.
- d. The duration of the protection requirements outlined in Permittee Responsibilities 5(b) and 5(c) above shall be the calendar year in which the activity center is identified and three years hence. In the case of activity centers designated on the basis of NSO nesting activity by a pair, if surveying indicates that an NSO pair has relocated to a new nest site, Permittee may in consultation with the Service, remove the protection requirements outlined in Permittee Responsibilities 5(b) and 5(c) above from the vacated activity center and relocate the protection requirements to the new nest site.
- e. Except for management and use of existing haul roads for hauling logs, no harvest operations will occur within 1,000 feet of any activity center during the breeding season. Operations can occur during the breeding season within 1,000' of an occupied

activity center if the results of protocol surveys indicate that nesting has not occurred or has failed, or that young can avoid direct impacts of timber harvest (e.g., young are capable of sustained flight or can take prey independently).

- f. If surveys conducted pursuant to Permittee Responsibility (4) above) indicate that a pair of NSO are not nesting, and the Permittee wishes to commence harvest operations during the breeding season within 1,000 feet of the activity center, the Permittee shall provide supporting survey information to the Service prior to commencing harvest activities.
- g. There shall be no felling of any known NSO nest trees for the duration of the Agreement and Permit periods.

(6) Cooperate with the Service on the control of barred owls (*Strix varia*) on the Enrolled Lands to the extent those control activities are consistent with this Agreement and do not create a significant financial or operational burden on the Permittee.

(7) Timber inventory reports will be submitted to California Department of Forestry and Fire Protection (CDF), the Service, and DFG every five years. The reporting resolution will be the management units (See Appendix B, Map 1). The reports will include volume estimates by species and diameter class and habitat estimates for each stand. The inventory sampling for timber and habitat must depend on plots that are no older than 10 years. The methodology for determining habitat from inventory sampling is described in Appendix B.

(8) Upon reasonable notice, allow access by the Service, or other agreed-upon party to the Enrolled Lands for purposes of carrying out monitoring and management activities. In the event of an emergency, the Service may enter the premises to care for and protect listed species at any time.

(9) In the event that any activity centers are managed pursuant to Permittee Responsibility 5(c), the Permittee will conduct annual protocol-level monitoring to locate activity centers, determine reproductive status, and to determine reproductive success of those activity centers for a minimum of three years post-harvest. This information shall be reported annually to the Service. After two activity centers have been managed and monitored according to Permittee Responsibility 5(c), the Permittee shall consult with

the Service on the need for any adaptive management relative to the management technique described in Permittee Responsibility 5(c). The Permittee and the Service shall consider the monitoring results and mutually agree on: (a) continuing to use Permittee Responsibility 5(c); (b) managing all activity centers pursuant to the techniques described in Permittee Responsibility 5(b); (c) applying the techniques in 5(c) for a specified number of additional activity centers in order to gather more information on the efficacy of Permittee Responsibility 5(c); or (d) implementing another adaptive management response that is supported by the monitoring results.

Service shall:

- (1) Upon execution of the Agreement and satisfaction of all other applicable legal requirements, the Service will issue a Permit to the Permittee in accordance with ESA section 10(a)(1)(A), authorizing take of the covered species as a result of lawful activities in compliance with this Agreement within the Enrolled Lands. The term of the Permit will be 90 years.
- (2) Provide written technical assistance within 30 days of notification of operations under the van Eck NTMP and this Agreement if operations other than the use of existing haul roads are proposed within 1,000 feet of any active NSO nest site. If the Service does not respond within 30 days, the Permittee may consider his/her proposal approved and may commence operations.
- (3) Monitor compliance with the terms of this Agreement and provide technical assistance to the Permittee when requested.
- (4) Provide information on federal funding programs.

8. NOTIFICATION REQUIREMENTS

- (1) The Permittee shall provide the Service a copy of all Notice of Timber Operations under the van Eck NTMP (or successor document) prior to any planned harvest operations as defined by the California Forest Practice Rules to allow the Service to monitor compliance with this Agreement. A cover letter will certify that the proposed harvest complies with this Agreement and the underlying WFCE.

(2) In the event of an emergency, as described in Section 11 of this Agreement, Permittee will notify the Service within 10 days of discovering such a situation, and will make reasonable accommodations to the Service for: (a) review of timber harvest actions in response to emergency situations, and (b) survey and/or relocation of species individuals prior to the action. The Parties acknowledge that survey and translocation may be precluded by certain urgent situations.

(3) Permittee shall provide the Service with notice and a copy of any subsequently approved van Eck NTMP within 30 days of approval by CDF.

9. MANAGEMENT ACTIVITIES FOR COVERED SPECIES

The Permittee may continue current land-use practices, undertake new ones, or make any other lawful use of the Enrolled Lands. The objective of the Permittee is to manage the Enrolled Lands for wildlife habitat, aesthetics and long-term timber production. The Permittee intends to enter the Enrolled Lands under the guides and constraints contained in: (1) this Agreement; (2) the WFCE (Appendix A); the approved van Eck NTMP (Appendix C) for the purpose of harvesting timber; and (3) all other applicable regulatory requirements.

All harvesting on the van Eck Forest will be conducted using single-tree selection or group selection. The method of harvesting will favor retention of native species and trees that grow vigorously. Exceptions will be made to trees that have been identified for snag or wildlife tree retention. Canopy cover will remain above 80% (averaged across the stand) upon completion of harvesting activities.

In addition, the Management Performance Goals, restrictions on timber harvest, and road restrictions of the van Eck WFCE (listed under Permittee Responsibility (2) above); the monitoring (listed under Permittee Responsibility (4) above); and the protection strategies (listed under Permittee Responsibility (5) above) constitute important management activities for NSO.

10. RETURN TO BASELINE

Unlike a typical Safe Harbor Agreement, the Enrolled Lands will not return to baseline conditions with respect to NSO habitat because the terms of the perpetual van Eck WFCE will continue to apply even after this

Agreement is no longer in effect. Throughout the term of the Permit and the Agreement, implementation of the WFCE will result in an increase in NSO nest/roost habitat on Enrolled Lands, due to the WFCE's: (a) management performance goals, (b) restrictions on timber harvest, and (c) road construction and maintenance measures, among other requirements. After 90 years, it is expected that 90 percent (approximately 1,900 acres) of Enrolled Lands will be suitable NSO nest/roost habitat. Because the WFCE is perpetual, this Safe Harbor Agreement does not include a provision for return to baseline conditions; therefore, the permit term is the same as the Agreement term (90 years).

11. NET CONSERVATION BENEFIT

This Agreement provides a net conservation benefit to the NSO, primarily through commitments to:

- Increase the quantity and improve the quality of the NSO habitat by increasing the overall percentage of nest/roost habitat on the property to 90 percent (approximately 1,900 acres) (Section 7, Permittee Responsibilities 2 and 3), and maintain this improved habitat condition throughout the Agreement term.
- Monitor NSO activities annually and contribute to knowledge of habitat use (Section 7, Permittee Responsibility 4).
- Establish specific buffer zones and restrictions on harvest operations for up to five activity centers (Section 7, Permittee Responsibility 5).
- Retention of nest trees for duration of Agreement (Section 7, Permittee Responsibility 5(e)).
- Cooperation on control of barred owls (Section 7, Permittee Responsibility 6).
- Regularly monitoring habitat conditions (Section 7, Permittee Responsibility 7).

The assurances associated with the section 10(a)(1)(A) permit of no additional regulatory requirements for the covered species during the 90-year Permit term provide an incentive for the Permittee to undertake these additional measures.

12. CHANGED CIRCUMSTANCES

Nothing in this Agreement prevents the Permittee from implementing management activities not described in the Agreement, as long as such actions comply with the requirements of the Agreement and do not affect the benefit for the covered species expected under this Agreement.

Emergency situations, such as natural disasters (e.g., hurricanes, excessive rainfall, extreme drought, insect infestations or epidemic disease), may require initiation of certain management actions such as salvage or sanitation harvesting within less than 30 days prior to notification. The Permittee will notify the Service within 10 days of discovering such a situation, and will make reasonable accommodations to the Service for:

- (1) review of timber harvest actions in response to emergency situations, and
- (2) survey and/or relocation of species individuals prior to the action. The Parties acknowledge that survey and translocation may be precluded by certain urgent situations.

13. AGREEMENT DURATION

The Agreement, including any commitments related to funding under Service programs, will be in effect for a duration of 90 years following its approval and signing by the Parties. The section 10(a)(1)(A) Permit authorizing take of the species will also have a term of 90 years from the effective date of the Permit. The Permit and Agreement may be extended beyond the specified terms through amendment, upon agreement of the Parties.

14. TAKE

Activities of Permittee and Authorized Representatives

Under this Agreement, the Permittee can make use of the Enrolled Lands in any legal manner that does not result in a violation of this Agreement. The Permit will authorize take of species and their progeny, or alteration of occupied habitat, resulting from lawful activities in compliance with this Agreement within the Enrolled Lands, from the time this Agreement is signed until Permit expiration. The following non-exclusive list of activities by Permittee and its authorized representatives are covered under this Agreement and may result in incidental take of the species covered under this Agreement:

- (1) Long-term forest management and related activities to include but not limited to the felling, skidding and transport of timber and other related forest products, vegetation management and site preparation (subject to the restrictions contained in WFCE, Ex. C, § Q (Appendix A)). Incidental take during the Permit term may occur through timber harvest related noise disturbance or alteration of the microclimate in proximity of an active nest site.
- (2) Road construction and maintenance, including mining for rock and gravel subject to the restrictions contained in WFCE, Ex. C, § L (Appendix A).
- (3) Fuels management activities for the purposes of reducing or maintaining fuel loads, favoring or maintaining specific native vegetation types, or other activities that foster forest health subject to the restrictions contained in WFCE, Ex. C, § Q.8 (Appendix A).
- (4) Research and educational activities reserved to the Permittee as described in WFCE, § 6 (Appendix A) provided, however, that if any such activities involve the purposeful take of an NSO, Permittee shall obtain separate take authorization (see, e.g., 50 C.F.R, § 17.22(a)(1)).
- (5) Construction of one residence for management and research purposes subject to the restrictions contained in WFCE, Ex. C, § C (Appendix A). Any such residence shall be located at least 1,000 feet from any activity center identified in the three years prior to construction and shall occur on no more than two acres (including ancillary structures).
- (6) Production of non-timber forest products (including but not limited to florals, edibles and greens) as described in WFCE, Ex. C, § C and subject to the restrictions contained in WFCE, Ex. C, § Q and other applicable restrictions on timber harvest (Appendix A).

Activities of Others

The Enrolled Lands are subject to various recorded encumbrances that provide others the right to enter the Enrolled Lands for purposes specified in those encumbrances. These encumbrances are listed in the WFCE. Ex. A (Appendix A). Permittee will attempt to provide a copy of this Agreement to all holders of recorded encumbrances on Enrolled Lands by United States

mail. This Agreement does not provide take authorization to those individuals and entities that may have access to the Enrolled Lands as described in the applicable encumbrances. Instead, those individuals and entities are subject to the “take” prohibitions of the Endangered Species Act.

15. REPORTING AND MONITORING

Permittee will undertake the reporting and monitoring described in Section 7, Permittee Responsibilities (4) and (7) above. Such reporting and monitoring will allow the Permittee and the Service to assess the net conservation benefits of this Agreement during the term of the Agreement.

16. FUNDING

Funding of this Agreement will be provided by Permittee.

17. MODIFICATIONS

After approval of the Safe Harbor Agreement, the Service may not impose any new requirements or conditions on, or modify any existing requirements or conditions applicable to, a landowner or successor in interest to the landowner, to mitigate or compensate for changes in the conditions or circumstances of any species or ecosystem, natural community, or habitat covered by the Agreement, except as stipulated in 50 C.F.R. sections 17.22(c)(5) and 17.32(c)(5).

Modification of the Agreement. Any party may propose modifications or amendments to this Agreement, as provided in 50 C.F.R. section 13.23, by providing written notice to, and obtaining the written concurrence of, the other Parties. Such notice shall include a statement of the proposed modification, the reason for it, and its expected results. The Parties will use their best efforts to respond to proposed modifications within 60 days of receipt of such notice. Proposed modifications will become effective upon the other Parties’ written concurrence.

Amendment of the Permit. The Permit may be amended to accommodate changed circumstances in accordance with all applicable legal requirements, including but not limited to the ESA, the National Environmental Policy Act, and the Service’s permit regulations at 50 C.F.R. section 13 and 50 C.F.R. section 17. The party proposing the amendment

shall provide a statement describing the proposed amendment and the reasons for it.

Termination of the Agreement. As provided for in Part 12 of the Service's Safe Harbor Policy (FR 64:32717), the Permittee may terminate implementation of the Agreement's voluntary management actions prior to the Agreement's expiration date, for circumstances beyond the Permittee's control. If the Permittee is unable to continue implementation of the plans and stipulations of the Agreement, whether due to catastrophic destruction of the species population numbers or habitat or due to unforeseen hardship, the Permittee would relinquish the Permit to the Service. Species management on the Permittee's lands would return to its status prior to the signing of the Safe Harbor Agreement. Such termination will not affect the Permittee's authorization under the Permit to take any species individual or occupied habitat that is not part of the Permittee's baseline at the time of termination. The Permittee may terminate this Agreement due to uncontrollable circumstances upon 30 days prior written notice to the other Parties, provided that the baseline conditions have been maintained and the Service is provided an opportunity to relocate affected species within 30 days of that notice. The Permittee also may terminate the Agreement at any time for any other reason, but termination for reasons other than uncontrollable circumstances, such as those associated with a *force majeure* event shall extinguish the Permittee's authority to take species or occupied habitat under the Permit.

Permit Suspension or Revocation. The Service may suspend or revoke the Permit for cause in accordance with the laws and regulations in force at the time of such suspension or revocation. The Service also, as a last resort, may revoke the Permit if continuation of permitted activities would likely result in jeopardy to covered species (50 C.F.R., § 13.28(a)). Prior to revocation, the Service would exercise all possible measures to remedy the situation.

Baseline Adjustment. Unforeseen circumstances could involve habitat impacts resulting from catastrophic (*force majeure*) events such as hurricanes, rainstorms, severe drought, lethal forest fires, or insect/disease epidemics. Such events are beyond the reasonable control of, and did not occur through, the fault or negligence of the Permittee, including but not limited to "acts of God" or sudden actions of the elements such as those described above. Such catastrophes could either locally destroy the species population or render the habitat unsuitable, thereby reducing population

numbers or occupied acreage below the original baseline conditions. For such circumstances beyond the control of the Permittee, the Parties may agree to revise the Agreement's baseline conditions to reflect the new circumstances, rather than terminate the Agreement.

Remedies. Each party shall have all remedies otherwise available to enforce the terms of the Agreement and the Permit, except that no party shall be liable in damages for any breach of this Agreement, any performance or failure to perform an obligation under this Agreement or any other cause of action arising from this Agreement.

Dispute Resolution. The Parties agree to work together in good faith to resolve any disputes, using dispute resolution procedures agreed upon by all Parties.

18. ADDITIONAL MEASURES

Succession and Transfer. This Agreement shall be binding on, and shall inure to the benefit of, the Parties and their respective successors and transferees, in accordance with applicable regulations (50 C.F.R. § 13.24 and § 13.25). The rights and obligations under this Agreement shall run with the ownership of the Enrolled Lands and are transferable to subsequent non-Federal property owners pursuant to 50 C.F.R. section 13.25. The enhancement of survival Permit issued to the Permittee also will be extended to the new owner(s). As a party to the original Agreement and Permit, the new owner(s) will have the same rights and obligations with respect to the Enrolled Lands as the original owner. The new owner(s) also will have the option of receiving Safe Harbor assurances by signing a new Agreement and receiving a new Permit. The Permittee shall notify the Service of any transfer of ownership, so that the Service can attempt to contact the new owner, explain the baseline responsibilities applicable to the Enrolled Lands, and seek to interest the new owner in signing the existing Agreement or a new one to benefit listed species on the Enrolled Lands. Assignment or transfer of the Permit shall be governed by Service regulations in force at the time.

Availability of Funds. Implementation of this Agreement is subject to the requirements of the Anti-Deficiency Act and the availability of appropriated funds. Nothing in this Agreement will be construed by the Parties to require the obligation, appropriation, or expenditure of any funds from the U.S. Treasury. The Parties acknowledge that the Service will not be

required under this Agreement to expend any Federal agency's appropriated funds unless and until an authorized official of that agency affirmatively acts to commit to such expenditures as evidenced in writing.

Relationship to Other Agreements. There are currently no other Agreements with the Service associated with the Enrolled Lands.

No Third-Party Beneficiaries. This Agreement does not create any new right or interest in any member of the public as a third-party beneficiary, nor shall it authorize anyone not a party to this Agreement to maintain a suit for personal injuries or damages pursuant to the provisions of this Agreement. The duties, obligations, and responsibilities of the Parties to this Agreement with respect to third parties shall remain as imposed under existing law.

Other Listed Species, Candidate Species and Species of Concern. The possibility exists that other listed, proposed, or candidate species or species of concern may occur in the future on lands enrolled in the Agreement as a direct result of the Permittee's voluntary conservation actions. If biological surveys determine this Agreement will provide a net conservation benefit to any such species or their potential habitat, the Parties may agree to amend the Agreement and Permit to cover additional species, at the Permittee's request.

If Federally designated candidate species should occur on the Enrolled Lands, the Service will recommend measures for including them in a joint Safe Harbor Agreement/Candidate Conservation Agreement with Assurances to contribute toward the conservation of those species. If appropriate measures are included in such an agreement, the Service, consistent with its "No Surprises" policy, will not impose additional requirements on the Permittee as a result of any such species later being listed as threatened or endangered.

Notices and Reports. Any notices and reports, including monitoring and annual reports, required by this Agreement shall be delivered to the persons listed below, as appropriate:

<p>Permittee The Fred M. van Eck Forest Foundation c/o The Pacific Forest Trust</p>	<p>Service Field Supervisor U.S. Fish and Wildlife Service Arcata Fish and Wildlife Office</p>
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California Main Office The Presidio 1001-A O'Reilly Avenue San Francisco, CA 94129	1655 Heindon Road Arcata, CA 95521
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19. REFERENCES CITED

Forsman, E.D., S. DeStefano, M.G. Raphael, and R.J. Gutierrez, Editors. 1996. Demography of the northern spotted owl. Studies in avian biology no. 17, Cooper Ornithological Society. Fort Collins, Colorado. 122 pp.

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Franklin, A.B., K.P. Burnham, G.C. White, R.J. Anthony, E.D. Forsman, C. Schwarz, J.D. Nicols and J. Hines. 1999. Range-wide status and trends in northern spotted owl populations. Colorado Coop. Fish and Wildl. Res. Unit, Fort Collins, Colorado and Oregon Coop. Fish and Wildl. Res. Unit, Corvallis, Oregon. Unpublished report. 71 pp.

Gould, G.I. Jr. 1995. Distribution and numbers of known northern spotted owl sites in northern California. Paper presented at the "Symposium on the Status and Management of the Northern Spotted Owl in California," at Ukiah, CA., on August 16, 1995. 11 pp.

Thomas, J.W., E.D. Forsman, J.B. Lint, E.C. Meslow, B.R. Noon, and J. Verner. 1990. A conservation strategy for the northern spotted owl. A report by the Interagency Scientific Committee to address the conservation of the northern spotted owl. U.S. Department of Agriculture, Forest Service, and U. S. Department of the Interior, Fish and Wildlife Service, Bureau of Land Management, and National Park Service. Portland, Oregon. 427 pp.

Thomas, J.W., M.G. Raphael, R.G. Anthony, E.D. Forsman, A.G. Gunderson, R.S. Holthausen, B.G. Marcot, G.H. Reeves, J.R. Sedell, and D.M. Solis. 1993. Viability assessments and management considerations for species associated with late-successional and old-growth forests of the Pacific Northwest. Portland, Oregon. U. S. Department of Agriculture, Forest Service. 523 pp.

USDA Forest Service; USDC National Marine Fisheries Service; USDI Bureau of Land Management, Fish and Wildlife Service, and National Park

**APPENDICES TO SAFE HARBOR AGREEMENT
WITH THE VAN ECK FOREST FOUNDATION**

Appendix A	Grant Deed (Working Forest Conservation Easement)
Appendix B	Landscape Planning on the van Eck Forest
Appendix C	Non-industrial Timber Management Plan
Appendix D	Summary of Northern Spotted Owl Survey Results

