RECORD OF DECISION

For
Proposed Issuance of an Endangered Species Act
Incidental Take Permit
Addressing the
Washington State Department of Natural Resources
1997 State Trust Lands Habitat Conservation Plan, as amended to include a Long-term
Conservation Strategy for the Threatened Marbled Murrelet

U.S. Fish and Wildlife Service

Introduction

This Record of Decision (ROD) was prepared by the U.S. Fish and Wildlife Service (Service) in accordance with the requirements of the National Environmental Policy Act of 1969 (NEPA), as amended. The purpose of this ROD is to document the decision of the Service in response to an application submitted by the Washington State Department of Natural Resources (WDNR) to amend its existing Incidental Take Permit (TE812521-0) (Permit or ITP) and its State Trust Lands Habitat Conservation Plan (1997 HCP) to include a Long-Term Conservation Strategy (LTCS) for the federally threatened marbled murrelet (murrelet). These amendment proposals are hereafter referred to as the "ITP Amendment" and the "HCP Amendment" or "amended HCP," respectively.

The 1997 HCP addresses both non-listed species and species listed under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (ESA). The ITP Amendment covers only the murrelet (*Brachyramphus marmoratus*). Permit coverage for all other covered species remains unchanged. The information contained in this ROD is based on the ITP Amendment application, inclusive of the Applicant's proposed HCP Amendment incorporating the LTCS (WDNR 2019), the Final Environmental Impact Statement (FEIS) (WDNR and Service 2019) addressing this action, and other information in the administrative record for this permit action.

The Service's decision to amend the Permit follows a determination that the permit issuance criteria under Section 10(a)(2)(B) of the ESA (16 U.S.C. 1539(a)(2)(B)) have been met (Service 2019b). The original Permit authorized the incidental take of the following nine federally listed or protected species in conjunction with implementation of the 1997 HCP: the marbled murrelet; northern spotted owl (*Strix occidentalis caurina*); gray wolf (*Canis lupus*); bald eagle (*Haliaeetus leucocephalus*); Columbian white-tailed deer (*Odoceoileus virginianus leucurus*); Oregon silverspot butterfly (*Speyeria zerence hippolyta*); American peregrine falcon (*Falco peregrinus*); Aleutian Canada goose (*Branta canadensis leucopareia*); and the grizzly bear (*Ursus arctos horribilis*). The 1997 HCP also intended to cover other unlisted species that use habitat on the Covered Lands should they become listed over the Permit term (IA, Section 7.0). The 1997 Permit was amended via a letter from the Service to WDNR in 1999 to include the federally threatened bull trout (*Salvelinus confluentus*) consistent with the terms of the Implementing Agreement for the 1997 HCP. In 2002, incidental take coverage for the grizzly bear expired.

The term of the ITP Amendment is 70 years (January 30, 1997 to January 30, 2067). WDNR may renew by the Permit up to three times with each renewal period being up to 10 years (IA, Section 19.2 Duration).

The interim marbled murrelet conservation strategy (Interim Strategy) described in the 1997 HCP has been replaced in the amended 1997 HCP with the marbled murrelet LTCS. Replacement of the Interim Strategy with the LTCS was envisioned in the original 1997 HCP. At the time of 1997 HCP development, the Service and WDNR lacked sufficient scientific information to include a LTCS in the HCP. Consequently, the Interim Strategy was designed to

avoid and minimize impacts to marbled murrelets while the LTCS was developed by, e.g., releasing some low quality habitat for timber harvest, and protecting high quality marbled murrelet habitat that could be potentially utilized for marbled murrelet conservation in the LTCS.

The 1997 ITP action was subject to the requirements of Section 7 of the ESA. The Service's biological opinion (Service 1997) on that permit action, inclusive of considering the Interim Strategy, concluded that the proposed action at that time was not likely to jeopardize the listed species or destroy or modify its critical habitat. The current proposed action is to amend the 1997 ITP and approve the WDNR's HCP Amendment in order to facilitate implementation of the LTCS for the murrelet. The Service's biological opinion on the proposed action concludes that it is not likely to jeopardize listed species or destroy or modify critical habitat (Service 2019a).

In general, the Covered Activities addressed in the 1997 HCP and the HCP Amendment can be categorized as timber-related and non-timber-related. The 1997 HCP focuses on timber management activities as the main factors influencing both landscape conditions and fish and wildlife species. The 2019 HCP Amendment does not change the scope or description of Covered Activities in the 1997 HCP. It adds conservation measures benefiting the marbled murrelet to the Covered Activities in certain locations, and specifies the areas within the Covered Lands where Covered Activities will and will not occur.

The ITP Amendment and HCP Amendment provide protection for and promote the conservation of the marbled murrelet, while enabling the WDNR to conduct otherwise legal activities associated with the continued implementation of the HCP including the LTCS. Under the amended HCP, habitat remaining on WDNR ownership for the conservation of marbled murrelets is expected to increase in quantity and improve in quality over the remaining term of the 1997 ITP.

Consistent with 40 CFR §1505.2, this ROD presents, without limitation, (1) the Service's permit decision in response to WDNR's permit amendment application; (2) the alternatives considered by the Service in reaching its decision; and (3) a discussion of whether all practicable means to avoid or minimize environmental harm from implementation of the selected alternative have been adopted.

Proposed Federal Action

The Service proposes to issue an ITP amendment and approve the Applicant's proposed HCP Amendment under the authority of Section 10(a)(1)(B) of the ESA. The HCP Amendment incorporates the marbled murrelet LTCS into the 1997 HCP. The LTCS is best represented by Alternative H, which was analyzed in the Final Environmental Impact Statement (WDNR and Service 2019). The amended ITP will expire on January 30, 2067 unless renewed. Documents used in the preparation of this ROD include the following:

• The WDNR State Trust Lands HCP (WDNR 1997);

- The Final Environmental Impact Statement for the Long-Term Conservation Strategy for the Marbled Murrelet (WDNR and Service 2019);
- The Long-Term Conservation Strategy for the Marbled Murrelet (WDNR 2019);
- The Service's Biological Opinion (2019a) on the Proposed Amendment of the ITP and HCP (Service 2019a); and
- The Service's Findings and Recommendations on the Proposed ITP Amendment (Service 2019b)

Purpose and Need

The Service's purposes are to ensure that: the ITP Amendment meets ESA Section 10(a)(1)(B) permit issuance criteria; the ITP Amendment complies with all other applicable Federal laws and regulations; the ITP Amendment is consistent with USFWS' legal authorities; and implementation of the ITP Amendment and amended HCP achieve long-term species and ecosystem conservation objectives at ecologically appropriate scales. The Service's need is to fulfill our legal obligations under Section 10(a)(1)(B) of the ESA in response to DNR's request to amend its ITP and HCP to replace the Interim Strategy with the LTCS for the marbled murrelet.

Any Permit issued by the Service must meet all applicable issuance criteria (16 U.S.C. 1539(a)(2)(B)). Issuance criteria under the ESA include, without limitation, that the taking will be incidental to an otherwise lawful activity, that the applicant will minimize and mitigate the impacts of the taking on the Covered Species to the maximum extent practicable, that the applicant will adequately fund the conservation plan, and the taking will not appreciably reduce the likelihood of survival and recovery of the Covered Species in the wild.

Project Description

Under the amended HCP, the Interim Strategy under which WDNR has operated since original Permit issuance is replaced with a LTCS for the murrelet, as envisioned in the 1997 HCP. Covered Activities are the same as those described in Section 16.0 ("Forest Product Sales and Other Management Activities Other Than Land Sales, Purchases, and Exchanges") and Section 17.0 ("Land Transfers, Purchases, Sales, and Exchanges") of the Implementing Agreement for the 1997 HCP. No activities have been added, deleted, or modified. The amended HCP addresses where Covered Activities will be implemented by establishing areas for long-term forest cover, occupied site buffers, timber-harvest deferrals (referred to hereafter as "meter" or "metering"), and anticipated timber harvest. The amended HCP (WDNR 2019) adds a biological goal and related objectives to the 1997 HCP as follows:

The biological goal of the Long-Term Conservation Strategy is to avoid, minimize, and mitigate the incidental take of marbled murrelets resulting from WDNR's forest management activities in a manner that increases the habitat capacity of WDNR-managed HCP lands over the life of the 1997 HCP.

Biological objectives:

1) Maintain all 388 existing marbled murrelet occupied sites on WDNR-managed HCP lands for the duration of the 1997 HCP.

- 2) Apply 328-foot (100 meter) buffers to all 388 existing occupied sites and prohibit or significantly limit activities within these buffers.
- 3) Increase the habitat capacity of WDNR-managed HCP lands by creating a network of 20 special habitat areas. Emphasize distribution of habitat in strategic locations and take full advantage of habitat in areas managed for multiple conservation objectives. Manage these special habitat areas to promote the development of secure, high-quality nesting habitat and to avoid disrupting murrelet nesting and reproduction.
- 4) Meter the harvest of 5,000 adjusted acres¹ of murrelet habitat for the first decade to maintain current habitat capacity while future habitat capacity is developed.
- 5) Maintain non-murrelet specific habitat managed under other conservation strategies that will also benefit marbled murrelets as habitat matures and becomes more structurally complex.

Plan Area

The Plan Area and Permit Area for the Amendment are the same as the "permit lands" as described in the 1997 HCP (Section 15.1). The HCP originally analyzed the Covered Activities in nine planning units in Washington. In the 1997 HCP and the amended HCP, the planning units fit into categories that reflect the applicable conservation measures: eastern slopes of the Cascades range, the Olympic Experimental State Forest, and the rest of the WDNR-managed lands in western Washington.

All land management activities related to the 1997 HCP occur in the State of Washington on state-owned forestlands in the area depicted in the 1997 HCP (Map 1.4) modified by land transactions. The 1997 HCP describes the Covered Lands as being all WDNR-managed forestlands in the range of the northern spotted owl, including all such lands in western Washington and on the east slopes of the Cascade Range in Washington. The Covered Lands exclude WDNR lands leased for commercial, industrial, or residential purposes and those lands designated as agricultural.

At the time the 1997 HCP was developed, WDNR managed approximately 1,680,000 acres of forestlands. The HCP does not preclude WDNR from buying, selling, or exchanging lands. Currently, WDNR reports 1,900,000 acres as the extent of Covered Lands. The amended HCP specifically identifies those Covered Lands located within the inland range of marbled murrelet nesting areas or otherwise considered to be within 55 miles of marine waters. Covered Lands within this specified area cover approximately 1,380,000 acres.

Covered Species

The marbled murrelet is the only Covered Species affected by the amendment of the 1997 HCP. As noted above, HCP and ITP coverage for all other covered species remain unchanged under the ITP Amendment and HCP Amendment, except for the grizzly bear. In 2002, incidental take

November 2019

¹ Adjusted acres is a value derived by multiplying the number of acres of marbled murrelet habitat by the modelled p-stage value of the habitat. For example, 100 acres of P-stage 0.25 habitat = 25 adjusted acres. Adjusted acres also incorporate discounts for edge conditions and geographic location.

coverage for the grizzly bear expired. The ITP Amendment covers the take of all Covered Species, including take of marbled murrelet as a result of implementing the LTCS.

Covered Activities

In general, the Covered Activities addressed in the 1997 and the amended HCP can be categorized as timber-related and non-timber-related. The 1997 HCP focuses on timber management activities as the main factors influencing both landscape conditions and fish and wildlife species. While the amended HCP does not change the scope or description of Covered Activities in the 1997 HCP, it does add conservation measures to the Covered Activities in certain locations and specifies the areas within the Covered Lands where Covered Activities will and will not occur.

The ITP Amendment and HCP Amendment (and the associated conservation measures) provide protection for and promote the conservation of the marbled murrelet while enabling the WDNR to conduct otherwise legal activities associated with the continued implementation of the HCP including the LTCS. Under the amended HCP, habitat remaining on WDNR ownership for the conservation of marbled murrelets is expected to increase in quantity and quality over the remaining term of the 1997 Permit, which as noted above expires in 2067.

The HCP Amendment anticipates the removal through harvest of approximately 38,000 acres of existing murrelet habitat, which equates to 11,085 adjusted acres of habitat over the 48 years that remain in the initial 70-year term of the 1997 HCP. Additionally, the loss of 114 adjusted acres of habitat is expect to occur due to yarding corridors and new road construction through murrelet-occupied sites, occupied site buffers, and special habitat areas. The majority of the murrelet habitat released for harvest will be harvested in the first two decades of implementing the LTCS as analyzed in the FEIS, HCP Amendment, and the Service's biological opinion.

In accordance with the final rule designating critical habitat for the murrelet (81 FR 51348), "... any lands within critical habitat that are covered by a legally-operative incidental take permit for marbled murrelets based on an approved HCP that addresses conservation of the marbled murrelet are excluded from the critical habitat while the permit is active." Although the WDNR-managed lands are covered by such an approved HCP and ITP, some Covered Lands are adjacent to federally designated critical habitat, mostly on Federal lands.

The degradation of up to 1,500 acres of murrelet habitat located within 328 feet of managed boundaries adjacent to WDNR HCP lands is considered to be an adverse effect to critical habitat, due to the loss and degradation of individual trees with platforms, and the creation of clear-cut edges which reduce the capability of the critical habitat to support successful murrelet reproduction at the scale of the affected stands. However, the affected stands are dispersed along the boundaries of 26 critical habitat subunits, and represent a cumulative total of about 0.4 percent of the current nesting habitat within designated critical habitat in Washington. Windthrow and edge effects along WDNR-managed boundaries are not expected to significantly reduce the capability of the critical habitat to provide for a well-distributed and self-sustaining murrelet population at the scale of any critical habitat subunit.

Murrelet Protection Measures and Conservation Strategy

Under the amended HCP, murrelet conservation is achieved primarily by protecting all occupied sites currently protected under the Interim Strategy, and additional occupied sites identified in the "2008 Recommendations and Supporting Analysis of Conservation Opportunities for the Marbled Murrelet Long-Term Conservation Strategy" (Raphael et al. 2008; hereafter referred to as the "science team"). Under the amended HCP, 388 occupied sites are bordered by 100-meter wide buffers, and 20 special habitat areas are established in strategic locations as detailed in the FEIS (summarized in Table S.3.3), the amended HCP (Appendix Q of the FEIS), and are summarized herein.

Occupied Sites and Occupied Site Buffers

Under the amended HCP, WDNR will protect murrelet habitat and restrict management activities and recreation within all murrelet-occupied sites on HCP Covered Lands as of the date the amended ITP is issued. Under the amended HCP, "occupied sites" are those sites delineated by the science team (Raphael et al. 2008), described in Section 2.1 of the FEIS (WDNR and Service 2019) and depicted in Figure B-2 of Appendix B of the amended HCP. Under the amended HCP: "protect murrelet habitat" means excluding variable retention harvest from these lands; and "restrict management and recreation activities" means restricting activities that may remove or damage trees (see Table A-4 in Appendix A of the amended HCP), cause audio or visual disturbances, or attract predators to murrelet nest sites. Based on the delineated 388 marbled murrelet occupied sites, 16,356 additional acres of murrelet-occupied habitat were identified on HCP Covered Lands. Under the amended HCP, WDNR will conserve 59,331 acres of habitat (Table A-3) within the 388 marbled murrelet-occupied sites. Most of these acres (85 percent) are within areas that have multiple conservation objectives. WDNR will not provide marbled murrelet-specific habitat protection or restrict management and recreation activities within any additional marbled murrelet-occupied sites that are discovered after the date on which the amended ITP is issued.

WDNR will apply a 100-meter (328-foot) buffer to the outer boundary of all recorded occupied sites on WDNR-managed HCP lands as of the date on which the ITP is amended. Within occupied site buffers, WDNR will exclude variable retention harvest and restrict management and recreation activities that may remove or damage trees, or disrupt marbled murrelet nesting (Table A-4 in Appendix A). Under the amended HCP, WDNR will conserve 32,777 acres of buffers around 388 murrelet-occupied sites. About half of these buffer acres (16,906 acres, or 51.6 percent) are within areas of existing long-term forest cover that have multiple conservation objectives. WDNR will not buffer any murrelet-occupied sites that are discovered after the date on which the amended ITP is issued.

Special Habitat Areas

To accomplish the second biological objective under the LTCS, WDNR will create a network of special habitat areas (SHAs) at strategic locations described in Section 6.3.1.2 of the amended

HCP (see Figure B-2 in Appendix B). "Special habitat areas are designed to reduce edge and fragmentation and increase interior forest around occupied sites and existing habitat in specific geographic areas to benefit the species" (WDNR and Service 2019). The SHA network under the amended HCP is consistent with the objectives discussed in Section II. D. 3.2.1 ("Increase the amount and quality of suitable nesting habitat"), Section II. D. 3.2.1.1 ("Decrease fragmentation by increasing the size of suitable stands to provide a larger area or interior forest conditions") and Section II. D. 3.2.1.2 ("Protect 'recruitment' nesting habitat to buffer and enlarge existing stands, reduce fragmentation, and provide replacement habitat for current suitable nesting habitat lost to disturbance events") of the Service's recovery plan for the murrelet.

The SHA network comprises 20 sites that collectively encompass 46,925 acres. All but one SHA contains at least one murrelet-occupied site (Table A-6 in Appendix A of the amended HCP). SHAs range in size from 338 acres to 7,549 acres, averaging 2,346 acres (Table A-6 in Appendix A). The following habitat categories are recognized within the SHAs: murrelet-occupied sites; murrelet habitat; future murrelet habitat; security forest; future security forest; and non-forested areas. Murrelet habitat is defined as WDNR forest inventory units (FIUs) that have been assigned a P-stage² value of at least 0.25. Future habitat means FIUs that do not currently meet this threshold but are projected to develop a P-stage value of at least 0.25 before the end of calendar year 2067. Security forest means FIUs that will not develop a P-stage value of at least 0.25 before the end of calendar year 2067, but have a closed canopy and trees greater than 80 feet tall. Future security forest means FIUs that do not yet meet the definition of security forest but are projected to reach that threshold before the end of calendar year 2067. Security forest protects habitat from deleterious edge effects including microclimate changes, windthrow, predation, and disturbance.

Murrelet-occupied sites and current habitat comprise 28,823 acres (61 percent) of the 46,925 acres within SHAs. Another 5,052 acres (10.8 percent) is future habitat. All but 1,014 acres of the remaining acreage is either security forest or future security forest (Table A-6 in Appendix A). Within the SHAs, WDNR will exclude variable retention harvest and restrict management and recreation activities that may remove or damage trees, or disrupt marbled murrelet nesting activities (Table A-4 in Appendix A).

Metering

Under the amended HCP, WDNR will meter harvest of 5,000 adjusted acres of murrelet habitat that it would otherwise be authorized to harvest until the end of the first decade following implementation of the amended HCP. The specific location and quality of habitat to be metered will be at WDNR's discretion. These metered acres will become available for harvest at the beginning of the second decade.

²P-stage is a habitat classification system used to characterize the quality of murrelet habitat based on forest age and dominant tree species present.

Metering is expected to maintain murrelet habitat capacity while additional habitat develops under the LTCS. The results of population viability analysis indicates that metering will improve the projected (modeled) viability of the murrelet population on WDNR-managed lands, and will prevent the near-term decline in modeled nesting carrying capacity that otherwise would occur during the first decade of the LTCS (Peery and Jones 2019).

Other Conservation Measures

Within the range of the marbled murrelet in Washington (55 miles inland of marine waters), variable retention timber harvest is already excluded from 567,000 acres of WDNR-managed HCP lands. These lands are being managed under conservation strategies and prescriptions for other purposes. These acres are referred to as long-term forest cover. Marbled murrelet habitat quality on these lands is variable. Not all areas of long-term forest cover contain marbled murrelet habitat, and some areas of long-term forest cover are non-forested (e.g., wetlands, alpine areas, etc.). In aggregate, these lands are expected to provide significant conservation value for murrelets relative to current habitat, future habitat, and security forest. Of the 567,000 total acres of long-term forest cover within the range of the marbled murrelet, approximately 153,000 acres (27 percent) currently meets the definition of marbled murrelet habitat in the 1997 HCP and the HCP Amendment. This habitat is expected to increase in quantity and quality as these forests continue to grow, mature, and become structurally more complex over the remaining Permit term. Within the amended HCP Covered Lands, these include the following:

- Riparian areas managed under the 1997 HCP riparian conservation strategies;
- All remaining old-growth forest (stands 5 acres or larger that originated naturally before 1850 and are in a fully functional stage of stand development) on WDNRmanaged HCP lands;
- Existing northern spotted owl high-quality habitat, which includes "the following WDNR mapped habitat classes as of 2018: old forest, high-quality nesting habitat, and A and B habitat per the definitions in the 1997 HCP (WDNR 1997, p. 12)" (WDNR and Service 2019);
- Uncommon habitats and special habitat features protected under the 1997 HCP multispecies conservation strategy;
- Natural area preserves and natural resource conservation areas;
- Genetic resources and special habitat features protected under WDNR's Policy for Sustainable Forests (WDNR 2006); and
- Inoperable areas and inaccessible areas.

In aggregate, these lands cover 85.0 percent of the area within the 388 murrelet-occupied sites on WDNR lands, 51.6 percent of the area within murrelet-occupied habitat site buffers, and 72.4 percent of the area within SHAs on WDNR lands (Table A-3 in Appendix A of the HCP Amendment). These lands not only form the foundation of murrelet-specific conservation components of the LTCS, but will also develop additional habitat capacity around occupied sites and in SHAs over time. To satisfy the second biological objective of the LTCS, the HCP Amendment reinforces the conservation value of these lands by adding new, murrelet-specific

restrictions on certain management and recreation activities (Table A-4 in Appendix A of the HCP Amendment). Management and recreation activities on these lands must comply with both existing restrictions and, where applicable, the new murrelet-specific restrictions detailed in Table A-4.

Restrictions on Management and Recreation Activities

A wide range of forest management and recreation activities have the potential to negatively affect forest structure, disrupt marbled murrelet nesting, and thereby reduce the effectiveness of the conservation components described in sub-sections 6.3.1.1, 6.3.1.3, and 6.3.2 of the HCP Amendment. To avoid and minimize such impacts, these activities are restricted under the LTCS (Table A-4 in Appendix A).

Adaptive Management

The HCP Amendment maintains the 1997 HCP's adaptive management program without changes. Chapter 6 of the 1997 HCP addresses the funding, monitoring, research, and reporting program implemented as part of the existing 1997 Permit. Section 24.5 of the HCP's implementing agreement (IA) describes and governs WDNR's adaptive management commitments under the 1997 HCP and the HCP Amendment. "Adaptive management provides for ongoing modifications of management practices to respond to new information and scientific developments. The monitoring and research provisions of the 1997 HCP are in part designed to identify modifications to existing management practices" (WDNR 1997, p. B.10). Section 24.5 of the IA identifies two marbled murrelet-specific adaptive management practices, one that was completed during the Interim Strategy ("the habitat definitions will be refined for each planning unit as a result of WDNR's habitat relationships study") and another that will be completed when the LTCS is adopted by WDNR upon completion of the inventory survey phase (WDNR 1997, p. B.11).

The 1997 HCP established a tiered priority for research related to riparian management, spotted owls, and marbled murrelets. Top-tier marbled murrelet-related research developed under the 1997 HCP aided WDNR in developing the HCP Amendment. However, Section 6.4 of the HCP Amendment emphasizes WDNR's intent "to determine whether the Amendment is implemented as written," citing the 1997 HCP's monitoring program. The Service understands this to mean that WDNR will undertake compliance monitoring which may result in the formulation of adaptive management or other proposals to better achieve the WDNR's biological objectives. The quoted language does not mean that WDNR may implement the HCP Amendment in any manner different from how it is written. Any changes to the HCP Amendment shall be subject to the regulations in place at the time the changes are sought and the IA. The HCP Amendment describes implementation monitoring as including a summary of the quantity and quality of habitat (P-stage) in murrelet-occupied sites, occupied site buffers, SHAs, and areas of long-term forest cover not included in the preceding categories, by HCP planning unit. Natural disturbance that occurs in these areas will be tracked via the reporting of salvage activities.

In addition, during the first decade of implementation, WDNR will report on the metering of 5,000 adjusted acres of habitat (Section 6.3.4 of the HCP Amendment). The HCP Amendment also describes effectiveness monitoring as documenting changes in habitat conditions, including general forest structure, specialized habitat features (e.g., in-stream large woody debris, marbled murrelet nesting platforms), and spotted owl prey populations, that result from timber harvest and other forest management activities carried out pursuant to the 1997 HCP. Only habitat areas addressed by the conservation strategies (i.e., riparian; spotted owl nesting roosting, and foraging; spotted owl dispersal; and marbled murrelet habitat areas) will be monitored for effectiveness. Validation monitoring, which will occur only within the Olympic Experimental State Forest (OESF) Planning Unit, is intended to document spotted owl and marbled murrelet use of areas managed to provide nesting habitat, and salmonid use of streams crossing DNRmanaged lands. For spotted owls and marbled murrelets, validation monitoring will rely upon surveys to detect changes in site occupancy, numbers and locations of breeding pairs, and reproduction, as appropriate for each species (DNR 1997, p. V.2). Accordingly, murrelet validation monitoring will document marbled murrelet use of select areas managed to provide murrelet habitat. Monitoring will rely upon surveys to detect changes in site occupancy in the OESF Planning Unit. Monitoring objectives are described while methods are not described.

Alternatives

Under the NEPA compliance process, the Service evaluated the proposed action and reasonable range of alternatives to the proposed action. Eight alternatives were analyzed in the FEIS, including a no-action alternative and seven action alternatives. Additional alternatives (some received during public comment) were also evaluated by the Service and WDNR in the preparation of the draft EIS and revised draft EIS for consideration of the Amendment, but were eliminated from detailed study. The alternatives eliminated from detailed study include: (1) removing Permit coverage for the marbled murrelet, (2) ceasing timber harvest activities, (3) relying on riparian buffers for marbled murrelet conservation, (4) retaining larger buffers on marbled murrelet nesting habitat, (5) excluding northern spotted owl habitat from the marbled murrelet conservation strategy, and (6) delaying harvest of marbled murrelet nesting habitat. Descriptions of these alternatives and why they were not considered as additional alternatives for detailed study are provided in the FEIS Chapter 2 and Appendix S.

Alternatives analyzed in the FEIS vary in the amount of marbled murrelet habitat that would be conserved, and the amount of habitat that would available for harvest. Each action alternative would protect the same 59,000 acres of murrelet-occupied sites, while the no-action alternative would only protect 43,000 acres of occupied sites. In order to evaluate a "reasonable worst case" scenario, the analysis assumes that all available habitat will be harvested and that harvest will occur in the first decade of the planning period for all alternatives, except Alternative H, which includes a metering approach. Alternatives also vary in the extent of occupied site buffers (0, 50, 100 meters), marbled murrelet management areas, emphasis areas, SHAs, and other factors that would comprise the network of long-term forest cover.

The following discussion provides brief summaries of the no-action alternative as well as the seven action alternatives. For each alternative, the various categories of protected areas may have spatial overlap, so the acreage values are not necessarily additive.

No Action

Inclusion of a No Action Alternative in the EIS is prescribed by the Federal Council on Environmental Quality regulations (40 CFR 1502.14(d)). Under the No Action Alternative, the Service would not amend the existing 1997 Permit, and therefore, would not authorize take above that specified on the existing ITP and the additional conservation measures proposed for the marbled murrelet would not be implemented. Under the No Action Alternative (analyzed as Alternative A in the FEIS), WDNR would continue operations as authorized under the Interim Strategy for murrelet conservation described in the 1997 HCP for all of the west-side planning units. WDNR would conserve habitat identified under the Interim Strategy. The Interim Strategy would protect 43,000 acres of long-term forest cover in murrelet-occupied sites, 28,000 acres in occupied site buffers, and defer harvest of 92,000 acres of "habitat identified under the interim strategy."

Alternative B

Under Alternative B, the Service would issue an amended Permit authorizing take of the Covered Species at the effect levels described in the FEIS (Section 4.6). Alternative B includes approximately 576,000 acres of long-term forest cover. Alternative B focuses on only conserving known marbled murrelet-occupied sites on WDNR-managed lands. This alternative is the only alternative that does not provide buffers on these occupied sites. Harvest and thinning would be prohibited in occupied sites. Alternative B would conserve 59,000 acres of occupied sites. Approximately 39,293 acres of low quality marbled murrelet habitat (P-stage 0.25, 0.36) and 5,754 acres of high quality marbled murrelet habitat (P-stage 0.47-0.89) would be released for harvest in the first decade of implementing this alternative (FEIS, Table 4.6.2). Using habitat as a surrogate and applying the analytical framework in the FEIS, expected adverse impacts would exceed mitigation by 4,329 adjusted acres (FEIS, Table 4.6.5).

Alternative C

Under Alternative C, the Service would issue an amended Permit authorizing take of the Covered Species at the effect levels described in the FEIS (Section 4.6). Alternative C includes approximately 617,000 acres of long-term forest cover. This alternative conserves known occupied marbled murrelet sites and marbled murrelet emphasis areas as well as other high-quality habitat patches. This alternative also applies a 328-foot (100 meter) buffer to all occupied sites except in the OESF, where the buffer would be 164 feet (50 meters) for occupied sites greater than 200 acres in size. Alternative C would protect 59,000 acres of occupied sites in addition to occupied site buffers, emphasis areas, and high-quality marbled murrelet habitat. Approximately 32,608 acres of low quality marbled murrelet habitat (P-stage 0.25, 0.36) would be released for harvest in the first decade of implementing this alternative (FEIS, Table 4.6.2). Using habitat as a surrogate and applying the analytical framework in the FEIS, expected mitigation for marbled murrelets would exceed impacts by 4,971 adjusted acres (FEIS, Table 4.6.5).

Alternative D

Under Alternative D, the Service would issue an amended Permit authorizing take of the Covered Species at the effect levels described in the FEIS (Section 4.6). Alternative D includes approximately 618,000 acres of long-term forest cover. Alternative D would protect 59,000 acres of occupied sites in addition to occupied site buffers, and SHAs. This alternative also applies a 328-foot (100 meter) buffer to all occupied sites. Approximately 33,178 acres of low quality marbled murrelet habitat (P-stage 0.25, 0.36) and 5,090 acres of high quality marbled murrelet habitat (P-stage 0.47-0.89) would be released for harvest in the first decade of implementing this alternative (FEIS, Table 4.6.2). Using habitat as a surrogate and applying the analytical framework in the FEIS, expected mitigation for marbled murrelets would exceed impacts by 1,220 adjusted acres (FEIS, Table 4.6.5).

Alternative E

Under Alternative E, the Service would issue an amended Permit authorizing take of the Covered Species at the effect levels described in the FEIS (Section 4.6). Alternative E includes approximately 621,000 acres of long-term forest cover. Alternative E combines the conservation approaches of Alternatives C and D. Alternative E would protect 59,000 acres of occupied sites in addition to occupied site buffers, emphasis areas, SHAs, and high-quality marbled murrelet habitat. Approximately 31,600 acres of low quality marbled murrelet habitat (P-stage 0.25, 0.36) would be released for harvest in the first decade of implementing this alternative (FEIS, Table 4.6.2). Using habitat as a surrogate and applying the analytical framework in the FEIS, expected mitigation for marbled murrelets would exceed impacts by 5,727 adjusted acres (FEIS, Table 4.6.5).

Alternative F

Under Alternative F, the Service would issue an amended Permit authorizing take of the Covered Species at the effect levels described in the FEIS (Section 4.6). Alternative F includes approximately 743,000 acres of long-term forest cover. This alternative conserves marbled murrelet management areas recommended in the Science Team Report and establishes marbled murrelet management areas in the North and South Puget planning units. Additionally, all northern spotted owl old forest habitat (as defined in the 1997 HCP) in the Olympic Experimental State Forest planning unit would receive a 328-foot (100 meter) buffer. Existing mapped low-quality northern spotted owl habitat in designated owl conservation areas (nesting/roosting/foraging, dispersal, and OESF) is included as long-term forest cover. Alternative F would also protect 59,000 acres of murrelet-occupied sites in addition to occupied site buffers. Approximately 19,307 acres of low quality marbled murrelet habitat (P-stage 0.25, 0.36) and 2,697 acres of high quality marbled murrelet habitat (P-stage 0.47-0.89) will be released for harvest in the first decade of implementing this alternative (FEIS, Table 4.6.2). Using habitat as a surrogate and applying the analytical framework in the FEIS, expected mitigation for marbled murrelets would exceed impacts by 15,205 adjusted acres (FEIS, Table 4.6.5).

Alternative G

Under Alternative G, the Service would issue an amended Permit authorizing take of the Covered Species at the effect levels described in the FEIS (Section 4.6). Alternative G includes approximately 642,000 acres of long-term forest cover. This alternative includes SHAs, emphasis areas, and marbled murrelet management areas, and applies 328-foot (100 meter) buffers to all occupied sites. Alternative G would protect 59,000 acres of murrelet-occupied sites in addition to occupied site buffers, emphasis areas, SHAs, priority areas identified by the Washington Department of Fish and Wildlife, and marbled murrelet management areas. Approximately, 23,619 acres of low quality marbled murrelet habitat (P-stage 0.25, 0.36) will be released for harvest in the first decade of implementing this alternative (FEIS, Table 4.6.2). Using habitat as a surrogate and applying the analytical framework in the FEIS, expected mitigation for marbled murrelets would exceed impacts by 10,380 adjusted acres (FEIS, Table 4.6.5).

Alternative H - Preferred Alternative

Under Alternative H, the preferred alternative, the Service would issue an amended Permit authorizing take of the Covered Species at the effect levels described in the FEIS (Section 4.6). Alternative H includes approximately 604,000 acres of long-term forest cover (FEIS, Table 4.6.5). Alternative H would protect 59,000 acres of murrelet-occupied sites and 20 SHAs as well as meter (delay) the harvest of 5,000 adjusted acres in the first decade of implementing this alternative. Alternative H also applies 328-foot (100 meter) buffers on all murrelet-occupied sites. Approximately 33,030 acres of low quality marbled murrelet habitat (P-stage 0.25, 0.36) and 5,017 acres of high quality marbled murrelet habitat (P-stage 0.47-0.89) will be released for harvest in the first decade of implementing this alternative (FEIS, Table 4.6.2), minus the 5,000 acres that will be metered into the second decade. Using habitat as a surrogate and applying the analytical framework in the FEIS, expected mitigation for marbled murrelets would exceed impacts by 809 adjusted acres (FEIS, Table 4.6.5).

The proposed HCP Amendment is best represented by Alternative H in the FEIS. The only difference between the proposed HCP Amendment and Alternative H is that the amendment includes 908 more acres of marbled murrelet-specific conservation acres in three SHAs in southwest Washington. Most of these acres are considered "security forest;" approximately 10 acres is considered marbled murrelet habitat.

Decision and Rationale

The Service's decision is to select the proposed action, which is to execute the ITP Amendment and approve the HCP Amendment in order to facilitate implementation of the LTCS for the benefit of murrelets. The proposed action was analyzed as Alternative H in the FEIS. The ITP Amendment will also include any terms and conditions that the Service deems necessary to ensure that HCP mitigation, financial assurance, and other WDNR commitments are met. Based on the analysis in the FEIS, our biological opinion (Service 2019a), our ESA Section 10 Findings and Recommendations (Service 2019b), this ROD, and other information in the administrative record, the Service determined that the proposed action is not likely to appreciably reduce the likelihood of the survival and recovery of the Covered Species in the wild, and that it complies

with all other ESA Section 10 permit issuance criteria set out in 16 U.S.C § 1539(a)(1)(B). Implementation of the final Amendment and issuance of an amended ITP best fulfills the Service's statutory mission and responsibilities while meeting the agency's purpose and need to conserve listed species.

Permit Conditions

Consistent with Section 10(a)(1)(B) of the ESA, the ITP Amendment requires implementation of the HCP Amendment to insure that the impacts of take of the Covered Species caused by Covered Activities will be minimized and mitigated to the maximum extent practicable. This requirement is also incorporated into the findings of the Service's biological opinion and ESA Section 10 Findings and Recommendations for the proposed action. Any further changes to the HCP shall be subject to the regulations in place at the time the changes are sought.

Conservation will be achieved primarily through deferring or avoiding Covered Activities in certain locations. Funding assurances for plan implementation remain unchanged by the HCP Amendment.

The Service will include terms and conditions in the ITP Amendment that are necessary to ensure that the conservation actions, monitoring, adaptive management, and plan implementation are sufficient and consistent with the HCP Amendment. Such provision may include, without limitation, terms and conditions ensuring that (1) permanently-designated conservation areas are tracked and encumbered to ensure changes in land ownership do not impact the biological outcomes anticipated from implementing the HCP Amendment; (2) all 1997 HCP and HCP Amendment commitments for conservation, monitoring, adaptive management, funding, and reporting are complied with; and (3) incidental take of covered species resulting from timber harvest and timber harvest-related activities are reported annually to the Service in a form consistent with the Service's biological opinion addressing the HCP Amendment.

Environmentally Preferable Alternative

The NEPA implementing regulations at 40 CFR 1505.2(b) require that the ROD identify the alternative or alternatives that is/are considered to be "environmentally preferable," i.e., the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources, as expressed in Section 101(b) of NEPA (43 CFR 46.30).

The Service identifies Alternative G as the environmentally preferable alternative, or the alternative that causes the least damage to the biological and physical environment and best protects, preserves and enhances historical, cultural and natural resources. Alternative G protects all existing high quality murrelet habitat, conserves and buffers all known murrelet-occupied sites, and creates and protects SHAs and emphasis areas in strategic locations known to be important to marbled murrelets.

Public Involvement

Scoping

On September 15, 2006, the Service published a Notice of Intent in the Federal Register (FR) to conduct public scoping and prepare a joint EIS on this permit action (71 FR 54515). On the same date, WDNR published a Determination of Significance and Public Scoping Notice under the State Environmental Policy Act (SEPA), indicating that an EIS would be prepared. The geographic scope of the proposal at that time included the Olympic Experimental State Forest, Straits, South Coast, and Columbia HCP planning units only.

After the public scoping notices were published, WDNR and the Service held four public meetings on the following dates and at the following locations in western Washington:

- September 25, 2006: Olympic Natural Resources Center, Forks
- September 28, 2006: Natural Resources Building, Olympia
- October 4, 2006: Willapa Harbor Community Center, South Bend
- October 5, 2006: Lacey Community Center, Lacey

Ten scoping comments were received during the scoping comment period (September 15 through October 30, 2006). WDNR decided not to proceed immediately with development of the EIS for the LTCS because of an economic downturn and resulting budget cuts.

In January 2012, the Service and WDNR jointly resumed development of the EIS for the LTCS pursuant to their respective authorities under NEPA and SEPA, and reinitiated and expanded public scoping due to the passage of time since the original scoping notices were published. Subsequently, the two agencies prepared a statement of need, purpose, and objectives consistent with their respective authorities in order to facilitate the identification of a reasonable range of alternatives for consideration in the EIS.

Scoping for the preparation of the 2016 draft EIS (DEIS) was conducted in two, 30-day phases. Phase 1 was initiated on April 20, 2012, when WDNR published a Public Scoping Notice and the Service published a Notice of Intent in the FR to conduct scoping (77 FR 232743). In Phase 1, WDNR and the Service requested additional public comments (over and above those received in the 2006 scoping process) related to: a proposed statement of need, purpose, and objectives; a reasonable range of alternatives; impacts that should be considered; and environmental information relevant to the analysis of the LTCS. Based on consideration of public comments, WDNR expanded the geographic scope of the proposed ITP Amendment and HCP Amendment to include the North and South Puget HCP planning units. Following the publication of these Notices, WDNR and the Service held four public meetings on the following dates and at the following locations in western Washington:

• April 30, 2012: Natural Resources Building, Olympia

- May 3, 2012: Northwest Region Office, Sedro Woolley
- May 8, 2012: Cathlamet County Courthouse, Cathlamet
- May 9, 2012: Olympic Region Office, Forks

In all, about 2,040 individual comments were received during the Phase 1 scoping period (April 20 through May 21, 2012). At a Board of Natural Resources (Board) meeting in August of 2012, the Board approved the "need, purpose, and objectives" statement for inclusion in the 2016 DEIS. Subsequently, WDNR and the Service decided to conduct a second phase of scoping. To that end, on May 13, 2013, WDNR published a "Notice of Public Meetings and Request for Comments on the Scope of an Environmental Impact Statement." Though not required under SEPA or NEPA, Phase 2 scoping increased the opportunities for the public to learn about and provide input into the murrelet LTCS process. In Phase 2, WDNR and the Service solicited public comments on a set of conceptual alternatives for the LTCS. During Phase 2, WDNR and the Service held four public meetings on the following dates and at the following locations in western Washington:

- June 5, 2013: Natural Resources Building, Olympia
- June 10, 2013: Northwest Region Office, Sedro Woolley
- June 12, 2013: Olympic Region Office, Forks
- June 19, 2013: Pacific County Courthouse Annex, South Bend

During the Phase 2 scoping period (May 13 through July 1, 2013), 1,976 individual comments were received regarding the conceptual alternatives. After considering all public comments received in the scoping process, the scope of issues for consideration in the 2016 DEIS was narrowed. Appendix A of the 2016 DEIS contains the scoping summary report provided to the Board.

In addition to the formal scoping process, WDNR presented draft alternatives to the Board on October 15 and December 3, 2015. Public comment received during those meetings were also considered and summarized in Appendix A of the 2016 DEIS.

Draft EIS

Following scoping, WDNR and the Service developed a set of management alternatives through a collaborative process. The alternatives that were identified represented a range of different management options and reflected the ideas and concerns raised by the public and stakeholders during the entire scoping process. WDNR and the Service then jointly prepared the 2016 DEIS (WDNR and Service 2016). The 2016 DEIS analyzed a reasonable range of alternatives to identify potential environmental impacts and mitigation measures under both the NEPA and SEPA processes.

On December 9, 2016, a Federal Register Notice of Availability (81 FR 89135) was published for the 2016 DEIS that initiated a 90-day public comment period in accordance with the requirements of NEPA. A Notice of Availability under SEPA was published on November 18, 2016. The 2016

DEIS analyzed six alternatives for a LTCS for the marbled murrelet on WDNR-managed lands. The 2016 DEIS did not specify a preferred alternative for the LTCS. Following publication of these Notices, WDNR and the Service held four public meetings on the following dates and at the following locations in western Washington:

- January 10, 2017: NW Region Office, Sedro Woolley
- January 12, 2017: Whitman Middle School Auditorium, Seattle
- January 17, 2017: Port Angeles High School, Port Angeles,
- January 19, 2017: Julius A. Wendt Elementary School, Cathlamet

Over 5,000 individual comments were received during the comment period. Comments carne in the form of individual letters, form letters, postcards, and emails. Some commenters supported one of the alternatives analyzed, some suggested new alternatives, and others suggested changes to what was analyzed in the 2016 DEIS and what should be included in a subsequent analysis. In the FEIS, WDNR and the Service responded to all public comments received on the 2016 DEIS.

Revised Draft EIS

A Revised DEIS (RDEIS) (WDNR and Service 2018) was developed in response to public comments on the DEIS. A considerable portion of the text from the 2016 DEIS was used directly in the RDEIS. However, some key changes were made in the RDEIS. For example, the Purpose and Need statements in Chapter 1 were separated by agency. Two new alternatives were added (Alternative G and Alternative H), and the document also included new and updated analyses. The discussion of murrelet conservation measures was updated, and additional changes were made in response to public comments on the DEIS. Minor changes were made to the population viability analysis. For a description of changes made between the DEIS and RDEIS, refer to the RDEIS ("Changes between the DEIS and RDEIS" at the end of chapter 1, and Appendix O).

60-day comment period for the RDEIS began on September 7, 2018. The comment period was extended for an additional 30 days and closed on December 6, 2018. The comment period provided the public with the opportunity to comment on the RDEIS and the draft HCP Amendment. WDNR and the Service held four public meetings on the following dates and at the following locations in western Washington:

- October 9, 2018: Rainforest Arts Center, Forks
- October 11, 2018: River Street Meeting Room, Cathlamet
- October 15, 2018: Ballard Library Meeting Room, Seattle
- October 17, 2018: Burlington Public Library Rotary Community, Burlington

Approximately 4,300 individual comments were received during this comment period. Comments came in the form of individual letters, form letters, postcards, emails, and online through a survey-type comment portal. In the FEIS, WDNR and the Service responded to all public comments received on the 2018 RDEIS.

Final EIS

Following the public comment period on the RDEIS and the draft HCP Amendment, WDNR and the Service reviewed the comments received and prepared the FEIS. WDNR also prepared and proposed its final HCP Amendment (Appendix Q). The HCP Amendment is represented by Alternative H in the FEIS. Alternative H is the WDNR's and the Service's preferred alternative, as noted in the FEIS.

A considerable portion of the FEIS is identical to the RDEIS, though some data updates were made as well (refer to FEIS, "Changes between the RDEIS and the FEIS" at the end of Chapter 1). Additionally, the appendices were updated and several new appendices were added in response to public comments, including summaries of comments received on the DEIS and RDEIS and responses to those comments (FEIS, Appendix S).

The availability of the FEIS was noticed in the Federal Register on September 27, 2019 (84 FR 51172). After the FEIS was published, a total of six public comments were received from the Environmental Protection Agency, the Washington Department of Fish and Wildlife, the Marbled Murrelet Coalition, the Wildlife Diversity Council, and two private citizens. The Service considered these comments and determined that they did not represent new and/or substantive information that had not been raised during previous comment periods on the DEIS and RDEIS and responded to in the FEIS (FEIS Appendix S).

Recommendation on Permit Issuance

Based on the foregoing findings with respect to the proposed action, I recommend approval of the issuance of ITP Amendment TE812521-1 in accordance with the final HCP Amendment.

Actin Deputy Regional Director

NOV 1 4 2019

Date

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