

**FINDING OF NO SIGNIFICANT IMPACT**  
**Regarding Proposed Issuance of an Endangered Species Act Section 10(a)(1)(A) Permit for Enhancement of Survival of the Marbled Murrelet (*Brachyramphus marmoratus*) in conjunction with the Weyerhaeuser Timber Holdings, Inc, Safe Harbor Agreement in Western Washington**

The U.S. Fish and Wildlife Service (Service) is proposing to issue a section 10(a)(1)(A) Enhancement of Survival Permit (Permit) under the Endangered Species Act of 1973, as amended (16 USC 1531 *et seq.*) (ESA) to the Weyerhaeuser Timber Holdings, Inc. including its affiliates and subsidiaries (collectively, the Applicant). The Permit would authorize taking of the threatened marbled murrelet (*Brachyramphus marmoratus*) (murrelet) in association with the implementation of a Safe Harbor Agreement (SHA) by the Applicant within the range of the murrelet in Western Washington. The Applicant prepared the SHA for the conservation of murrelets and will implement the SHA to produce a net benefit for murrelets. The Applicant requested a permit term to expire in 2056, to coincide with the expiration of the associated Washington Forest Practices Habitat Conservation Plan.

On February 9, 2023, the Service published final revisions to the regulations for ESA section 10(a)(1)(A) and (B) (88 FR 8380), which went into effect on May 13, 2024. Among other changes and clarifications, the revised regulations simplify the requirements for Enhancement of Survival Permits by combining Safe Harbor Agreements and Candidate Conservation Agreements with Assurances into one agreement type, now known as a Conservation Benefit Agreement. As applications that were in process and published in the Federal Register prior to the effective date of this rule are not required to meet the new regulatory requirements, this application will be processed as an SHA.

The proposed issuance of a Permit by the Service is a Federal action that may affect the human environment, and therefore, is subject to review under the National Environmental Policy Act of 1969, as amended (NEPA; 42 U.S.C. §§ 4321 *et seq.*). An Environmental Assessment (EA) addressing the proposed Permit action, hereby incorporated by reference, analyzed the effects to the human environment from three alternatives: a No Action alternative, a Proposed Action alternative, and an alternative SHA with Additional Set-Asides. This EA was developed in accordance with implementing regulations in effect after April 2022 (i.e., Council on Environmental Quality regulations at 40 CFR Parts 1500-1508, as amended April 20, 2022, 87 FR 23453, and the Department of Interior NEPA regulations at 43 CFR Part 46). We considered the changes to NEPA as amended by the Fiscal Responsibility Act of 2023, and determined the EA was consistent with those changes as written. We also considered the regulatory changes proposed by CEQ on July 31, 2023 (88 FR 49924) and finalized on May 1, 2024 (89 FR 35422). As these changes are not required to be applied to NEPA processes that began before July 1, 2024 (see 40 CFR 1506.12)(2024), citations to CEQ regulations in this document are to the regulations in effect before the 2024 revisions.

**Decision Rationale**

For purposes of NEPA compliance, preparation of an Environmental Impact Statement (EIS) is required for actions likely to have significant effects on the human environment (40 CFR

1501.3(a)(3)). Following a detailed review of the EA and the SHA, the Service has determined that implementation of the Proposed Alternative is not expected to result in any significant adverse effects to the human environment. In reaching that determination, the Service considered relevant criteria consistent with NEPA regulation (40 CFR § 1501.3) and Service policy (550 FW 3), including the following findings:

- No significant impacts to the marbled murrelet are expected, in part because implementation of the SHA is expected to provide a net conservation benefit to the murrelet. Applicable monitoring and compliance provisions are detailed in the SHA.
- No significant impact to any other species of fish and wildlife were identified.
- No significant impacts to the human environment including climate, aquatic resources, geology and soils, vegetation, land use and ownership, cultural resources, or socioeconomics and environmental justice, were identified.
- There is no known controversy over environmental effects (e.g., major scientific or technical disputes or inconsistencies over one or more environmental effects).
- There are no changes in Service policy having a major positive or negative environmental effect.
- There are no precedent-setting actions with wide-reaching or long-term implications (e.g., special use permits for off-road vehicles, mineral extraction, or new road construction). The proposed action to issue a section 10(a)(1)(A) Enhancement of Survival Permit is consistent with Service policy and precedent both locally and nationally.
- There are no major alterations of natural environmental quality that may exceed local, State, or Federal environmental standards.
- Implementation of the SHA is not anticipated to affect public health in any way.
- Nothing in this SHA or related federal decisions is a statement of the Applicant's compliance with state Forest Practices rules as they relate to the set aside of lands, also referred to as Forests Practices HCP riparian buffers. Site-specific procedures to comply with the Forest Practices HCP, as it may be adapted over time, may alter the riparian buffers that underpin the proposed SHA, so the SHA establishes a floor below which riparian buffers may never dip while implementing the Forest Practices HCP and the proposed SHA on the subject lands. The SHA does not establish a limit on any adaptive management or compliance procedure under the Forest Practices HCP.
- There are no adverse effects on designated or proposed natural or recreation areas.
- There will be no removal from production of prime and unique agricultural lands, as designated by local, regional, State, or Federal authorities.
- There are no adverse effects on municipal, industrial, or agricultural water supply or quality; or major consumptive use or other long-term commitments of water.
- There is no condemnation of property rights or fee title to land; or large-scale relocation of people, homes, commercial, industrial, or major public facilities.

As described further in the Findings and Recommendations document, the Service selected the Proposed Alternative because it meets the purpose and need identified in the EA and the issuance criteria for issuance of a Permit, including providing a net conservation benefit for the murrelet per Service SHA policy:

- The proposed SHA will provide a net conservation benefit for the murrelet through the voluntary protection of Occupied Sites, Murrelet Habitat Development Areas, and Presumed Habitat for the murrelet on Enrolled Lands. Outside of known Occupied Sites, Presumed Habitat is the highest quality habitat for the murrelet on the Enrolled Lands, and is likely to be subject to harvest under the baseline condition. By protecting high-quality habitat and areas that will develop into high-quality habitat that would otherwise be harvested, this SHA will be contributing to the recovery of the species above and beyond baseline conditions, such that more murrelets are expected to occupy the Applicant's Enrolled Lands in by the end of the permit term with this SHA than without this SHA. In return, the Service will assure the Applicant that they will not be subjected to increased property-use restrictions while the Permit remains effective as a result of their efforts to either attract the marbled murrelet to their property or to increase the numbers or distribution of the species already on their property. The impacts of the anticipated take resulting from SHA implementation are not expected to outweigh the benefits resulting from the protection of habitat under the proposed SHA.
- The proposed SHA would result in the harvest of 25 percent of the potential habitat for murrelets on Enrolled Lands without the surveys currently required to avoid take. However, the impacts of this take are offset by the protection of Occupied Sites, Murrelet Habitat Development Areas, and Presumed Habitat. Potential habitat released for harvest under the proposed SHA consists of small fragmented patches dispersed across the Enrolled Lands.
- The protection of Presumed Habitat and Murrelet Habitat Development Areas in the SHA in combination with the Forest Practices HCP Buffers is projected to result in an increase in murrelet habitat from 12,652 acres (2 percent) to 21,117 acres (3.3 percent) of the Enrolled Lands (637,021 acres) over the term of the SHA.

## **Description of the Considered Alternatives**

### ***No Action Alternative***

Under this alternative, the Service would not take the proposed Federal action of issuing the requested Permit. The Applicant would continue to conduct forest practices in compliance with current Washington State Forest Practices Rules (including rules for operating in marbled murrelet habitat) and the proposed SHA would not be implemented. When the Applicant plans timber harvest or associated activities in potential murrelet habitat (WAC 222-10-042; WAC 222-16-087), they would conduct protocol surveys for murrelets and harvest any habitat areas determined to be unoccupied, excluding areas already reserved under the Washington Forest Practice Rules for other reasons. We estimated that 28 percent of existing potential habitat (3,527 acres, including 404 acres of Presumed Habitat) would be harvested in absence of the Permit and

SHA (EA, pp. 54).

### ***Proposed Action Alternative***

The proposed action is the issuance of the requested Permit authorizing take of murrelets until 2056, based on the proposed SHA. The Applicant would implement the proposed conservation program under the SHA, which would provide a net conservation benefit for murrelets across the Enrolled Lands. Under the Proposed Action alternative the Applicant would defer harvest of 494 acres of Presumed Habitat, defined as forest stands within Enrolled Lands that have an estimated age class of 210 years old or greater for western hemlock-dominant stands or 250 years old or greater for Douglas Fir-dominant stands (EA, pp. 11). In addition, 64 acres of Murrelet Habitat Development Areas would be protected from harvest during the life of the SHA. However, the Proposed Action alternative would also remove pre-harvest murrelet survey requirements for all other categories of potentially suitable habitat within the proposed Enrolled Lands. Approximately 852 acres (105 acres in Forest Practices HCP buffers and 747 acres in Adjacent Forests) of More-Likely-Than-Not and Marginal Habitat would trigger a survey under current regulations. However, these habitat types are less likely to contain suitable murrelet nesting habitat compared to Presumed Habitat. In summary, the Proposed Action Alternative to issue a Permit and SHA would defer the harvest of 494 acres of Presumed Habitat and 64 acres of Murrelet Habitat Development Areas on the Applicant's lands. The voluntary protection of Occupied Sites, Presumed Habitat, and Murrelet Habitat Development Areas under the proposed action, combined with other habitat areas that are protected in the Forest Practices HCP Buffers, is expected to maintain more acres of existing potential murrelet habitat on the landscape that would otherwise be harvested under existing regulations and, in that way, provide a net conservation benefit to the species.

The proposed SHA is based on the foundation of conservation provided through the existing protections of riparian forests and unstable slopes in the Forest Practices HCP Buffers. Under all alternatives, habitat in the Forest Practices HCP Buffers will continue to provide positive benefits to murrelets over the long-term by increasing the total amount of potential nesting habitat available for murrelets within the Enrolled Lands. For Occupied Sites, SHA Occupied Sites, Presumed Habitat, and Murrelet Habitat Development Areas, the Applicant will receive no take assurances for return to baseline.

### ***Alternative SHA with Additional Set-Asides***

This alternative is essentially identical to the Proposed Alternative (the Proposed Action), with the additional voluntary conservation of 2,515 acres of unique sites, both forested and non-forested, with perceived high conservation value. Components of this alternative that differ from the Proposed Action Alternative are deferment of harvest within Special Sets-Asides (SSA) for the term of the Permit and provisions for protecting new Occupied Sites discovered in the Enrolled Lands during the term of the Permit that differ from the protections required under the Forest Practices Rules (No Action). In exchange for providing additional retention of some or all existing Potential Nesting Habitat within SSAs, the Applicant would be provided take coverage for all of the Applicant's owned lands in Washington.

## **Public Involvement and Review**

A Notice of Availability (NOA) for the Weyerhaeuser SHA, the Permit application, and the draft EA, was published with a request for public review and comments in the Federal Register on October 12, 2022 (87 FR 61625). The NOA described the proposed Federal action (i.e., issuance of a Permit) and the purpose and need for the action. The public comment period extended for 30 days and closed on November 14, 2022.

The Service received 21 comment letters on the draft SHA and EA during the 30-day public comment period (Appendix A). A subset of the comments received were substantial. Most of the substantive comments focused on the net conservation benefit standard and calculation, the proposed elimination of murrelet surveys on covered lands, the potential loss of habitat other than Presumed Habitat, concerns about take of marbled murrelets, and questions about whether SHAs are appropriate for these situations. Additional comments, especially from the forestry industry, were supportive of the proposed actions. The summary of the comments received and our responses is attached to this document (Appendix B). The Applicant revised language in the SHA to address a comment about notification following a catastrophic event like a windstorm or fire. The Service made minor technical corrections and clarifications but did not substantively revise the EA as a result of comments received.

## **Conclusions**

Based on review and evaluation of the information contained in the supporting documents, we have determined that the Proposed Action alternative is not a Federal action that would significantly affect the quality of the human-environment, within the meaning of section 102(2)(I) of the National Environmental Policy Act of 1969, as amended. The actions considered are not of a nature that would normally require preparation of an environmental impact statement, and are not a type, context, or intensity that is without precedent.

Accordingly, the Service is not required to prepare an environmental impact statement for this action. Therefore, the Service has made a Finding of No Significant Impact as allowed by NEPA regulation and supported by Council on Environmental Quality guidance.

This Finding of No Significant Impact and supporting documents are on file and available for public inspection, by appointment, at the following U.S. Fish and Wildlife Office:

Washington Fish and Wildlife Office  
510 Desmond Dr SE, Suite 102  
Lacey, WA 98503

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Assistant Regional Director,  
Ecological Services – Pacific Region  
U.S. Fish and Wildlife Service

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Date

**APPENDIX A: PUBLIC COMMENTS RECEIVED ON THE WEYERHAEUSER SAFE HARBOR  
AGREEMENT**

## **APPENDIX B: RESPONSES TO PUBLIC COMMENTS RECEIVED ON THE WEYERHAEUSER TIMBER HOLDINGS, INC., SAFE HARBOR AGREEMENT**

A Notice of Availability (NOA) of the Weyerhaeuser Timber Holdings, Inc. (the Applicant) Safe Harbor Agreement (SHA), the Enhancement of Survival Permit (Permit) application, and the U.S. Fish and Wildlife Service's (Service, or USFWS) draft Environmental Assessment was published with a request for public review and comments in the *Federal Register* on October 12, 2022 (87 FR 61625). The NOA described the proposed Federal action (i.e., issuance of the Permit to the Applicant) and the purpose and need for the action. The public comment period extended for 30 days and closed on November 14, 2022. The Service received 21 comment letters on the draft SHA and draft EA during the 30 day public comment period.

Comments were received from the following individuals and organizations:

<b>Name</b>	<b>Organization</b>	<b>General nature of comments</b>
Judi Mandi	Private individual	Prefers the No Action alternative
Art Homer	Private individual	Prefers the No Action alternative
Denise Garoutte	Private individual	Prefers the No Action alternative
Kathy Montagne	Private individual	Prefers the No Action alternative
Res0glf5	Private individual	Prefers the No Action alternative
Cindy Mitchell	Washington Forest Protection Association	Supports the Proposed Action alternative.
MC Campbell	Private individual	Prefers the No Action alternative
Cathy Bergman	Private individual	Prefers the No Action alternative
Jason Spadaro	Broughton Lumber Company	Supports the Proposed Action alternative.
Noah Greenwald and Sophia Ressler	Center for Biological Diversity	Prefers the No Action alternative.
Hannah Anderson	Washington Department of Fish and Wildlife (WDFW)	No preferred alternative identified. Substantive comments submitted regarding the Proposed Action.
Danny Kelly-Stallings	K&L Gates, on behalf of the Applicant	Supports the Proposed Action alternative.
Karimah Schoenhut	Sierra Club	No preferred alternative identified. Substantive comments submitted regarding the Proposed Action.
Jennifer Bakke	Manulife Investment Management	Supports the Proposed Action alternative
Timothy Manns	Skagit Audubon Society	Prefers Alternative 3 over the Proposed Action with caveats. Substantive comments submitted regarding the Proposed Action.
Lindsay Adrean	American Bird Conservancy	Prefers the No Action alternative

Tom Wheeler	Environmental Protection Information Center (EPIC)	No preferred alternative identified. Substantive comments submitted regarding the Proposed Action.
William Murray	National Alliance of Forest Owners (NAFO)	Supports the Proposed Action alternative



**Comment 1**

*“{T}he current proposal does not provide enough evidence to support the conclusion that a net conservation benefit will be realized for murrelets as a result of this SHA... In light of this finding, American Bird Conservancy can only support Alternative 1: No Action Alternative presented in the EA.”* (American Bird Conservancy pp. 1, 3)

**Response**

Net conservation benefits expected to occur as a result of the proposed SHA are described in the SHA document on pages 23-26. The net benefits fall into two primary categories: Voluntary protection of “Presumed Habitat” and protection of designated “Murrelet Habitat Development Areas.” As noted in the EA (pp. 59-61), these areas are likely to be harvested under the No Action alternative. Potential Marbled Murrelet Nesting Habitat as defined on p. 7 of the SHA is projected to increase in the covered lands over the term of the SHA, as 64 acres of Murrelet Habitat Development Areas (those with a younger stand age that are not considered Presumed Habitat) are set aside as no harvest so that they may develop into murrelet nesting habitat.

Continued protection of “Occupied Sites” as defined in this SHA is also considered a net benefit, because as noted in the EA (p. 54), 1,240 acres of Occupied Sites would become no harvest zones whereas, under the No Action Alternative, they potentially could be harvested under a Class IV-Special Forest Practice application or a federal HCP. Under the Class-IV-Special regulations, WDNR makes a decision to approve individual Forest Practices Applications based upon a significance determination. Class-IV-Special regulations would not permit harvest in an occupied area; however, where occupancy is not otherwise known, a stand of suitable habitat could be surveyed, and if found negative for murrelet occupancy, harvested under these regulations. The SHA protects all areas identified as Occupied Sites now for its entire term, as well as any future SHA Occupied Sites that are identified during the term of the SHA.

The conservation benefits described under this SHA align with the examples provided in the Announcement of Safe Harbor Policy Part 4, which states that “Conservation benefits from Safe Harbor Agreements include... the maintenance, restoration, or enhancement of habitats.”

**Comment 2**

***Several commenters requested clarity on the role of the Forest Practices HCP in the SHA analysis.***

*“Protection of the Forests & Fish Buffers is presented as support for a net conservation benefit. In fact, these lands are already protected under Washington’s Forest Practices Rules without the proposed SHA and should not be used in calculating the benefit of the proposal to murrelets.”* (American Bird Conservancy p. 1)

*“Some of the Presumed Habitat occurs in existing F&F Buffers that are defined and managed for listed fish conservation according to the Forest Practices Habitat Conservation Plan and Incidental Take Permit. Conservation of maturing forests derived through F&F Buffers is an existing condition under FP Rules; It is not clear that the SHA provide additional conservation benefit in these buffers through Presumed Habitat conservation.”* (WDFW p. 3)

*“Conservation Benefits: The wording could be interpreted to say that management under the*

*pre-existing Forest and Fish Buffers (apparently codified in Washington Forest Practice Rules) are a benefit of the SHA. While laudable, are these not part of the SHA baseline? If so, make clear that Forest and Fish Buffers are benefits of the baseline, not SHA benefits.”*  
(EPIC p. 1)

### **Response**

Implementation of the proposed individual SHA is intended to maintain the habitat protections of the baseline as well as provide a net conservation benefit for the marbled murrelet over and above those benefits that are accruing through the Applicant’s growing, protecting, and restoring mature and complex forest stands that are retained in riparian buffers, channel migration zones, and on unstable slopes through compliance with Washington’s Forest Practices Program (EA p. 1). The Applicant’s proposed SHA provides a net conservation benefit to the species by committing to no harvest in ‘Presumed Habitat,’ ‘Occupied Sites,’ and ‘Murrelet Habitat Conservation Areas’ on the Applicant’s Enrolled Lands.

### **Comment 3**

***Several commenters noted that the likelihood of detecting SHA Occupied Sites is low, because the Applicant will not be conducting surveys for marbled murrelets on the Enrolled Lands, and therefore SHA Occupied Sites would not contribute to a net conservation benefit.***

*“Protection of new SHA Occupied Sites is included as evidence of a net conservation benefit, however there is no methodology outlined as to how new SHA Occupied Sites will be identified. An end result of SHA implementation is that the Applicant will no longer be required to conduct Marbled Murrelet surveys on Enrolled Lands. Therefore, based on the information provided in this proposal, it is unlikely that new SHA Occupied Sites would be identified and contribute to a net conservation benefit... The methods used to survey lands for murrelet occupancy are not presented, so it is not possible to determine the adequacy of the survey methods or if the Occupied Sites represent the only Occupied Sites that exist in the proposed Enrolled Lands. It is important to know how many years of surveys were conducted, in what areas, and in what years. There may be additional Occupied sites within the Enrolled Lands of this proposal that are not included for protection if surveys were not conducted at all or were conducted in years of poor breeding conditions when few murrelets attempted nesting. If additional Occupied Sites exist in the Enrolled Lands that are not documented here, this would negatively affect the amount of conservation benefit provided by this proposal”*

(American Bird Conservancy p. 1)

*“We also note the following statement in the draft EA: “Any Occupied Sites that are documented after the date of the authorization of the proposed SHA would be classified as ‘SHA Occupied Sites.’ The Applicant will cooperate with USFWS to verify the status and location of any SHA Occupied Site. Clearly, any site which becomes occupied during the duration of the SHA should receive the same protection as the Occupied Sites known at the start of the SHA, but the provision above concerning surveys leaves the discovery of newly occupied sites up to the applicant. And the provisions of the SHA exempt the applicant from having to do surveys. Thus, the likelihood that newly occupied sites would be found and reported to the USFWS would appear to be small.”*

(Skagit Audubon Society p. 3-4)

*“The applicant’s mechanism for SHA Occupied Sites (new) is ‘discovery.’ The applicant did not reference or commit to methods consistent with practices on lands managed under FP Rules to*

*identify SMMH, conduct habitat assessments, and/or conduct formal murrelet surveys (i.e., PSG terrestrial protocol); the likelihood of determining murrelet occupancy is low without an intentional survey. To demonstrate commitment to create benefit, intentional surveys could document SHA Occupied Sites; those should be treated as Occupied Sites (state critical habitat) once detected and delineated using established methods as per FP Rules... However, under this SHA approach, there would be landscape level impacts on Adjacent Forests: further isolated existing Occupied Sites... eliminated opportunity to identify and conserve future SMMH and Occupied Sites (state critical habitat), and loss of habitat without evaluation of occupied sites newly identified under these SHA....By not requiring the FP Rules assessment to identify SMMH and apply current PSG methods and protocols on Enrolled Lands with this SHA, natural resources managers lose a reliable, consistent mechanism to detect and document murrelet occupancy behaviors to establish new Occupied Sites and inform recovery progress.”* (WDFW pp. 3-5)

*“Section 5.2, Conservation Measures: These are sites found to be Occupied after SHA permit issuance. While the wording is unclear, and the likelihood of these occurring unknown, the wording in this section indicates that the SHA would appear to treat these differently from Occupied Sites, and to allow harvest within them. If so, this is contrary to murrelet conservation. Recommend these be explicitly treated with no-harvest protections (and buffers), exactly the same as for ‘Occupied Sites’ (described in the first paragraph on this page, under ‘Conservation Measures Under this SHA’). In fact, elsewhere in the SHA (pg. 30, Baseline Stand Data), the wording suggests that SHA Occupied Sites will be protected the same as Occupied Sites. Section 12.2, Anticipated Take: If harvest is to be allowed in SHA Occupied Sites, then take associated with such harvest needs to be addressed in this section.”* (EPIC p. 1)

*“The failure of the draft SHA to require any surveys for marbled murrelet occupancy prior to the destruction of Potential Nesting Habitat is arbitrary and capricious, and cannot rationally be squared with ensuring a net conservation benefit to the species. This is particularly true as the draft SHA and EA do not contain sufficient information to demonstrate that there will be a net conservation benefit, and a major source of negative impacts from the agreement and proposed permit would be the extensive authorization of take by timber harvest activities across an enormous area, and the resultant destruction of as yet unknown, but currently existing, occupied habitat that would otherwise be protected by state law survey requirements and ESA section 9 prohibitions. The draft SHA and EA fail to provide adequate analysis to demonstrate a net benefit despite the destruction of that habitat. More broadly, under these circumstances, the failure of the draft SHA to include any mandatory survey requirements for the purposes of monitoring and ensuring compliance with the SHA and permit is arbitrary and capricious, and inconsistent with ESA section 10(a)(1)(A), the regulations thereunder, and the Safe Harbor Policy.”* (Sierra Club p. 27)

## **Response**

The likelihood of detecting SHA Occupied Sites is low, because the Applicant will not be conducting surveys for marbled murrelets on the Enrolled Lands (EA p. 62). However, it is possible for SHA Occupied Sites to be identified where surveys for murrelets occur on adjacent land ownerships (e.g., federal lands) and “Suitable Marbled Murrelet Habitat” extends onto to SHA-enrolled lands. This is why the Applicants have included SHA Occupied Sites in the

proposed SHA. SHA Occupied Sites will be treated the same as existing Occupied Sites in that they will not be harvested during the SHA term (regardless of whether there is continued occupancy) and the Applicant will receive no take assurances for return to baseline.

Because no additional surveys will be required under the SHA, no specific protocol is identified. The methods used to identify existing Occupied Sites are the methods required under the Forest Practices Rules and outlined in Forest Practices Board Manual Sections 14 and 15. Since 2004, WAC 222-12-090(14) has required that landowners use the Pacific Seabird Group protocol in effect January 6, 2003. The Applicant has used that protocol for any surveys since that became the applicable protocol. Before then, the Applicant used previously applicable protocols.

Continued protection of “Occupied Sites” as defined in this SHA is considered a net benefit, because as noted in the EA (p. 54), 1,240 acres of Occupied Sites would become no harvest zones whereas, under the No Action Alternative, they potentially could be harvested under a Class IV-Special Forest Practice application or a federal HCP. Under the Class-IV-Special regulations, WDNR makes a decision to approve individual Forest Practices Applications based upon a significance determination. Class-IV-Special regulations would not permit harvest in an occupied area; however, where occupancy is not otherwise known, a stand of suitable habitat could be surveyed, and if found negative for murrelet occupancy, harvested under these regulations. However, the primary net conservation benefit for this SHA is the voluntary protection of Presumed Habitat and Murrelet Habitat Development Areas, which are likely to be harvested under the No Action alternative (EA, pp. 59-61).

#### **Comment 4**

*“The SHA and associated permit should be preceded by a current survey. At several points the draft SHA and EA mention that the Enrolled Lands (i.e., the Weyerhaeuser acres to be included in the SHA) include 24 Occupied Marbled Murrelet Sites; that is, sites that meet the definition based on nests or sightings. We may have missed it, but we did not see in any of these mentions the date for when the survey(s) took place which established this number. It is explicitly stated that the applicant will not be required to do additional surveys before the requested permit is issued. A permit allowing takings of marbled murrelets ought not to be granted without a very recent survey to determine Occupied Sites. Further, by no longer requiring surveys the SHA would undercut the very basis of the approach the Washington Forest Practice Rules take to protecting the marbled murrelet: ‘Generally, the Washington Forest Practices Rules are designed to identify and protect occupied marbled murrelet habitat on nonfederal lands through habitat assessments, survey requirements and the SEPA review process.’”*

(Skagit Audubon Society, p. 3)

#### **Response**

The 24 Occupied Sites include all sites on the covered lands that were identified as occupied at any point in the past. The additional surveys recommended by the commenter would provide additional information to improve the planning certainty, but the Service cannot compel the applicant to conduct pre-permit work and must base decisions on the best available information.

#### **Comment 5**

*Several commenters request more information on how stand age was determined. They ask about the use of stand age as a proxy for murrelet habitat quality, and highlight differences*

***between the SHA-specific habitat definitions and existing Forest Practices definitions. Some commenters recommend that the use of stand age to approximate murrelet habitat results in an inadequate assessment of habitat and therefore does not appropriately inform the net conservation benefit of the SHA.***

*“The methods used to calculate stand age are not provided, so it is not possible to determine if the methods have relevancy for the Marbled Murrelet. For example, an assessment of nesting platform density would provide a better picture of habitat suitability in the context of murrelet needs than a stand age assessment that weights small trees vs. large trees in a manner that is biased against Marbled Murrelet nesting tree needs. Additionally, it is stated in the proposal that timber age classes were not calculated with precision. This furthers the need for disclosure of the methods.”*

*“...The amount of potential habitat loss as result of the SHA is not adequately presented. The EA states that “the amount of Suitable Marbled Murrelet Habitat as defined in WAC 222-16-060 [Washington Forest Practices Rules] on the Applicant’s Enrolled Lands is unknown because delineation of suitable habitat is determined on a site specific basis”. The Applicant does not provide the alternate methods used in the self-delineation of stand age and predominant stand type, so it is not known if the methods used are relevant to Marbled Murrelets or if the reported total amount of suitable habitat on the Enrolled Lands is accurate. An adequate assessment of the potential habitat loss as a result of this SHA is necessary to generate an estimate of the amount of incidental take that could occur and what the effect would be to the net conservation benefit of this proposal.”*

*(American Bird Conservancy pp. 1-2)*

*“We would also note the statement in the EA that, ‘The amount of ‘Suitable Marbled Murrelet Habitat’ as defined in WAC 222-16-060 on the Applicant’s Enrolled Lands is unknown, because the delineation of ‘suitable habitat’ is determined on site-specific basis.’ Yet, without this essential baseline information, the proposed agreement would waive survey requirements before harvest.”*

*(Skagit Audubon Society p. 3)*

*“In this letter, WDFW provides information to assist the applicant and USFWS in revising the proposed SHA to address the following key [concern]: refine baseline conditions description by habitat characteristics that are related to Marbled Murrelet occupancy and potential use rather than by stand age class alone.”*

*“...The use of SHA-unique definitions under Potential Nesting Habitat (Presumed Habitat, More-likely-than-not Habitat, Marginal Habitat) is problematic because those definitions do not align completely with the definition of SMMH, findings during Forest Practices Application (FPA) reviews, and WDFW documentation. To estimate areas of Potential Nesting Habitat in the Enrolled Lands, the Applicant uses existing inventory data for forest stand age and predominant stand type. These habitat categories are ‘loosely based’ on probability thresholds for murrelet use and occupancy cited in the DNR Longterm Conservation Strategy (2019) but ‘the concepts discussed in that document are not explicitly adopted or relied on’ by the SHA applicant. Strictly using stand age and inventory age to classify and define potential nesting habitat are problematic: 1) age inventory information can be incomplete or inaccurate, and 2) age class and inventory do not always reflect older and more structurally complex residual or legacy trees that can provide potential nesting structures within younger age classes.”*

*“Under USFWS SHA Policy, the applicant must identify management actions and time frames needed to achieve ‘net conservation benefits’ (64 FR 32718-23). The applicant describes their beneficial proactive activities as deferred harvest in Presumed Habitat, a subset of Potential Nesting Habitat by their definitions. While the stand ages in Presumed Habitat – HSC 210+ y.o. and DF forest types 250+ y.o. – can easily be considered potential nesting habitat (DNR Long Term Conservation Strategy 2019), age class does not entirely define SMMH and none of the Presumed Habitat has been described for functional value for Marbled Murrelet (interior forest, platform density).”*

*“...Washington state Forest Practices Rules (FP Rules) authority (WAC 222-16-080) addressing state critical habitat for Marbled Murrelets, Forest Practices Board Manual 15 focusing on murrelet habitat evaluation and delineation, and Forest Practices Applications (FPA) review performed by staff provide a good foundation of process and information that could improve this SHA in identifying suitable habitat for conservation benefit. The FP Rules for Marbled Murrelet provide a common language, mechanisms for identification of potential nesting habitat, and take avoidance and minimization measures through habitat assessment, subsequent surveys when Suitable Marbled Murrelet Habitat (SMMH; FP Rules definition) is identified, and protection of Occupied Sites and associated Occupied Site Buffers. These are the critical steps, negotiated by stakeholders during FP Rule development for making State Environmental Policy Act (SEPA) determinations with respect to FPAs which may have potential adverse impacts on Marbled Murrelets. FP Rules inform conservation and forest management practices and update state critical habitat locations. In contrast to the proposed SHA, the FP Rules provide concrete, proactive tools for conserving habitat for endangered Marbled Murrelets. This SHA proposes unique habitat definitions that diverge from current murrelet habitat knowledge and site delineation practice, could exempt the applicant from FP Rules-defined SMMH identification and related murrelet protocol surveys, and does not clearly show tangible conservation and recovery benefit beyond the current regulatory structure.”*  
(WDFW pp. 1-4)

*“More broadly, the draft SHA and EA fail to provide an adequate scientific basis for any of the habitat definitions in the SHA. Rather than provide a reasoned explanation relying on citations to reliable scientific information to explain the basis for the definitions for each classification, and for the treatment of the stands in those classifications, the draft SHA indicates that the definitions are ‘loosely based on science cited in the Washington Department of Natural Resources (“WDNR”) Long Term Conservation Strategy for Marbled Murrelets, but the concepts discussed in that document are not explicitly adopted or relied upon here.’ The draft SHA then directs the reader to the Final EIS for the WDNR Long Term Conservation Strategy ‘[f]or more detail regarding the scientific basis for these thresholds[.]’ Thus, after stating that it is only ‘loosely’ based on the scientific basis articulated in the Long Term Strategy, and indeed expressly refusing to adopt or rely upon the scientific rationales in the Long Term Strategy, the draft SHA bizarrely directs the reader to the FEIS for that Strategy document for ‘more detail’ about the classifications used in the SHA, rather than actually providing any explanation of the scientific basis for the SHA’s classifications.”*

*“...In evaluating the proposed SHA and permit, FWS must provide a rational explanation, supported by the best available scientific information, for the classification and treatment of forest stands with regard to the potential for nesting habitat, including occupied nesting habitat, to occur in those classifications, and an analysis of the impacts of protecting, authorizing take by timber harvest activities, and displacing survey requirements for areas within, and excluded from, those*

*definitions. The Safe Harbor Policy specifically states that FWS must use the “best available techniques and information” when establishing its estimates of baseline conditions. Prior to issuing a permit, FWS regulations in turn require FWS to find, among other factors, that the SHA complies with the Safe Harbor Policy. FWS therefore is obligated to ensure that its analysis utilizes “best available techniques and information.” The discussion of the SHA habitat classifications provided in the draft SHA cannot be relied upon to satisfy that obligation. Stating that the definitions are only “loosely” based on the scientific basis described in the Long Term Strategy implies that the definitions are based on other factors, aside from science, or based on an alternative scientific rationale. But those other factors, or other scientific rationale, are not articulated, let alone supported by citations to scientific information. Approval of the proposed SHA and take permit absent satisfaction of this requirement would be arbitrary and capricious, and fail to comply with the requirements of the ESA and the regulations thereunder.”* (Sierra Club Supp. Letter pp. 2-3)

## **Response**

The Applicant maintains stand age data in the regular course of business and used that data to identify presumed murrelet habitat. The Applicant has owned some of its land for 122 years and has a continuous inventory system that it uses to keep its stand age information up to date. In western Washington state, stand ages are usually determined as the number of years since planting or last harvest. When historic harvest information is not available, age is determined using an increment bore and counting annual rings to the trees pith for the dominant and co-dominant trees in a stand. See Burkhart et al. 2019 and Husch et al. 2003.

The Applicant provided the Service with GIS data for mapped Potential Marbled Murrelet Habitat on Enrolled Lands. The Service used the Maxent habitat model developed for the Northwest Forest Plan monitoring program to independently estimate the area of potential nesting habitat; At the landscape scale, the amount of modelled higher suitability habitat identified under the Northwest Forest Plan murrelet model is similar to the amount identified by the Applicant on the Enrolled Lands. This SHA reflects the best information available to Applicant at the time of submission, and as a result many of the delineations of stand age class made under this SHA may be provisional in nature and may change, with the consent of the Service, when more thorough delineations are made or better information becomes available.

The Service recognizes that there is some uncertainty associated with using stand age and stand type to represent potential murrelet nesting habitat. It is possible that stands in a specific age category may include small patches of residual older trees that are not represented in the average age data for a specific stand. Likewise, it is possible for potential nesting habitat (e.g., trees with suitable nesting platforms) to be present in younger forest stands than those used in this assessment. However, tree species composition and stand age are two types of readily available forest inventory data that can be used together to inform estimates of murrelet habitat. For example, in a separate project, the landscape-scale habitat classification model used on Washington Department of Natural Resources forestlands relies on forest inventory data such as forest type, stand origin, and stand age to estimate the location and potential quality of murrelet habitat (WDNR and Service 2019, p. 2-5). This model shows a correlation between tree species/stand age and habitat quality for murrelets, such that stands of Douglas-fir over 250 years old are classified as High Quality Marbled Murrelet Habitat (WDNR and Service 2019, p. E-6).

Older stands contain not only larger trees, but also old-growth characteristics such as large diameter branches with deformities and moss/detritus that provide nesting platforms.

Since the delineation of Suitable Marbled Murrelet Habitat as defined in WAC 222-16-060 is determined on a site-specific basis, the SHA utilizes tree species and age class to identify areas of “Potential Marbled Murrelet Habitat” on the enrolled lands, with old-forest stands that are presumed to contain at least 95 percent “Suitable Marbled Murrelet Habitat” (EA p. 39). The focus on age class rather than surveys is similar to the methodology employed in WDNR’s Long Term Conservation Strategy, which relates tree species and stand age to habitat quality for marbled murrelets (Raphael et al. 2008, p. ES-24; WDNR and USFWS 2019, p. 2-6). In that project, age class thresholds were used to predict, in advance, the likelihood of habitat rather than conducting individual surveys. Similar to the proposed action, the Service considered the use of stand age and species as an appropriate surrogate for murrelet habitat at the limited scale of the analysis area. Additionally, the intensive management history results in a non-random age distribution heavily biased toward structurally young forests. This SHA will provide more protections than the current regulations, because harvest can occur on SMMH under the FP rules but harvest cannot occur on Presumed Habitat identified in the SHA; We estimate that 3,527 acres of Potential Nesting Habitat would likely be available for harvest under current regulations, but only 3,169 acres would be available under the SHA.

#### **Comment 6**

***Several commenters pointed out that the SHA’s definition of Potential Nesting Habitat excludes stands with a 25% likelihood of containing SMMH. They comment that take is not adequately analyzed because the analysis does not include age classes that could potentially support murrelet occupancy.***

*“In this letter, WDFW provides information to assist the applicant and USFWS in revising the proposed SHA to address the following key [concern]: revise the incidental take analysis to include all age classes known to support murrelet occupancy.”*

*“...The SHA Potential (Presumed, More-Likely-Than-Not, and Marginal, combined) Nesting Habitat excludes stand ages HSC less than 93 y.o. and DF forest types less than 134 y.o. that in many areas in Washington have been documented to provide FP Rules-defined SMMH with nesting platforms at sufficient density to provide nesting opportunity (WDFW Marbled Murrelet Database). In Washington, FP Rule-defined structural characteristics that may warrant assessment for potential Marbled Murrelet occupancy surveys are known to occur in HSC stands at about >70 y.o. and DF types >120 y.o. Many Occupied Sites documented in southwest Washington on DNR lands have been associated with HSC stands in the Stem Exclusion stage with a modeled probability of occupancy being less than or equal to P-stage 0.25 (Raphael et al. 2008: Figure 4-1, ‘Model Averaged Predicted Probability of MM Occupancy...’; LTCS 2019). The equivalent age class of the P-stage 0.25 threshold is about 70 y.o. (LTCS 2019). Numerous Occupied Sites identified through surveys in the DNR model (Raphael et al. 2008: Figure 4-1) were documented at and below P-Stage 0.25. Similar findings (i.e., younger age class than SHA Marginal Habitat) have been documented during FPA evaluations by WDFW and DNR, Raphael et al. (2008) Science Team field visits, LTCS (2019) Team and Forest Practices Board field visits, and within Occupied Sites on private, county and state lands (WDFW Marbled Murrelet Database).”*

*“...USFWS regulations (50 C.F.R. § 17.32(c)) and SHA Policy (64 Fed. Reg. 32,717 (June 17, 1999)) specify that a SHA applicant must provide an assessment of anticipated or likely incidental take associated with the SHA-proposed management activities and a return to*



*baseline. However, in this SHA, the sole reliance on stand age class creates uncertainty around the take assessment. It is not clear that calculated acres in SHA categories More-Likely-than-not and Marginal fully account for potential impact to SMMH through incidental take via harvest or disturbance: Weyerhaeuser did not consider or document unquantified percentages of 24,346 ac in 70-93 y.o. HSC and 534,399 ac in 120 – 134 y.o. DF.”*  
(WDFW pp. 1-2)

*“Similarly, areas with less than 25% likelihood of containing SMMH have a likelihood that is between zero and 25%, so a non-zero amount of undetected occupied habitat currently exists on the remainder of the Adjacent Forest areas as well. FWS should also assess the extent of, rather than discount, the as yet undetected but currently existing occupied habitats that would be authorized for destruction in the vast areas where the probability of SMMH is less than 25%.”*  
*“...[T]here is a reasonable basis in existing science indicating that stands between 70 years and 90 years old for HSC (Hemlock-Spruce-Cedar), and between 120 years old and 180 for Douglas Fir, have a likelihood of containing occupied habitat that cannot rationally be discounted without additional analysis.”*

*“...Sierra Club writes to emphasize concerns previously raised by the Washington Department of Fish and Wildlife (“WA DFW”) about the inadequacy of the Potential Nesting Habitat definitions used in similar SHAs proposed in 2020. The Potential Nesting Habitat definitions in the Weyerhaeuser SHA—including Presumed Habitat, More-Likely-Than-Not Habitat, Marginal Nesting Habitat, and Murrelet Habitat Development Areas—all exclude stand ages where the predominant species are younger than 90 years old for western hemlock, Sitka spruce, or western red cedar trees or less than 180 years old for Douglas fir.”*

*“...In addition to its failure to protect habitat existing in areas the SHA defined as “Marginal Nesting Habitat” and “More-Likely-Than-Not Habitat,” and indeed its authorization of destruction of unsurveyed occupied habitat in those areas, the draft SHA also fails to protect, and authorizes the destruction of, unsurveyed occupied habitat in these younger stands that are excluded from the definitions... FWS must carefully examine and estimate the amount of currently existing unsurveyed occupied habitat that will be authorized for destruction by timber harvest under the proposed SHA and take permit. And that analysis should include these younger stands. Absent such an analysis, FWS cannot satisfy its ESA obligation to ensure that there will be a net conservation benefit, nor can it satisfy its NEPA obligation to take a hard look at the impacts of its action and alternatives to that action.”*  
(Sierra Club p. 20, Supplemental Letter)

## **Response**

In response to these comments, revisions have been made to the SHA and all supporting documents to include Western Hemlock (WH) stands 70-89 years old and Douglas-fir (DF) stands 120-179 years old in our analyses of Potential Marbled Murrelet Habitat. With these additional stand age classes incorporated into the Marginal Habitat category, the SHA still demonstrates a Net Conservation Benefit. The Incidental Take Statement and EA also reflect these changes.

In the SHA, Potential Marbled Murrelet Habitat is defined using stand age class, based on science cited in the WDNR Long-Term Conservation Strategy for Marbled Murrelets (WDNR and USFWS 2019, entire) relating stand age to quality of murrelet habitat using the P-stage

Model. The P-stage Model identifies marbled murrelet habitat as any forest stand with a P-stage value of at least 0.25 (WDNR and USFWS 2019, p. 2-7). The SHA definition of Potential Marbled Murrelet Habitat defines its youngest habitat category, Marginal Habitat, as WH stands 90-130 years old and DF stands 180-220 years old. While this definition includes some stand age classes with a P-stage value of 0.25, it doesn't include all stand age classes with a P-value of 0.25 that are identified as marbled murrelet habitat by the P-stage Model.

To ensure that the effects of the SHA on marbled murrelet habitat were thoroughly analyzed, we included all forest stand age classes with a P-stage value of at least 0.25 in the SHA's definition of Potential Marbled Murrelet Habitat. To do so, we incorporated WH stands 70-89 years old and DF stands 120-179 years old into the SHA's definition of Marginal Habitat. Marginal Habitat is now identified in the SHA as "forest stands where western hemlock, Sitka spruce, or western red cedar trees that are 70 to 129 years old are the predominant species, and/or forest stands where Douglas-fir trees that are 120 to 219 years old are the predominant species" (SHA p. 6). The Applicant and the Service worked together to revise the SHA and all supporting documents to reflect this change.

#### **Comment 7**

***Several commenters requested a more robust analysis of the landscape-scale impacts of SHA implementation.***

*"A bulk of the Enrolled Lands in Southwest Washington overlap with the Marbled Murrelet Special Landscape defined in the Washington Forest Practices Rules. Neither the SHA proposal or the EA provide an assessment of potential local or landscape-level impacts that could result in this area from implementation of the SHA."*

(American Bird Conservancy p. 2)

*"Neither the draft SHA nor the EA adequately address how activities on unenrolled lands will impair the purported conservation value of the lands where harvest will be deferred, despite the maps showing a patchwork of unenrolled lands intermixed with Enrolled Lands. The documents generally assert that those impacts would happen anyway, but they do not assess how those impacts would detract from the purported value of deferring harvest on the conserved areas. Thus, the draft SHA and EA fail to provide information that is necessary to weighing whether there will be a net conservation benefit."*

(Sierra Club p. 28)

#### **Response**

The EA assesses the impacts of the proposed action to the affected area and its biological, physical, and human resources in the context of the Affected Environment (EA p. 19). Relative to the Applicant's proposal for a Section 10 Permit, the affected environment includes those settings where any covered activities would occur, which includes the 637,021 acres of Enrolled Lands. The potential landscape-level impacts from implementing this SHA are discussed in Section 3.0 of the EA. The Biological Opinion contextualizes the effects on the Enrolled Lands to the murrelet population within Conservation Zones 1 and 2, which is broader than the scope of NEPA analysis.

Unenrolled lands are not a part of the Affected Environment. The actions taken on unenrolled lands are expected to be the same under the action alternatives as compared to the no action alternative. Chapter 5, Cumulative Effects, discusses other past, present, and reasonably

foreseeable actions that may add to the effects of the proposed action, and included all areas of Washington within 50-55 miles from marine waters. Under the Alternatives analyzed in this EA, the cumulative effects of the studied alternatives on the marbled murrelet are likely to be positive compared to the No Action Alternative and, in any event, are not expected to be significant, even after considering the reasonably foreseeable environmental trends and planned actions in the area.

#### **Comment 8**

*“The negative population trend of Marbled Murrelets in Washington State cited in these documents reveals that current conservation measures are not sufficient to maintain or increase the already greatly reduced population. This SHA has the potential to contribute to the continuing decline of Marbled Murrelets by reducing the current Forest Practices Rules responsibilities of the landowner on 516,227 acres of forestland within the Marbled Murrelet breeding range, while providing new protections for the Marbled Murrelet on only 1,200 acres.”* (American Bird Conservancy p. 2)

#### **Response**

While the direct causes for population declines in Washington are unknown, potential factors include the loss of nesting habitat, including cumulative and time-lag effects of habitat losses over the past 20 years (an individual murrelets potential lifespan), changes in the marine environment reducing the availability or quality of prey, increased densities of nest predators, and emigration (Miller et al. 2012, p. 778). The purpose of this SHA is to further the recovery of murrelets by providing a net conservation benefit via the voluntary protection of 1,798 acres of Occupied Sites, Presumed Habitat, and Habitat Development Areas from potential harvest. Under the No Action alternative, the applicant’s responsibility is limited to take avoidance, which is often achieved without habitat protection. Under the proposed SHA, the applicant would protect from harvest the identified habitats, resulting in a net conservation benefit even considering authorization of the requested take of marbled murrelets.

#### **Comment 9**

*“The information presented in the proposal is not sufficient to determine whether protection of the comparatively miniscule amount of acreage would be sufficient to offset any incidental take that might occur on the rest of the Enrolled Lands. Marbled Murrelets are known to have high breeding site fidelity and are not expected to quickly adapt to the removal of nesting trees. Any new incidental take, particularly at inland breeding sites, is likely to have a profound effect on the viability of this species in Washington state.”* (American Bird Conservancy p. 2)

#### **Response**

Greater than 99 percent (633,266 acres) of the Enrolled Lands are regularly harvested commercial timberlands that are not suitable for murrelet nesting. Of the 12,652 acres of Potential Marbled Murrelet Habitat on the Enrolled lands, 1,798 acres of Occupied Sites, Presumed Habitat, and Habitat Development Areas would be protected from harvest under the SHA. These areas include lands that may have otherwise been vulnerable to harvest under existing regulations and their voluntary protection represents a net conservation benefit. The remaining Potential Nesting Habitat that would be exempted from survey requirements but not protected from timber harvest is 501 acres of More-Likely-Than-Not Habitat (containing at least 50 percent Suitable Marbled Murrelet Habitat) and 10,353 acres of Marginal Habitat (containing at least 25 percent Suitable Marbled Murrelet Habitat). Because the Applicant would no longer be required to survey for murrelets on Enrolled Lands, there is potential for take if an

area that is occupied by murrelets is harvested without the benefit of a pre-harvest survey. However, take in the form of removal of nesting sites is unlikely to occur because existing sites are protected, any newly discovered sites will be protected, and the likelihood of occupancy on the relatively small amount of Potential Nesting Habitat that exists on the Enrolled Lands is very low, given the fragmented nature of existing Potential Nesting Habitat on the Enrolled Lands and the history of low rates of murrelet occupancy (less than 10 percent) for surveyed forests greater than 80 years old (Betts et al. 2020, p. 5). Based on this rate of occupancy, and the likelihood that Suitable Marbled Murrelet Habitat occurs on these habitat types, we expect approximately 86 acres (11 acres in Forest Practices HCP buffers and 75 acres in Adjacent Forests) of More-Likely-Than-Not and Marginal Habitat could be occupied. We assume that most (95 percent) of any areas identified as Potential Nesting Habitat on Enrolled Lands would be harvested under the existing regulations based on the information above (EA p. 60) and the applicant's implementation experience.

#### **Comment 10**

*"[B]y ensuring that the Applicant will not be subject to additional or different management activities related to Marbled Murrelets for the duration of the SHA, the USFWS will forfeit opportunities to apply new science advances or conservation measures on these lands for 34 years. This would have a direct effect on 2-3 generations of murrelets who might otherwise benefit from the rapidly growing body of research on the species."*

(American Bird Conservancy p. 2)

#### **Response**

Many of the delineations made under this SHA are provisional in nature and may change when more thorough delineations are made or better information becomes available. The applicant may provide ongoing updates to its maps to reflect new designations and delineations of covered and/or protected areas. This SHA is submitted on the basis of the best information available to the Applicant at the time of submission, with the understanding that more precise boundaries may need to be drawn for any of the land categories delineated on the Applicant's maps if and when better information becomes available. In light of this, it is understood that all acreage totals included in this SHA are best estimates only based on the best information available (SHA p. 28). The SHA may be modified with the approval of the Service (SHA p. 29). Additionally, the Applicant retains their obligations under the Forest Practices HCP, which contains adaptive management processes to address evolving scientific information.

#### **Comment 11**

*Several commenters emphasized the importance of private lands to marbled murrelet conservation.*

*"Private lands account for more than 50% of the forested lands in seven out of the eleven counties that are represented in the Enrolled Lands of this SHA, indicating that private lands have an important role to play in the maintenance and restoration of the Marbled Murrelet."*

(American Bird Conservancy p. 3)

*"All potential marbled murrelet nesting habitat is significant and should receive equal protection. At several points the SHA and EA point out that the amount of marbled murrelet nesting habitat in Washington is far greater on federal and state-owned land than on private property, including that of Weyerhaeuser Timber Holdings, Inc. This implies that having detailed information about this habitat on private lands and protecting it is not as important as doing so on publicly owned forest lands. We disagree. The fact that private lands include relatively less*

*appropriate habitat does not make the appropriate habitat they do have less important to protect. Given the precipitous decline in the murrelet population, it is important to protect all of the species' potential habitat, no matter the land ownership."*  
(Skagit Audubon Society p. 3)

### **Response**

The Service agrees with the commenter that private lands are important to the maintenance and restoration of the marbled murrelet. The conservation goals of this SHA are to provide greater conservation of and contribution to marbled murrelet populations in Washington by protecting more murrelet habitat than would exist on the Applicant's Enrolled Lands without the requested permit.

Protecting habitat on both public and private lands is critical to the recovery of the marbled murrelet (Lorenz et al. 2017, p. 319). Safe Harbor Agreements are intended to encourage private and other non-Federal property owners to implement conservation actions for federally listed species by authorizing take associated with the conservation actions.

### **Comment 12**

*"The preferred alternative described in the EA (alternative two) would, for the 34-year duration of the SHA, defer timber harvest in the known Occupied Marbled Murrelet Sites (1,240 acres) and on an additional 558 acres. In return, the applicant would be relieved of the requirements of the Washington Forest Practice Rules to, among other things, survey for marbled murrelets before harvesting timber on occupied or potential habitat. This exemption would apply to all 637,021 acres of the Enrolled Lands not otherwise protected through the 1999 Forest and Fish Agreement, now embodied in Washington State law. This lopsided arrangement apparently derives from the reality that as trees grow larger in the riparian, wetland, and channel migration zone buffers and in the buffers or set-asides on unstable slopes, they could become murrelet habitat. That the landowner would then need to comply with protections for the marbled murrelet is perceived as an unreasonable burden."*  
(Skagit Audubon Society p. 2)

### **Response**

The difference between the number of acres preserved and the number of acres exempted from survey requirements was considered as part of the Service's Net Conservation Benefit analysis. Most of the Applicant's lands are regularly harvested on a rotation of between 35 and 55 years and therefore are wholly unsuitable for use as potential nesting habitat for marbled murrelets. Less than 1 percent of the Applicant's land base has trees that can support marbled murrelet nesting sites (12,652 acres of Potential Nesting Habitat out of 637,021 acres of Enrolled Lands). Of those 12,652 acres of Potential Nesting Habitat, 1,798 acres of Occupied Sites, Presumed Habitat, and Murrelet Habitat Development Areas are set aside as no-harvest. The remaining 10,855 acres of Potential Nesting Habitat that is not protected from harvest is made up of More-Likely-Than-Not Habitat (501 acres) and Marginal Habitat (10,353 acres), which are at least 50 and 25 percent likely to contain Suitable Marbled Murrelet Habitat, respectively. Thus, in exchange for no harvest on the highest-quality 14 percent of potential habitat, the lowest quality 86 percent of potential habitat and all non-habitat does not need to be surveyed. As a result, the Service determined that implementation of the proposed SHA would result in a positive net conservation benefit.

The Service acknowledges the conservation value provided through the protection of riparian forests and unstable slopes in the Forest Practices HCP buffers for species dependent on old

forest structures. As described above we did consider the current take avoidance procedures (i.e., existing requirements in Washington State law) along with additional conservation measures proposed in the SHA as part of our Net Conservation Benefit analysis.

### **Comment 13**

*“We would support EA alternative three in that it protects a bit more potential murrelet nesting habitat, but this alternative goes too far in exempting not just the Enrolled Lands but all Weyerhaeuser property in Washington (over one million acres) from adherence to the Forest Practice Rules regarding this species; i.e., removes the requirement for surveys before harvesting potential murrelet habitat and provides incidental take coverage for this very large area.”*

(Skagit Audubon Society p. 2)

### **Response**

The Service has taken this comment into consideration and has updated Alternative 3 to clarify the area of take coverage and reflect an affected environment consistent with the no action and proposed action alternatives, approximately 637,021 acres. The Service considers an alternative to protect additional habitat categories on a subset of the 'applicant's lands to be within the range of alternatives considered. Specifically, it fits between the proposed action (Alternative 2) and Alternative 3.

### **Comment 14**

*“The SHA and EA refer to the intention to do thinning and “salvage” in riparian and other buffers, but there does not appear to be a commitment to no harvest in buffers other than those around Occupied Marbled Murrelet Sites. Such a commitment would be a meaningful addition to the conservation measures the applicant is offering.”*

(Skagit Audubon Society p. 2)

### **Response**

The Applicant conducts commercial thinning within Forest Practices HCP buffers consistent with existing Forest Practices HCP prescriptions. Where thinning occurs, it is “thinning from below,” for which the objective “is to distribute stand requirement trees in such a way as to shorten the time required to meet large wood, fish habitat and water quality needs (WAC 222-30-021).” This is achieved by increasing the potential for leave trees to grow larger than they otherwise would without thinning. When these practices are conducted, they represent a minor habitat modification that should not result in total removal of habitat or a significant deterioration of marbled murrelet habitat values (SHA p. 33). Active and participatory interdisciplinary team (ID Team) reviews are an important part of the Forest Practices procedures to ensure riparian thinning prescriptions are built in a site-specific manner to achieve the biological goals of the Forest Practices HCP. The same procedures would be implemented where riparian thinning is implemented under the proposed SHA. In any event, this thinning is permitted by WDNR under the Forest Practices Rules and would be allowable under the SHA as well.

Likewise, reforestation after salvage (i.e. post-disturbance timber harvest) in the buffers is required under the Forest Practice Rules. Without voluntary and permissible salvage, there is no requirement for reforestation in these areas. Salvage and reforestation will shorten the time that these buffers will be restored and improve the potential to redevelop into marbled murrelet habitat.

Managed buffer zones around other habitat types, such as Presumed Habitat, were not included as a part of the proposed SHA. The purpose of the Occupied Site Buffers is to mediate edge effects to Occupied Sites.

**Comment 15**

*“Committing now to a term for the SHA longer than 34 years and further limiting the acreage that would be returned to baseline at the end of the agreement would also make the proposal more equitable.”*

(Skagit Audubon Society p. 2)

**Response**

The Applicant has agreed not to return SHA Occupied Sites, Occupied Sites, Murrelet Habitat Development Areas or Presumed Habitat to baseline at the expiration of the SHA, so timber management after the proposed permit term would be subject to regulations in place at the time.

The proposed permit term is intended to coincide with the Forest Practices HCP duration. That HCP is part of the basis for this SHA, so whether the State would renew, amend, or terminate the Forest Practices HCP could inform SHA planning beyond the proposed term, along with other relevant information such as the status of the species at that time. Moreover, a longer term was not proposed by the applicant.

**Comment 16**

*“The Center is also concerned about the duration of the proposed SHA, which expires in 2056 commensurate with the remaining terms of the Forest Practices HCP. This time span is overly extensive and should more closely align with the average lifespan of the marbled murrelet. More closely aligning the timespan of the SHA with the bird’s lifespan would allow the population size and impacts to be reevaluated at a more regular interval. After more regular reevaluation the SHA should only be extended if the population is not declining or negatively impacting the species and posing a danger of population decline.”*

(Center for Biological Diversity p. 3)

**Response**

The SHA is an outgrowth of the Forests & Fish Agreement, and the Service finds it appropriate for the term of the SHA to be coextensive with the Forest Practices HCP. While the proposed SHA term would extend over multiple generations of the marbled murrelet, development of nesting habitat for the marbled murrelet is a slower process. Limiting the permit term to the species generational timelines would limit the scope of an SHA to protection of current habitat. The Service values the longer-term planning approach because it addresses habitat protection along with expanding the habitat for the species. Considering the proposed SHA does not include a full return to baseline, we find it beneficial to the species that the proposed permit term extends beyond a single generation of the covered species. The Applicant will provide the Service regular implementation monitoring reports to ensure that the provisions of the SHA are being followed (SHA Section 11).

**Comment 17**

*Several commenters requested further detail on implementation monitoring for the SHA.*

*“The draft SHA lacks any provision for periodic implementation monitoring. The SHA includes a*

*strong statement that U.S. Fish & Wildlife (USFWS) staff are not to conduct surveys for marbled murrelets' presence without advance written permission. The taxpaying public, rather than the applicant, would be required to cover the cost of any surveys, should they be done. It would thereby appear that not only is there no provision for monitoring the implementation of the agreement but that it is almost discouraged."*

*"...Without a clear plan for implementation monitoring it cannot be known whether the SHA is in fact providing a net benefit to the marbled murrelet. We understand providing such a benefit to be the very rationale for allowing issuance of Enhancement of Survival Permits and signing Safe Harbor Agreements.*

(Skagit Audubon Society pp. 3-4)

*"An SHA must provide monitoring to ensure baseline conditions are maintained, the SHA is implemented according to conditions, and incidental take is accounted for and authorized (64 FR 32723). WDFW recommends monitoring and reporting to assess conservation delivery, compliance, and realized effectiveness. Monitoring could also include a coordination step to inform future SHA development to benefit timber and conservation lands management."*

(WDFW pp. 4)

### **Response**

The Applicant has proposed to provide the Service implementation monitoring reports every five years (SHA Section 11). These monitoring reports will include the latest information about the quantity, location, and distribution of Potential Nesting Habitat being grown on Conservation Lands, as well as the identification of any new SHA Occupied Sites. According to the Safe Harbor Policy, "[t]he monitoring component of these Agreements ensure that the participating landowner is implementing the provisions of these Agreements" (64 FR 32717 and 32725). The Service is considering this comment and whether the proposed monitoring plan meets this purpose, or whether permit terms for additional monitoring are necessary. Five-year reports may be sufficient to ensure the Applicant is complying with the provisions of the SHAs. Further, the habitat thresholds used to track conservation benefits are not so rapidly achieved that conservation benefit accrual will fluctuate significantly from year to year, therefore requiring more frequent reporting may not provide any additional benefit. The Service also retains authority to request additional information to ensure the permits are being implemented in accordance with the terms of the SHA.

More detail with regards to implementation monitoring has been added to the SHA on page 33. In response to this comment, the Service and the Applicant discussed what specific monitoring terms would be appropriate to track compliance with authorized take, and elected to include these measures in the SHA.

With respect to occupancy monitoring of murrelets, please see response to Comment 3.

### **Comment 18**

*"[T]his SHA as written does not provide sufficient information to assess the conservation conclusions advanced by the applicant."*

(WDFW p. 1)

### **Response**

The Service has concluded that the SHA and the EA contain sufficient information to reach satisfactory conclusions regarding net conservation benefit and to complete all analyses required



for issuance of an enhancement of survival permit. The Service requested, and received, additional information from the applicant including obtaining GIS files and other requested information. While there are some limitations in knowledge regarding the analysis, they are addressed by conservative assumptions related to habitat definitions and adaptive management provisions that would incorporate finer-scale stand assessments when available. All assumptions used in the conservation benefit analysis are provided in the EA, the SHA, the Biological Opinion, and in other permit issuance documents. The Applicant's proposal is based on the best available information.

#### **Comment 19**

***Several commenters asked for clarity on why the proposed agreement qualified as a Safe Harbor Agreement rather than an HCP.***

*"In general, it would be helpful to clarify how activities on Enrolled Lands beyond those defined by SHA Policy as 'beneficial management activities' qualify for incidental take assurances under a Safe Harbor Agreement 10(a)(1)(A), rather than an Incidental Take Permit and Habitat Conservation Plan 10(a)(1)(B)."*

*"...WDFW encourages the applicant to address the issues in this letter to craft Marbled Murrelet SHA activities that deliver conservation benefit and contribute to recovery. We believe that clearer measures for conservation benefit that are framed around functional Marbled Murrelet habitat (occupancy potential, not only stand age class) and include a monitoring strategy would enable the applicant to demonstrate a net conservation benefit and meet the SHA standard for incidental take assurances, rather than seek an Incidental Take Permit (ESA Section 10(a)(1)(B)) with Habitat Conservation Plan for those assurances."*  
(WDFW pp. 2, 4-5)

*"The Center is concerned about the overly broad exemptions provided to Weyerhaeuser Timber Holdings, Inc. ("Weyerhaeuser") for activities that harm the species and believe stronger protections are warranted than what is being considered in the agreement at issue. Specifically, the Center believes this permit should be issued under section 10(a)(1)(B) of the ESA and require a habitat conservation plan. We ask you to reconsider the SHA in light of these concerns and ensure improved safeguards for the marbled murrelet that will guarantee the species protection and recovery."*

*"... The proposed SHA permits incidental take through an 'enhancement of survival' permit under section 10(a)(1)(A) the ESA. This allows take under a part of the statute that is supposed to be solely to 'enhance the propagation or survival of the affected species.' Although the proposed restoration of complex forest stands in the SHA may enhance the survival of the species, the ESA reserves exemption of incidental take from land use activities to permits issued under section 10(a)(1)(B), which requires development of a habitat conservation plan."*

*"...According to the ESA, such conservation plans must specify the "impact which will likely result from such taking" and: (ii) what steps the applicant will take to minimize and mitigate such impacts, and the funding that will be available to implement such steps; (iii) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not being utilized; and (iv) such other measures that the Secretary may require as being necessary or appropriate for purposes of the plan. In exempting incidental take in the absence of these measures, the Service is subverting the purpose of the ESA to protect species from activities that cause harm to their habitat and acting in a manner that is clearly unlawful. The Service could cure this problem by working with the landowner to develop a habitat conservation plan*

*that provides durable protections for the specie's habitat. This is not merely a procedural problem, but rather the agreement undermines the very purpose of the ESA to protect the ecosystems upon which species depend."*

*"...Due to the failure to issue this permit under 10(a)(1)(B) of the ESA the Center has serious concerns that this SHA will provide sufficient protections to the threatened species and request the Service and applicant revise the plan to comply with the ESA and better protect the marbled murrelet and its habitat."*

(Center for Biological Diversity pp. 1-3)

*"In the Safe Harbor Policy, the Service explains that enhancement of survival take permits under ESA section 10(a)(1)(A) are not appropriate when 'the land or water is occupied by a listed species and the property owner seeks immediate 'incidental take' authorization.' The Service explained that an incidental take permit authorized under section 10(a)(1)(B), which requires a Habitat Conservation Plan, is the appropriate mechanism for authorizing take in that scenario."* (Sierra Club p. 10)

### **Response**

The Service found this application to meet the standards for a Safe Harbor Agreement. According to the Safe Harbor Policy, "Safe Harbor Agreements encourage proactive species' conservation efforts by private and other non-Federal property owners while providing certainty relative to future property-use restrictions, even if these efforts attract listed species onto enrolled properties or increase the numbers or distribution of listed species already present on their properties" (64 FR 32717 and 32722). Overall, the additional conservation actions taken under this agreement produce a net conservation benefit, thereby meeting the standard for a Safe Harbor Agreement. Enhancement of Survival Permits issued under Section 10(a)(1)(A) of the Act can authorize take, so long as that take occurs in the forms authorized by the agreement and the agreement provides for the survival and enhancement of the species.

### **Comment 20**

*"The applicant states that F&F Buffer adjustments based on water-typing and stream classification for fish could remove F&F Buffer from the SHA Conserved Lands. As framed in the SHA, these removals would not be assessed for Marbled Murrelet benefit or occupancy prior to changes in SHA-allowed forest practices for Adjacent Forest. Currently, the incidental take analysis does not address Marbled Murrelet habitat loss and/or greater edge effect adjacent to suitable and conserved habitat from these changes."*

(WDFW p. 3)

### **Response**

The acreages and boundaries of habitat delineations in the proposed SHA are based off the best available information, which includes stand inventory data, aerial photographs, and modeling. This means that when more precise information becomes available it will be applied, for example if a change were to occur in the boundaries of the Forest Practices HCP buffers, which are also delineated based off of the best available information until more accurate information becomes available. Any changes in habitat delineations on Enrolled Lands would be assessed for murrelet habitat quality in the same way as all other lands in the SHA, and any new Occupied Sites would be protected as SHA Occupied Sites.

This SHA is submitted with the understanding that more precise boundaries may need to be drawn for any of the land categories designated or delineated on Applicant's maps if and when

better information becomes available, to reflect on-ground realities. Changes may be made on a site-specific basis with the consent of both Applicant and the Service, so long as no such change in designation results in an appreciable impact on net conservation benefits or the long term success of the SHA (SHA p. 29).

#### **Comment 21**

*“In this letter, WDFW provides information to assist the applicant and USFWS in revising the proposed SHA to address the following key concern: revise the incidental take analysis to evaluate the impacts of baseline return for SHA Occupied Sites;”*

*“...As proposed, SHA Occupied Sites could be harvested upon return to baseline without evaluation for impact on murrelet conservation and recovery in Washington and would result in loss of potential state critical habitat. In the SHA, applicant should provide an evaluation process (similar to Class IV Special FPA), document findings to understand site conditions and habitat value, and provide considerations for retaining those sites (i.e., under what conditions would applicant consider retaining SHA Occupied Sites).”*

(WDFW, pp. 1, 3)

#### **Response**

In the event that the Applicant chooses to relinquish their SHA, the Applicant may return Enrolled Lands to baseline conditions. Under the terms of the SHA, upon relinquishment of the SHA, Presumed Habitat and SHA Occupied Sites may not be harvested (i.e. no take assurance would be provided). Any harvest of Presumed Habitat, Occupied Sites, or Potential Nesting Habitat within Forest Practices buffers would be consistent with the applicable Forest Practices rules and ESA take prohibitions. Therefore, we anticipate the effects to murrelets associated with a return to baseline would be less than the conservation benefits provided by the SHA.

#### **Comment 22**

*“443 acres (SHA Exhibit E: 392 ac + 51 ac) of Presumed Habitat occur outside of F&F Buffers and clearly some percentage of that Presumed Habitat would not be considered interior forest (e.g. as illustrated by several, although not all, of the provided maps), incurring higher predation risk, windthrow risk, epiphyte dehydration, and other edge-related risks to Marbled Murrelet (Chen et al. 1993, 1995; van Rooyen et al. 2011; Raphael et al. 2002; Malt and Lank 2009; DNR LTCS for Marbled Murrelet 2019).”*

*“...While confluences and larger patches of Presumed Habitat could provide benefit, it is not clear that all Presumed Habitat – as proposed – contributes interior forest and conditions suitable for Marbled Murrelet. Most riparian configurations will be relatively linear and have minimal or no interior forest characteristics important for successful murrelet breeding (DNR LTCS for Marbled Murrelet 2019). The retained F&F Buffers surrounded by more intense forest management (i.e. clear cut harvest) tend to create narrow, linear “riparian stringers” (on average less than 200 to 300 feet wide total, both sides of water, as illustrated by many of the maps within the SHA) of forest with minimal interior forest conditions and higher amounts of edge habitat. These riparian stringers are more permeable to predators, wind and edge effects, providing less functional value as murrelet habitat (Chen et al. 1993, 1995; van Rooyen et al. 2011; Raphael et al. 2002; Malt and Lank 2009). The applicant maintains an option to adjust Presumed Habitat adjacent to the 300-foot buffer, which creates uncertainty in the amount of conserved Presumed Habitat.”*

*“...Under this SHA approach, there would be landscape level impacts on Adjacent Forests... [and] patches of Presumed Habitat with greater edge exposure and diminished interior forest function.”*  
(WDFW pp. 3-5)

### **Response**

The commenter is correct that much of the Potential Marbled Murrelet Habitat on the Enrolled Lands is fragmented and subject to edge effects. Presumed Habitat represents the highest quality of un-surveyed habitat on the landscape, and is protected into the future alongside Occupied Sites and Murrelet Habitat Development Areas in an effort to provide more high-quality habitat. The proposed SHA would provide additional conservation benefit for that Presumed Habitat because Forest Practices HCP buffers can be subject to commercial thinning.

The Applicant conducts even-aged management across its lands and maintains relatively consistent acreage within each age-class. As trees are harvested, other trees are growing to take their place. The projected development of habitat areas in addition to the already-protected areas amid the Applicant’s managed lands means at any given time, there will be fairly consistent forest cover across the landscape. There will always be some stands of trees set aside for conservation purposes on the Enrolled Lands that are subject to edge effects, but there will also always be stands that are surrounded by mature forest. The net amount of trees subject to edge effects and surrounded by mature forests remains relatively constant even though the exact areas in each category will change.

### **Comment 23**

*“There are several practices mentioned in the SHA which indicate a potential for take and are not beneficial management. Practices on Enrolled Lands adjoining non-owned murrelet protected lands could incur take for the Applicant and reduce murrelet site viability for the adjoining lands; this would not contribute to net conservation benefit. There are no known studies that support tree thinning or “release” to improve Marbled Murrelet habitat (promote nesting structure development); studies for spotted owls and fish are not analogous. Platform development from this practice would be difficult to quantify in the SHA timeline. The Applicant conditions their actions after Catastrophic Events (SHA p. 26) that they may salvage timber that no longer meets the criteria for an Occupied or SHA Occupied Site, Murrelet Habitat Development Areas, or Presumed Habitat, without evaluation of either the site impact, potential recovery or viability of the site, or murrelet occupancy during appropriate murrelet survey seasons prior to taking salvage actions; with only 30 days notification to USFWS and no notification to DNR or WDFW to assist in assessment in a reasonable timeframe, potential take is unknown.”*  
(WDFW p. 3-4)

### **Response**

We agree that with respect to neighboring properties, take could result from forest practices on the Applicant’s Enrolled Lands that adjoin non-owned protected habitat and have a managed buffer that extends onto the Applicant’s Enrolled Land. The SHA’s definition for Occupied Site is updated to clarify that the Applicant is required to maintain a 300-foot managed buffer next to any non-owned adjacent occupancy (SHA p. 7). This 300-foot managed buffer is designed to avoid significant disturbances or habitat degradation that could result in take of individual marbled murrelets and to maintain marbled murrelet site viability on the adjoining lands.

Where thinning occurs in Forest Practices HCP buffers, it is “thinning from below,” for which

the objective “is to distribute stand requirement trees in such a way as to shorten the time required to meet large wood, fish habitat and water quality needs (WAC 222-30-021).” This is achieved by increasing the potential for leave trees to grow larger than they otherwise would without thinning, encouraging growth of large trees that could benefit marbled murrelets. Well-designed thinning prescriptions can support habitat development (SHA p. 33).

With respect to Catastrophic Events (SHA Section 7.0), while such events are likely to occur it is impossible to predict with precision the severity and impacts of such events. For this reason, the Applicant will notify the Service of such events if they affect Presumed Habitat, Murrelet Habitat Development Areas, Occupied Sites, or SHA Occupied Sites. This salvage may be conducted to the same extent as would otherwise be permitted for a destroyed or degraded Occupied Site under the Forest Practices program.

Salvage harvest is not expected to result in take because it will occur only when habitat has already been so heavily modified due to a catastrophic event that the site no longer meets the criteria for suitable marbled murrelet habitat (Occupied or SHA Occupied Site, Murrelet Habitat Development Areas, or Presumed Habitat). This salvage may be conducted to the same extent as would otherwise be permitted for a destroyed or degraded Occupied Site under the Forest Practices Program. For instance, salvage activities will still be subject to a Forest Practices Application and WDFW may be notified in the ordinary course of filing such an application.

#### **Comment 24**

***Several commenters noted the similarity of this SHA to previous SHAs, and commented that the SHA’s analysis of cumulative effects and landscape-level impacts is not sufficient.***

*“This SHA mirrors those recently adopted by other forest landowners across Marbled Murrelet range in Washington. Amplified use of this “template” over time would diminish effectiveness and applicability of the Marbled Murrelet FP Rule. This would be less of an issue if other conservation conditions to diminish cumulative and landscape level impacts were provided.”*

*“...As presented, this SHA compounds effects of similar SHAs and reduces WDFW’s opportunity to collaboratively manage and conserve Marbled Murrelets and make progress toward recovery with our land management partners.”*

*(WDFW pp. 4-5)*

*“Objection #5: The Draft Environmental Assessment Fails to Provide an Adequate Analysis of the Cumulative Effects of the Proposed SHA with Past and Reasonably Foreseeable Future SHAs In the draft EA, FWS concedes that it ‘expects to receive applications for proposed SHAs for marbled murrelet from other companies in Washington’ and that ‘[t]hese proposed SHAs are expected to be similar to the Applicant’s proposed SHA.’ Rather than actually evaluating the potential combined impacts of the proposed SHA and these other foreseeable SHAs, the EA offers the conclusory assertion that the cumulative effects ‘are likely to be positive’ and ‘in any event, are expected to be significant.’”*

*“...Yet, as detailed above, by displacing WA state survey requirements to protect currently existing but unidentified occupied habitats, the proposed SHA and permit would sacrifice currently occupied habitat to provide voluntary protections for unoccupied habitat—an impact that neither the draft agreement nor EA evaluate adequately or rationally. Past and future SHAs following the same or a similar approach will individually have the same negative impact on such occupied habitat—trading it for protection of unoccupied habitat, and failing to provide anything but speculation that the unoccupied habitat will ever provide a benefit to the species. To comply with NEPA, FWS must consider what the cumulative impact would be of authorizing take*

*on private lands in WA of currently existing but undetected occupied marbled murrelet stands, in exchange for protections that only really provide new voluntary protections for unoccupied habitats, and only do so for a short term. While the amount of occupied habitat sacrificed in this manner for each individual SHA may be relatively small, FWS should consider whether the cumulative impact across past and foreseeable future SHAs would be a significant impact. In light of the declining population in WA, the stand fidelity of the species, and the losses of privately owned habitat, authorizing SHAs and take permits that allow the remaining and currently existing undetected occupied habitat to be destroyed without any analysis of how the proposed SHAs individually or cumulatively would ensure that more occupied habitat is created than destroyed is arbitrary and capricious, violates the ESA requirement to ensure a net conservation benefit to the marbled murrelet, and fails to provide the hard look at cumulative impacts that is required under NEPA. The EA fails to provide a sufficient analysis to assess this impact, let alone to demonstrate that this cumulative impact is not significant.”*

*“...Independently, and more broadly, FWS should refrain from issuing this permit, and from engaging in the process to develop and permit the future SHAs that will be similar to the draft Weyerhaeuser SHA, until it has conducted a region-wide analysis of the impacts of this approach to an SHA. Given the similarities of the Weyerhaeuser SHA to the SHAs for Rayonier Operating Company and the Sierra Pacific Land & Timber Company that FWS considered and permitted in between 2020 and 2021, and the anticipated similarity of future SHAs in WA from private applicants whose property is subject to the WA Forest Practices regulations, FWS should conduct a programmatic and region-wide analysis pursuant to NEPA of the impacts of this SHA model (or template) on the marbled murrelet. Considering the decline of the WA populations, the Service’s failure to conduct an adequate analysis of cumulative impacts of forsaking existing (but undetected) occupied habitat to protect unoccupied habitat prior to authorizing SHAs across the region, risks significant harm to the species.”*

*“...Moreover, in establishing the boundaries for the proposed take authorization in relation to the areal extent of the Forests & Fish Buffer area, rather than in relation to the much more limited extent of the areas where voluntary protections will actually occur, FWS has tacitly adopted an interpretation of the ESA and its section 10 regulations that seemingly will continue to be applied in future SHAs and permits for this species in WA. The impacts of that interpretation on the scope and extent of take authorization that can be authorized under ‘Enhancement of Survival’ permits, and on the cumulative impacts on marbled murrelets that would result from authorizing take in this manner, are significant and should be examined in an EIS.”*

*(Sierra Club pp. 24-25)*

## **Response**

The cumulative effects of the proposed SHA on murrelets and other resources are analyzed on Section 5.2 of the EA (pp. 70-77). After this analysis, the Service concludes that the cumulative effects of the studied alternatives on the marbled murrelet are likely to be positive compared to the No Action Alternative and, in any event, are not expected to be significant, even after considering the reasonably foreseeable environmental trends and planned actions in the area (EA p. 76). The proposed SHA protects currently Occupied Sites from harvest, as well as high-quality Presumed Habitat that may be occupied. Presumed Habitat provides some of the highest quality Potential Nesting Habitat on the landscape, and is the most likely to contain occupied, but undetected habitat. Presumed Nesting Habitat is also the most likely area to become occupied during the proposed SHA if it is not already.

The Service can only analyze the applications that are currently before it. However, as noted above, The Service expects the conservation benefits that will accrue under this SHA will be positive, and the net result is that more habitat will remain available for murrelets in the affected environment with the proposed SHA than under the No Action alternative.

The Service determined that the SHAs for Rayonier and Sierra Pacific each provided a net conservation benefit and otherwise met the criteria for a permit. Any future SHA using a similar approach will also be required to provide a net conservation benefit and comply with regulations in effect at that time. In general, we anticipate future SHAs would increase, not decrease, the overall cumulative benefit provided due to the basic requirements of a SHA. The Service will also have to consider any future baseline condition, status of the species, and cumulative impacts considering the best available information on such factors as increased edge exposure, decreased interior forest function, or isolation of existing Occupied Sites as part of any future permit decision.

An EIS is appropriate only if an action “is likely to have significant effects” 40 C.F.R. 1501.3(a)(3). As described in the EA (p. 5), an EIS is not warranted for this proposed action. The Service has fully satisfied the requirements of NEPA.

**Comment 25**

*“Clarify whether the acres stated for Occupied Sites includes the 300-foot Occupied Site Buffers, or if the buffers are additional acres. Also, please include the separate total acres for the Occupied Sites (minus buffers) and for Occupied Site Buffers.”*  
(EPIC p. 1)

**Response**

The acres stated for Occupied Sites do not include the 300-foot Occupied Site Buffers. The Occupied Site Buffers make up approximately 1,619 acres.

**Comment 26**

*“Since only 24 Occupied sites are covered, suggest adding a table that lists each of the 24 sites, with identifying names (most timber companies have names for murrelet sites), along with the location (UTM or township-range) for each, acres for each, and basis for classification as Occupied (e.g., based on observed nesting, or audio-visual surveys). The maps of these sites provided in the Exhibits are helpful, but a companion table would greatly improve the quality of the information provided.”*  
(EPIC p. 1)

**Response**

A table listing the 24 Occupied Sites has been added to the SHA as Exhibit F.

**Comment 27**

*Several commenters noted that the definition of Presumed Habitat in the SHA excluded mature stands beyond 300 ft. from Forest Practices HCP buffers.*

*“There appears to be no biological basis for not classifying as Presumed Habitat any mature habitat beyond 300 ft. from Forest & Fish Buffers. While all such mature habitat has potential value to murrelets, the exclusion of habitat contiguous with designated Presumed Habitat is contrary to murrelet conservation. Admittedly, the criteria for Presumed Habitat is likely to*

*include relatively few acres on commercial timberlands such as these, but forests of this age are old enough to likely provide reasonably-quality murrelet nesting habitat. Why not include and manage all such mature stands as Presumed Habitat under the SHA?”*  
(WDFW p. 8)

*“Objection #4: The Draft SHA and Environmental Assessment Fail to Disclose and Evaluate the Impacts of Not Protecting Areas that Meet the ‘Presumed Habitat’ Age- Class Characteristics But Exist More than 300 Feet from Forests & Fish Buffer Boundaries.”*

*“...The draft SHA will not assure protection from timber harvest areas that extend more than 300 feet from the Forests & Fish Buffer boundaries but otherwise meet the definition of ‘Presumed Habitat.’ The Draft SHA states: ‘If a Forest Stand of Presumed Habitat extends more than 300 feet beyond the nearest Forests & Fish Buffer, the boundary of Presumed Habitat will end 300 feet from the Forests & Fish Buffer unless Applicant elects to extend the Presumed Habitat boundary further.’ Yet neither the draft SHA nor the EA provide any analysis of how areas that are to be protected as ‘Presumed Habitat’ could be fragmented as a result of that boundary, undermining the protection for the ‘Presumed Habitat’ portion by reducing their size. The assessment of net conservation benefits necessarily should take this into account to avoid a conclusion that is arbitrary and capricious, and would violate the ESA requirement to ensure a net benefit. The failure to assess the extent of this impact in the EA also violates NEPA requirements to take a hard look at the impacts of the proposed action.”*

*“...Furthermore, those areas would ostensibly fall within the unenrolled lands of the proposed Action, which under Alternative 3 would receive authorization for take by timber harvest. Yet the EA fails to assess what the impacts would be of authorizing take by timber harvest of lands that are so highly likely to contain SMMH, particularly combined with displacing state law survey requirements. To comply with NEPA, FWS should assess what the areas of such lands is, and assess the take of undetected occupied habitat that would result authorizing take and exempting survey requirements on lands that are so highly likely to currently contain SMMH.”*  
(Sierra Club p. 24)

## **Response**

The Applicant voluntarily included all Presumed Habitat on its land base in the SHA, including Presumed Habitat that is more than 300 feet from Forest Practices HCP Buffers. The final SHA’s definition of Presumed Habitat has been revised accordingly as well as the total acreage of Presumed Habitat. The SHA now reads:

“Presumed Habitat” or “Presumed Marbled Murrelet Habitat” is defined as Forest Stands within Enrolled Lands that have an estimated age class of 210 years old or greater for Western Hemlock-dominant stands or 250 years old or greater for Douglas Fir-dominant stands (calculated at the time an individual application is submitted). The total acreage of Presumed Habitat on the Enrolled Lands is 494” (SHA p. 8).

If Alternative 3 were adopted, all Presumed Habitat would be protected. With regard to take authorization, the Service has considered these comments and updated Alternative 3 to clarify the area of take coverage and reflect an affected environment consistent with the no action and proposed action alternatives. Regardless, Alternative 3 is not the proposed action alternative. Under the proposed action alternative, the Applicant has included all Presumed Habitat in the SHA as no-harvest including Presumed Habitat that is more than 300 feet from Forest Practices



HCP Buffers.

**Comment 28**

*“Duration: the reference t’ see section ‘10.3’ regarding renewal would appear to reference section 10.4.”*

(EPIC p. 2)

**Response**

The reference on p. 33 to Section 10.3 has been corrected to Section 10.4.

**Comment 29**

*“P. 35, item a.iii at bottom: clarify the time period attached to the statement that selective thinning would occur on about 5% of F&F Buffers. Is this for the life of the SHA, or some other period, such as per year?”*

(EPIC p. 2)

**Response**

The Applicant estimates that selective thinning occurs on approximately five percent of its Forest Practices HCP Buffers. This is not a per-year or life-of-the-SHA calculation. It reflects the fact that thinning rarely occurs, and when it does occur, it is limited in extent and frequency.

**Comment 30**

*“P. 37, item ‘e.’: Suggest adding ‘SHA Occupied Sites’ to the listed areas”*

(EPIC p. 2)

**Response**

‘SHA Occupied Sites’ has been added to the listed areas under item ‘e’ on p. 37 of the SHA.

**Comment 31**

*“Exhibit E: Elsewhere in the document it states there are 494 ac. of Presumed Habitat; the numbers in this table add up to 495 ac. This may be simply an artifact of rounding.”*

(EPIC p. 2)

**Response**

This is simply an artifact of rounding. No changes to the document were made in response to this comment.

**Comment 32**

*“P. 31, item ‘b’: The number 161,764 acres may be a typo, as the numbers cited in the same sentence add up to 133,748 ac, as do the numbers in Exhibit E.”*

(EPIC p. 2)

**Response**

This is a typo. The correct number is 135,230 acres. The SHA has been revised accordingly.

**Comment 33**

*“[T]he enhancement of survival permit issued in connection with a Safe Harbor Agreement is intended to relieve liability only for incidental take that occurs because members of an ESA-listed species have been attracted to the property, or increased in numbers on the property, as a result of voluntary measures that improved or created habitat for the species on that property. The permit cannot be used to authorize take of listed animals for which the property owner*

*would be liable prior to, or absent, undertaking those positive actions that cause additional members of a listed species to be newly present on their property. In other words, it is not appropriate to use these permits to authorize take of listed animals already present on the property before voluntary beneficial measures are undertaken, or that would be present on the property in the future even without those voluntary measures. Nor is it lawful to authorize “take” associated with the purported conservation benefits of habitat maintenance where the ESA’s prohibition on take bars destruction or degradation of that habitat, such that “maintenance” of the habitat is not actually voluntary, but rather is the result of compliance with ESA prohibitions and the threat of ESA liability. Only take that is “above the... baseline conditions” at the property can be authorized. “Baseline conditions” means “population estimates and distribution and/or habitat characteristics and determined area of the enrolled property that sustain seasonal or permanent use by the covered species at the time the Safe Harbor Agreement is executed between the Services and the property owner.”*  
(Sierra Club p. 10)

### **Response**

Under an SHA, non-Federal landowners are encouraged to maintain or enhance existing endangered species habitat, to restore listed species habitats, or to manage their lands in a manner that benefits listed species. In return, the Service provides take assurances that future activities would not be subject to restrictions beyond those applicable at the time of enrollment into the program. As a result, any endangered species occupying a landowner’s property at the time of enrollment in the program would remain protected as a part of the baseline. Thus, to implement the SHA, the Service may authorize take of individuals of a listed species on an enrolled property in excess of those lands or individuals that were already protected at the time of the agreement. The Service believes this approach will provide conservation benefits because the individuals that may be taken under the permit would not have existed but for the program and without the program’s incentives, landowners may continue to actively exclude listed species in land management activities (USFWS 1998, p. 4-54).

This SHA involves the voluntary protection of Presumed Habitat, Murrelet Habitat Development Areas, and Occupied Sites from timber harvest, which will maintain and enhance marbled murrelet habitat beyond the current regulations. Marbled murrelets occupying the Applicant’s property at the time of enrollment are protected in this SHA via the protection of Occupied Sites. While it is possible that murrelets exist on the landscape undetected, the Service expects that this SHA will provide conservation benefit because approximately 494 acres of high-quality habitat not known to be occupied would be deferred from harvested as a result of this SHA (Biological Opinion p. 55).

### **Comment 34**

*“Objection #1: The Proposed Take Authorization Unlawfully and Irrationally Extends to Areas Far Beyond the Extremely Small Footprint of Actual Voluntary Conservation Measures, in violation of the ESA.”*

*“...The proposed take authorization associated with the draft SHA is unlawful because it extends to a vast area beyond the small footprint of the voluntary conservation measures without any justification or demonstration that the presence of murrelets or occupied murrelet habitat in those areas would be the result of conservation measures in the small footprint where the*

*voluntary measures will occur. Although the draft SHA refers to approximately 135,200 acres as “Conservation Lands,” only a tiny fraction of those lands will receive protections under the SHA that are actually voluntary, rather than the result of existing mandatory requirements to protect fish imposed by the WA Forest Practices program, and required to be binding by the Forest Practices HCP and Incidental Take Permits for various ESA-listed fish species issued by FWS and NMFS in 2006.”*

*“...As the EA makes clear, 134,757 acres of the ‘Conservation Lands’ are in the FFB area, which constitutes lands already protected from harvest due to the core zone and inner zone buffers required by the Forest Practices HCP and associated Incidental Take Permits for fish. As detailed above, in 2006, FWS and NMFS required that those Forest Practices protections be binding on parties subject to the Forest Practice regulations in order for the incidental take authorization for fish species provided by the ITPs to apply. If FWS were now to treat those measures as voluntary instead, it would vitiate the incidental take authorization for listed fish species provided to WA DNR and private parties regulated under the Forest Practices program. Put another way, it would be unlawful, and plainly arbitrary and capricious, for FWS to treat those binding requirements as voluntary when FWS and NMFS have required that they be binding in exchange for authorizing take of the fish species. While the draft SHA contains extensive discussion that appears intended to support the spurious argument that these measures should be treated as voluntary because they were developed through a process that was initially voluntary, ultimately, it concedes that FWS cannot actually rely on those already binding measures for fish protection in making its net benefits determination.”*

*“...The only voluntary protections that provide additionality beyond those protections from harvest that result from the Forest Practices HCP and ITPs are for the “Presumed Habitat” and “Habitat Development Areas” that are not within those core zone and inner zone buffers—which cover an area of only 443 acres and 30 acres, respectively, for a total of only 473 acres.”*

*“...Aside from those protections, with regard to Occupied Sites, the applicants propose not to seek exemptions that would potentially allow them to be harvested under state law if the applicants could also somehow obtain incidental take authorization to address the ESA section 9 prohibitions. Absent any demonstration that the applicants actually have or would likely be able to obtain both the state law exemption and an exemption from ESA section 9 liability (such as under an HCP and ITP issued pursuant to ESA section 10(a)(1)(B), or via an ITS issued in association with a section 7 consultation), the benefit conveyed by promising not to apply for those exemptions is entirely speculative. Since otherwise applicable WA state law and ESA section 9 protections would prevent take of occupied habitat absent those exemptions, and would also compel surveys to detect currently unknown occupied habitat, the SHA’s protections for Occupied Sites and SHA Occupied Sites do not provide any real protection beyond what otherwise is already mandated or compelled by law. Moreover, the proposed take permit would actually weaken otherwise applicable ESA protections for existing Occupied Sites by authorizing harm and harassment occurring as the result of timber harvest activities on Adjacent Forest areas.”*

*“...Habitat ‘maintenance’ is not ‘voluntary’ conservation where logging, thinning, or habitat destruction is already prohibited by the ESA because it would cause unauthorized harm or harassment of marbled murrelets by habitat destruction or disturbance. At minimum, it is clear that any forest stand area that is currently likely to be used as nesting habitat by marbled murrelets, such as areas designated as ‘occupied’ after surveys of Suitable Marbled Murrelet Habitat (“SMMH”) required by state regulations, is protected from destruction and degradation by the ESA’s prohibitions on harm and harassment. Elimination of such ‘occupied’ habitat*

*causes impairment of breeding for marbled murrelets, and therefore violates the ESA prohibition on take of the species. See, e.g., Cascadia Wildlands et al., v. Scott Timber Co., et al.,--- F.Supp.3d ---- (D. Oregon 2022), 2022 WL 3017684 at \*23-\*24 (permanently enjoining logging of 49 acres determined to be ‘occupied’ per PSG protocol to prevent take of marbled murrelets by harm and harassment). Consequently, any stand that is likely occupied at present is already protected from logging by the ESA’s prohibitions on harm and harassment, such that ‘maintenance’ of that habitat by deferring or avoiding logging it is not voluntary, and therefore is not voluntary conservation. And stands that would be determined to be occupied in the future due to the WA state survey requirements for areas exhibiting SMMH characteristics would similarly be protected from take not only by state law, but by ESA section 9 prohibitions, and the threat of liability for violations of those prohibitions.”*

*“...Thus, the actually voluntary protections provided by the draft SHA occur on an area of only about 473 acres. Moreover, though the quality of the maps provided with the draft SHA is very poor, those maps appear to show that these areas are not ubiquitously spread throughout the Adjacent Forest area of over 500,000 acres, but rather exist in a small number of small areas that are distant from the vast majority of “Adjacent Forest” areas. In short, the 500,000+ acre “Adjacent Forest” area where incidental take from timber harvest would be broadly authorized is not “adjacent” to the 473 acres of Presumed Habitat and Habitat Development Areas. Rather, it is plainly based on proximity to the Forests & Fish Buffers, which in turn reflect the requirements for the core zone and inner zone protections afforded by the Forest Practices Program incorporated into the Forest Practices HCP and made binding by the Forest Practices ITP. The draft SHA provides no rationale connecting conservation on the few pockets totaling 473 acres of Presumed Habitat and Habitat Development Areas to anticipated increases in marbled murrelet presence or habitat on the enormous 500,000 acre expanse of “Adjacent Forest.” Consequently, authorization of take on the entirety of that enormous area, that appears to bear no rational relationship to the much more limited geographic area where voluntary conservation benefits will occur, is arbitrary and capricious, in violation of ESA section 10(a)(1)(A), FWS regulations for implementing the Safe Harbor Agreement incidental take permits, and its Safe Harbor Policy.”*

*“...As the statute, regulations, and policy all make clear, the purpose of the take permit is to encourage voluntary conservation by providing a “safe harbor” from take liability that would arise from increases in species presence resulting from the voluntary conservation measures. Without that rational connection between the scope of the voluntary measures and the scope of the liability shield provided by the take authorization, it is unlawful, arbitrary, and an abuse of discretion to use a section 10(a)(1)(A) permit to authorize take.”*

*(Sierra Club pp. 16-18)*

## **Response**

We value the thoughtful comments about how the requested permit may impact existing permits. The interplay between separate ESA permit coverage for a single activity is complex. It is important to note the different species covered by the permits noted in this comment. The Washington Forest Practices HCP and its associated ITP cover aquatic species only, resulting in take avoidance requirements for other listed species. To avoid take of marbled murrelets, WDNR adopted procedures to evaluate most areas proposed for harvest where the marbled murrelet may occur. In contrast, a permit covering the marbled murrelet may allow different approaches to benefit the species while authorizing certain forms of take. The proposed SHA would not release the Applicant from complying with the Forest Practices HCP; it provides protection for marbled

murrelet habitat that is most likely to be used for nesting by individual marbled murrelets during the permit term while allowing for take resulting from forest practices that occur in Forest Practices HCP Buffers and Adjacent Forests on Enrolled Lands (SHA p. 32). While the development of the Forest Practices HCP was voluntary, nothing in our analysis is intended to convey that compliance with existing Federal or state law is voluntary. The restrictions on forest practices put in place by the Forest Practices HCP and state laws implementing the HCP are not voluntary and must still be observed. However, these laws currently allow for substitution of the take avoidance procedures where a proponent has relevant take authorization. The Forest Practices HCP, and related regulations are part of the baseline conditions and the conservation benefits of this SHA depend on additional conservation measures not assured through current take avoidance procedures.

Voluntary conservation measures under this SHA include the protection of Presumed Habitat, Habitat Development Areas, and Occupied Sites from harvest. Lands that are not subject to commercial thinning under the Forest Practices Rules are not treated as voluntary conservation, and the benefit of preserving Occupied Sites is not speculative. As noted in the EA (p. 54), 1,240 acres of Occupied Sites would become no harvest zones whereas, under the No Action Alternative, they potentially could be harvested under a Class IV-Special Forest Practice application or a federal HCP. Under the Class-IV-Special regulations, WDNR makes a decision to approve individual Forest Practices Applications based upon a significance determination. Class-IV-Special regulations would not permit harvest in an occupied area; however, where occupancy is not otherwise known, a stand of suitable habitat could be surveyed, and if found negative for murrelet occupancy, harvested under these regulations. The SHA protects all areas identified as Occupied Sites now for its entire term, as well as any future SHA Occupied Sites that are identified during the term of the SHA. In this way, the SHA will protect murrelet habitat above and beyond existing regulations.

The net conservation benefit analysis for the SHA is focused on the incremental change that results from the murrelet-specific conservation that is provided by the voluntary protection of Presumed Habitat, Murrelet Habitat Development Areas, and Occupied Sites compared to ongoing management under existing Forest Practices Rules for murrelets. The Service expects that this SHA will provide conservation benefit because approximately 494 acres of high-quality habitat not known to be occupied would be deferred from harvested as a result of this SHA (Biological Opinion p. 55), and the amount and extent of take is expected to be very low on the remaining Enrolled Lands due to its fragmented and commercial nature (SHA pp. 35-38).

The 135,314 acres of Conservation Lands on the Applicant's Enrolled Lands include Forest Practices HCP Buffers, Presumed Habitat, and Murrelet Habitat Development Areas. Within Conservation Lands only about 12,652 acres are estimated to be Potential Nesting Habitat, and 14 percent of those lands with the highest habitat potential are given no-harvest protections under this SHA. Even though the acreage of land receiving voluntary protection is relatively small compared to the acreage of land receiving take assurances, implementation of the SHA would result in fewer acres of habitat being harvested compared to the No Action Alternative (Biological Opinion p. 55). Based on the net conservation benefit analysis, approximately 3,169 acres of estimated habitat would likely be harvested under the terms of the SHA, compared to 3,527 acres of habitat that would likely be harvested under existing regulations (Biological Opinion p. 55).

Take assurances under the proposed action include 3,169 acres of habitat degradation from selective harvest in Forest Practices HCP buffers and regeneration harvest in Adjacent Forests (Biological Opinion p. 55). Approximately 697 acres of future developing Potential Nesting Habitat will be degraded by selective harvest over the term of the proposed SHA.<sup>1</sup> Up to 541 acres of habitat in Occupied Sites would be degraded by edge effects associated with thinning in Occupied Site buffers, and up to 882 acres of habitat in Occupied Sites will be exposed to prolonged noise and visual disturbances associated with thinning activities in managed buffers. We also expect take associated with 22,117 acres in all existing and future habitat within Forest Practices HCP buffers, which will be periodically exposed to short-term disturbance effects associated with regeneration harvest in Adjacent Forests and habitat degradation associated with edge effects.

The acreage values listed above are cumulative totals that would occur over the life of the SHA, representing few acres of impact on an annual basis (Biological Opinion p. 58). The incidental take analysis demonstrates that comparing habitat removal in the short-term with projected long-term habitat increases in the Forest Practices HCP Buffers shows a net positive increase in murrelet nesting habitat capacity on the Enrolled Lands, from 27 murrelets to a projected future habitat capacity to support up to 32 murrelets (Biological Opinion p. 62).

Taking into consideration the net conservation benefit of the proposed action compared to the no action alternative, the amount and extent of take analyzed in the incidental take statement, and the projected increase in murrelet nesting habitat capacity, we conclude that SHA implementation would improve murrelet conservation.

### **Comment 35**

*“Objection #2: The Proposed Take Authorization Unlawfully Allows Harm and Harassment at Currently Existing Known Occupied Sites from Timber Harvest on Adjacent Forests”*

*“...The proposed SHA and take permit would authorize incidental take by harm and harassment in currently existing known occupied habitats caused by timber harvest activities on Adjacent Forest areas. The authorization of this take, which could impair reproduction of marbled murrelets in currently existing occupied habitats, represents take that is not limited to being take ‘above the baseline’ and therefore is unlawfully in violation of the requirements under ESA section 10, the SHA permit regulations, and FWS SHA Policy. The draft SHA asserts that ‘this form of ‘take’ would occur absent this SHA as well and would not be expected to materially differ in amount or geographic scope.’ That assertion egregiously and unlawfully ignores that such take would be in violation of ESA section 9, absent another ITP or ITS providing take authorization. It therefore cannot lawfully be treated as ‘above the baseline’ merely because it is anticipated to occur ‘absent the SHA,’ particularly as there is no indication that it would be authorized under another ITP or ITS.”*

(Sierra Club p. 18)

### **Response**

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<sup>1</sup> Future Marginal Nesting Habitat was initially calculated as a stand age class that would transition into Marginal Nesting Habitat over the 34-year term of the SHA. However, at the time of publication, the duration of the agreement has shortened to 32 years. WH stands 34 to 37 years old and DF stands 84 to 87 years old, representing 2,651 acres, would not actually transition into Marginal Nesting Habitat by the end of the SHA term.

SHA-covered activities occurring in SHA-defined Adjacent Forests include all forest practices that may result in take of individual marbled murrelets within Conservation Lands, SHA Occupied Sites, or Occupied Sites, and Occupied Site Buffers (SHA p. 12). This SHA involves the voluntary protection from harvest in all Presumed Habitat, Murrelet Habitat Development Areas, and Occupied Sites, which will maintain and enhance marbled murrelet habitat beyond the current regulations. Marbled murrelets occupying the Applicant's property at the time of enrollment are protected in this SHA via the protection of Occupied Sites. While it is possible that murrelets exist on the landscape undetected, the Service expects that this SHA will provide conservation benefit because approximately 494 acres of high-quality habitat not known to be occupied would be deferred from harvested as a result of this SHA (Biological Opinion p. 55).

Under the proposed SHA, existing Occupied Sites will be classified as no-harvest zones for the life of the SHA regardless of any future de-listing or changes in the Forest Practices Program, including no road construction within Occupied Sites (except as permitted for salvage purposes outside the marbled murrelet nesting season), application of 300-ft managed Occupied Site Buffers around Occupied Sites that can be harvested in compliance with the prescriptions set forth in the definition of Occupied Site Buffers (SHA p. 7), and the application of daily timing restrictions to avoid forest practices during marbled murrelet daily peak activity periods during the marbled murrelet nesting season.

#### **Comment 36**

*"Objection #3: Neither the Draft SHA Nor the Draft Environmental Assessment Adequately Analyze the Impacts to Occupied Habitat from the Take Proposed to Be Authorized Under the Permit"*

*"...The draft SHA and EA fail to adequately evaluate the impacts of the proposed SHA and take authorization on habitat that is currently occupied, but has not yet been identified by occupancy surveys. As acknowledged in the draft EA, approval of the proposed SHA will displace otherwise applicable WA state regulatory requirements that require surveys of areas exhibiting the characteristics for Suitable Marbled Murrelet Habitat to determine whether the area is occupied habitat. And the SHA itself does not impose survey requirements, and instead affirmatively states that such surveys are not required. As the EA acknowledges, this means that those currently existent but as yet unidentified occupied areas will only be discovered by happenstance, which the EA characterizes as having a 'low' and 'very low' likelihood without the WA state rules surveys displaced by approval of the SHA. Whereas the SHA's protection of areas identified as 'Presumed Habitat' and 'Habitat Development Areas' means that currently unidentified occupied areas existing in the lands within those classifications will be protected from harvest during the term of the SHA despite the displacement of WA state rules survey requirements, unidentified occupied habitat currently existing in areas classified as 'More-Likely-Than-Not' and 'Marginal Nesting' habitats will not, particularly where they do not overlap with the areas protected by the WA state rules buffer requirements along streams that limit harvest in the Forests & Fish Buffers. Consequently, the 'More-Likely-Than-Not' and 'Marginal Nesting Habitat' areas that are in the 'Adjacent Forest' lands are within the area where take directly from timber harvest is authorized under the proposed permit and SHA, and will not be subject to surveys to check for occupied habitat, even where stands otherwise would have triggered WA state regulatory requirements for murrelet occupancy surveys. Without analysis of the extent of the impact to currently existing but as yet unidentified occupied habitat in those areas, the EA*

*dismisses this impact; with regard to displacing the survey requirements, the EA asserts that “the risk of incidental take is considered to be low, given the low amount of Potential Nesting Habitat that could be harvested on Enrolled Lands.” The EA does not provide any analysis to support that contention, nor estimate the amount of occupied habitat that could be destroyed as a result. Although information and assumptions made by FWS in the EA readily provide a basis for quantifying that potential impact, the EA fails to do so.”*

*“...If FWS had conducted this analysis, it would have shown that at least approximately 25 acres of currently existing but as yet undetected occupied habitat will be authorized for destruction by the proposed take permit due to the displacement of survey requirements.” [See letter for mathematical explanation.]*

*“...In reality, the amount would be higher, as the ‘More-Likely-Than-Not’ lands are at least 50% likely to contain SMMH, but may have a likelihood of containing SMMH that is higher, but does not meet the high threshold to be considered ‘Presumed Habitat.’ The same is true for the ‘Marginal Habitat’ which seemingly is between 25% and 50% likely to contain SMMH. Nonetheless, these estimates show that it is possible to reasonably estimate the amount of currently existing but unidentified occupied habitat that will be authorized for destruction due to the take permit and the displacement of occupancy survey requirements.”*

*“...In sum, a coarse analysis indicates that at least 25 acres of currently existing occupied habitat would be sacrificed to destruction by harvest due to the take permit and SHA, but a more refined analysis would indicate an even higher amount. FWS has unlawfully failed to conduct that analysis.”*

*“...Moreover, for context, it is possible to compare the estimated 25 acres of sacrificed occupied habitat to the total known occupied habitat area enrolled in the SHA—1240 acres. The acreage of unknown occupied sites that would be authorized for destruction is equivalent to approximately 2% of the known occupied acreage ( $25 \text{ acres} / 1240 \text{ acres} = 0.02 = 2\%$ ).”*

*“...While this amount superficially might appear to be a small proportion, it is unclear how FWS could rationally knowingly authorize any take of currently existing occupied habitat in WA given the declining population caused by habitat loss, and the stand-fidelity of the species. In particular, it is unclear how FWS could rationally or lawfully authorize such take of currently existing occupied habitat in WA when the SHA’s voluntary conservation benefits only actually provide additionality of protection—compared to otherwise applicable legal mandates—for unoccupied habitat, as currently occupied sites would otherwise already be protected from harvest by WA state law and ESA section 9 take protections. Although Weyerhaeuser could potentially apply for exemptions to those otherwise protections for occupied, it is entirely speculative that Weyerhaeuser would be able to obtain exemptions under both state law and ESA section 10(a)(1)(B) (via an HCP and associated ITP). Absent any analysis to demonstrate that such exemptions have been or would likely be obtained, it would be arbitrary and capricious to rely on the mere existence of those processes to pretend that protections conferred on undetected occupied sites actually provide additionality of conservation benefit. Nor do the draft SHA and EA contain analysis to show that the amount of new occupied habitat that would be generated due to additional SMMH grown during the SHA term in the Presumed Habitat and Habitat Development Areas outside the areas already protected by state law within the FFB would exceed the 25 acres or more authorized for destruction under the proposed SHA and incidental take permit.”*

*“...In short, though information is available to do so, the draft SHA and EA unlawfully fail to assess the amount of currently existing but undetected occupied habitat that would be authorized for destruction, and fail to evaluate whether the impact of authorizing the destruction of that*



*occupied habitat can be considered insignificant given the decline of the species, the stand fidelity of the species, and the absence of any analysis showing that the loss of this existing occupied habitat would be offset by new occupied habitat resulting from the narrow subset of conservation measures under the SHA that would be both truly voluntary and additional beyond what would have otherwise been compelled by WA state regulations and the threat of ESA section 9 liability for take. FWS has therefore failed to take a hard look at this impact, and would violate NEPA by making a FONSI and permitting decision based on an EA that fails to include such analysis.”*

*“...Similarly, the draft SHA and EA are devoid of the analysis necessary to support a rational determination that there will be a net conservation to the marbled murrelet despite the destruction of this existing but as yet unsurveyed occupied habitat on the lands where take by harvest will be authorized under the proposed SHA and permit. Without such analysis, the approval of the SHA and issuance of the permit would be arbitrary and capricious, and violate the requirement to demonstrate a net conservation benefit.”*

*“...Finally, in conducting the necessary analysis to demonstrate a net conservation benefit, FWS must particularly explain how sacrificing currently existing, but unsurveyed, occupied habitat to destruction by timber harvest can provide a net benefit when any new unoccupied habitat created by the deferred harvests may never become occupied habitat. In short, it appears to be entirely speculative whether any new SMMH created due to the voluntary protections of the SHA will ever become occupied, and the SHA and EA contain no analysis to demonstrate or estimate how much new occupied habitat will be generated, or when that will occur. Destroying existing occupied habitat to grow additional habitat that may never be occupied cannot rationally constitute a net conservation benefit, particularly in the absence of any analysis explaining how much new occupied habitat will be created, and when that will occur. As the current population is declining, a benefit that either may never accrue because it is speculative, or that will accrue at a point so far in the future that the WA population may not persist to even benefit from it, is arbitrary and capricious and would violate the ESA section 10(a)(1)(A) and the regulations and policy implementing it.”*

(Sierra Club pp. 19-23)

## **Response**

The Service conducted the net conservation benefit analysis in the Findings and BO. The analysis is summarized in the EA. The analysis will be made available to the public at the time of permit issuance. The net result of the SHA is to preserve more high-quality habitat for marbled murrelets than is currently preserved. The Service can “rationally and lawfully” authorize take associated with implementation of an SHA that provides a benefit to the species or its habitat. All assumptions used in the conservation benefit analysis are provided in the EA, the SHA, the Biological Opinion, and in other permit issuance documents.

The Service’s net conservation benefit analysis accounts for the possibility that currently occupied sites may be harvested. The Potential Nesting Habitat that would be exempted from survey requirements but not protected from timber harvest is 501 acres of More-Likely-Than-Not Habitat (containing at least 50 percent Suitable Marbled Murrelet Habitat) and 10,353 acres of Marginal Habitat (containing at least 25 percent Suitable Marbled Murrelet Habitat). Because the Applicant would no longer be required to survey for murrelets on Enrolled Lands, there is potential for take if an area that is occupied by murrelets is harvested. However, take resulting from removal of nesting sites is unlikely to occur throughout all such areas, any newly

discovered occupied sites will be protected, the majority of these areas are already highly fragmented reducing nesting suitability, and the larger patches of Potential Nesting Habitat likely overlap other harvest exclusions (e.g., unstable slopes, channel migration zones) that exist on the Enrolled Lands.

It is likely that marbled murrelet density is low outside of Occupied Sites and Presumed Habitat on the proposed Enrolled Lands given the fragmented nature of existing Potential Nesting Habitat on the Enrolled Lands. Some areas of SHA-defined Potential Nesting Habitat would not meet the specific habitat criteria to trigger a survey for marbled murrelets under the WA Forest Practices Rules. Because marbled murrelet detections have been very low in managed landscapes over recent years (e.g., Betts et al., 2020 p. 5), we assume that most (95 percent) areas identified as Potential Nesting Habitat on Enrolled Lands would be approved for harvest, if proposed under the existing regulations (EA p. 60).

The voluntary protection of Presumed Habitat and Murrelet Habitat Development Areas under the proposed SHA represents a net benefit over existing regulations. The net conservation benefit analysis for the SHA assumes that take of murrelets may occur, but due to the voluntary protection of Presumed Habitat and Murrelet Habitat Development Areas, the effect of SHA implementation would benefit the species on the subject lands. Approximately 3,169 acres of estimated habitat would likely be harvested under the terms of the SHA, compared to 3,527 acres of habitat that would likely be harvested under existing regulations, resulting in a net conservation benefit of 358 acres (Biological Opinion p. 108).

Take assurances under the proposed action include 3,169 acres of habitat degradation from selective harvest in Forest Practice HCP buffers and regeneration harvest in Adjacent Forests (Biological Opinion p. 54). Approximately 697 acres of future developing Potential Nesting Habitat will be degraded by selective harvest over the term of the proposed SHA.<sup>1</sup> Up to 541 acres of habitat in Occupied Sites would be degraded by edge effects associated with thinning in Occupied Site buffers, and up to 882 acres of habitat in Occupied Sites will be exposed to prolonged noise and visual disturbances associated with thinning activities in managed buffers. We also expect take associated with 22,117 acres in all existing and future habitat within Forest Practices HCP buffers, which will be periodically exposed to short-term disturbance effects associated with regeneration harvest in Adjacent Forests and habitat degradation associated with edge effects.

The acreage values listed above are cumulative totals that would occur over the life of the SHA, representing few acres of impact on an annual basis (Biological Opinion p. 58). The incidental take analysis demonstrates that comparing habitat removal in the short-term with projected habitat increases in the Forest Practices HCP Buffers shows a net positive increase in murrelet nesting habitat capacity on the Enrolled Lands, from 27 murrelets to a projected future habitat capacity to support up to 32 murrelets (Biological Opinion p. 62).

Taking into consideration the net conservation benefit of the proposed action compared to the no action alternative, the amount and extent of take analyzed in the incidental take statement, and the projected increase in murrelet nesting habitat capacity, we conclude that SHA implementation would improve murrelet conservation.

The lack of a survey requirement is taken into consideration. The SHA implements a consistent strategy across all of Applicant's Enrolled Lands employing age class data instead of protocol surveys. This allows conservation and harvest planning decisions to be made in advance and made consistently rather than leaving those decisions to be made individually after surveys are conducted. Habitats most likely to be occupied by murrelets in the future are Presumed Habitats, Murrelet Habitat Development Areas, and habitat created by the Washington Forest Practices HCP.

Moreover, the lands receiving take assurances fall into two categories: (1) Forest Practices HCP Buffers, on which only limited harvest is permitted under current regulations; and (2) Adjacent Forests, which are predominantly commercial timberland on which the Applicant conducts frequent regeneration harvest, making them largely unsuitable for murrelet habitat except where there is Presumed Habitat and Murrelet Habitat Development Areas. All exceptions to these categories are accounted for in the take analysis and net conservation benefit calculation in the Biological Opinion. Murrelet Habitat Development Areas (64 acres) are expected to grow into Potential Nesting Habitat during this SHA.

### **Comment 37**

*"Objection #6: The Draft EA Fails to Provide an Adequate Analysis of the Purportedly More Protective Alternative ("Alternative 3")"*

*"...The draft EA considers only three alternatives: the proposed SHA and take permit, the no action alternative, and a third alternative, 'Alternative 3,' that includes additional protected areas, referred to as 'special set-asides' or 'SSAs.' Under Alternative 3, the additional set-asides consist of the 'More-Likely-Than-Not Habitat' areas and 'Marginal Nesting Habitat' areas delineated under the proposed SHA. The acreages of the 'More-Likely-Than-Not Habitat' areas and 'Marginal Nesting Habitat' areas that will be protected under Alternative 3 correspond to the acreages within the Enrolled Lands area under the proposed SHA, as do the acreages for the Presumed Habitat and other areas that would be protected under the proposed SHA. Thus, the only areas where the additional set asides would protect habitat would be within the Enrolled Lands boundaries for the proposed SHA. Problematically, in exchange for this modest additional protection, the EA states that under Alternative 3, Weyerhaeuser would be provided with take coverage for all of the Applicants owned lands in WA. The EA states: 'In exchange for providing additional retention of some or all existing Potential Nesting Habitat (within SSAs), the Applicant would be provided take coverage for all of the Applicant's owned lands in Washington.' That is, FWS would provide incidental take authorization for activities on all of the non-enrolled lands identified in the proposed SHA. Thus, under Alternative 3, Weyerhaeuser would obtain incidental take authorization across an additional 488,534 acres."*

*"...But the EA provides no information to characterize the habitat on that additional 488,534 acres in terms of various habitat categories used in the proposed SHA, or with regard to the presence of Occupied Sites or likelihood of Suitable Marbled Murrelet Habitat. Nor is it clear what, if any, portions of that 488,534 acres would be protected from harvest under Alternative 3. Indeed, from the information in the EA, it appears that there would be no voluntary protections from harvest for areas within that additional 488,534 acres. Yet the EA provides no information and no analysis about the presence of suitable habitat or occupied sites within that additional 488,534 acres. The EA characterizes Alternative 3 as having more conservation benefits to the marbled murrelet than the proposed SHA, but because the EA fails to provide sufficient information or analysis to evaluate the negative impacts on marbled murrelets and marbled murrelet habitat of authorizing*

*incidental take over that enormous additional area, the EA fails to rationally supply the information necessary to support that characterization. Thus, the failure of the EA to analyze Alternative 3 adequately violates NEPA by failing to take a hard look at the alternative, and undermining the comparison of alternatives.”*

*“...Moreover, the EA fails to even evaluate whether it would be lawful to extend the incidental take coverage to an additional 488,534 acres based on providing additional protections on the Enrolled Lands as identified under the proposed SHA, but without providing any voluntary protections on the additional 488,534 acres.”*

(Sierra Club pp. 25-26)

### **Response**

Alternative 3 would protect all 12,652 acres of Potential Nesting Habitat on the Applicant-owned lands in Washington State (EA p. 19). As described, the take assurances on the additional 488,534 acres would apply only to activities on lands that are not expected to be murrelet habitat. However, the Service has considered these comments and updated Alternative 3 to clarify the area of take coverage and reflect an affected environment consistent with the no action and proposed action alternatives, approximately 637,021 acres.

The Proposed Action Alternative includes protection of all Presumed Habitat, including Presumed Habitat that is more than 300 feet from Forest Practices HCP Buffers.

The following information is added to p. 19 of the EA for clarity: “SSAs would include all Potential Nesting Habitat identified on both Enrolled and un-enrolled lands.”

### **Comment 38**

*“Objection #7: The Draft EA’s Reliance on a 2006 FEIS Instead of Evaluating Impacts on Aquatic Species Is Arbitrary and Capricious and Violates NEPA.”*

*“...Instead of evaluating impacts to aquatic species that would result from the proposed action and alternatives, the EA asserts that those impacts were already analyzed in the 2006 Final EIS for the Forest Practices HCP. Since protections for marbled murrelets under WA state regulations and the ESA currently provide some incidental benefits to aquatic species, stripping those protections could have negative impacts on aquatic species that should be analyzed using the best currently available scientific information, not by relying on a 16-year-old analysis. FWS’s failure to take a hard look at this impact on aquatic species violates NEPA.”*

(Sierra Club p. 26)

### **Response**

The Service’s reference to the 2006 FEIS is justified and warranted. As outlined in detail in the EA, the conservation measures taken under Washington’s Forest Practices Rules for the protection of aquatic species will dominate with respect to environmental impacts between the various alternatives. In other words, the Service determined that the SHA will have no measurable impact on aquatic resources compared to the conservation measures contained in the Forest Practices Rules. Under all alternatives, the Applicant will continue to follow the Forest Practices Program and its prescriptions to protect riparian health, stream temperatures, and water quality for federally-listed fish species. Specifically, all activities would follow applicable rules and regulations (i.e., Forest Practices Rules and FPHCP) regarding RMZs, CMZs, and Unstable Slopes; therefore, impacts to aquatic resources would be those associated with implementation of

the permit analyzed in sections 4.5 and 4.7 of the FPHCP FEIS (EA p. 59). Thus, a new analysis for impacts of the SHA on aquatic species is not necessary.

#### **Comment 39**

*“Objection #8: If the Draft SHA and EA Include Lands No Longer Owned by Weyerhaeuser, FWS Should Update the Draft SHA and EA and Provide a New Comment Period”*

*“...Sierra Club is concerned about whether some lands included as Enrolled Lands in the Draft SHA may no longer be owned by Weyerhaeuser, including the lands in Whatcom County and Skagit County, and some lands in Snohomish, King, and Skykomish Counties. If that is the case, and those lands will no longer be Enrolled Lands, FWS should publish a new draft SHA and EA that accurately reflect the lands that will be included, and that accurately reflects the corrected acreages for the various categories of land. For example, the EA states that 8,661 acres in Whatcom County and 121.5 acres in Skagit County would be Enrolled Lands owned by the Applicant. If the information provided in the draft SHA and EA is no longer accurate, FWS has undermined the ability of the public to comment on its proposed action. For example, if sales of some of these lands would affect the extent or location of the ‘Presumed Habitat’ that will be protected from harvest, or the relative amounts of habitat that will be protected from harvest versus the areas where take by harvest will be authorized, factors key to the assessment of net conservation benefit and impacts would have been altered, and the public deprived of an opportunity to comment meaningfully on the actual terms and impacts of the SHA and proposed permit.”*

(Sierra Club pp. 26-27)

#### **Response**

It is understood that all acreage totals included in this SHA are best estimates (SHA p. 29). We acknowledge that land ownership does change from time to time. The final SHA and EA were updated to reflect the latest information available. The SHA section on newly acquired lands (page 31) has been updated to provide more clarity on how the applicant may seek to enroll newly acquired lands. The SHA also contemplates the possibility of land transfers (SHA p. 30). It states that the applicant may remove portions of the Enrolled Lands from the SHA with written notice to the Service. This section has been revised to further specify that prior to the sale of any Murrelet Habitat Development Areas or Presumed Habitat lands, the applicant must provide a mechanism such as execute a conservation easement that will assure those habitat areas are protected for the term of the Permit to the same extent as if they had not been conveyed. The Service will ensure that any sale, transfer, or conveyance of any protected lands under the SHA would not appreciably impact net conservation benefits or the long-term success of the SHA.

#### **Comment 40**

*“The draft SHA lists several purported ‘ancillary benefits’ that cannot properly be characterized as conservation benefits to the marbled murrelet. These purported benefits should be excluded from the net conservation benefit analysis. Specifically, the draft SHA asserts that the collection of monitoring data necessary to ensure compliance with the SHA is an “ancillary benefit.” It plainly would be unlawful bootstrapping to rely on the monitoring requirement itself as a benefit, particularly in the absence of any specified study with a specific goal of facilitating recovery action for the species. The draft SHA also tries to assert that another ancillary benefit is promoting the renewal of the Forest Practices HCP and ITPs at the end of their term. Since that HCP and ITP provides a shield from take liability for various fish species, without which WA DNR and private*

*parties conducting timber harvest activities could be vulnerable to liability for unauthorized ESA section 9 take, it is apparent that the potential for ESA section 9 liability will be a motivating factor for renewal of that HCP and ITP, regardless of this SHA. In short, these are not ‘benefits’ that could lawfully be considered in the net conservation benefit analysis.”*  
(Sierra Club, p. 27)

### **Response**

These ancillary benefits have been excluded from the Service’s net conservation benefit analysis. In the SHA, they are discussed separately from Net Conservation Benefits. The SHA is the Applicant’s document and may include statements of the Applicant’s perspective that are separate from the Service’s analysis.

### **Comment 41**

*“The termination provision at page 33 of the draft SHA is inadequate. The termination provision should make clear that terminating the agreement will terminate the incidental take authorization provided under the permit.”*  
(Sierra Club p. 27)

### **Response**

Upon termination, the Applicant may return the Enrolled Lands to baseline conditions (subject to and in compliance with then-applicable laws and regulations) that existed at the commencement of this SHA and receive federal take assurances for such return to baseline. However, the Applicant will not have take protection under this SHA for any return to baseline condition of Presumed Habitat [or Murrelet Habitat Development Areas, Occupied Sites, or SHA Occupied Sites, as specified in the SHA]. Return to baseline means continued protection of Occupied Sites and Forest Practices HCP Buffers (i.e., RMZs, CMZs, WMZs, and unstable slopes) to the same extent required by Washington Forest Practices Rules (Title 222 WAC) and other applicable regulations and continued protection of forested areas as required under the Forest Practices Rules as of the date of SHA approval (SHA p. 1).

### **Comment 42**

*“The maps included in the draft SHA are not of sufficient quality and detail to identify and understand the geographic distribution of the categories and classifications that are listed in Exhibit E of the draft SHA, or to understand how the acreages of those categories and classification would be distributed. The poor quality of these maps has undermined the ability of the public to comment meaningfully on this draft SHA and EA, and it is difficult to understand how FWS could realistically monitor compliance with the SHA without more detailed and higher resolution maps at an appropriate scale.”*  
(Sierra Club p. 28)

### **Response**

Maps are useful in identifying and describing baseline conditions and net conservation benefits. The SHA maps represent the best information available at the time of submission of the SHA application. It was submitted with the understanding that the maps are provisional in nature and that more precise boundaries may need to be drawn if and when better information becomes available. The maps are sufficient to show the distribution of the various land categories that are relevant under the SHA. More importantly, the information provided in table form shows the acreages that are of interest under the SHA and provide the public adequate information to

analyze, study, and comment on the SHA. The GIS information used to create these maps was shared with the Service.

### **References cited in Service Comment Responses**

- Betts, M.G., J.M. Northup, J.A. Bailey Guerrero, L.J. Adrean, S.K. Nelson, and 6 others. 2020. Squeezed by a habitat split: Warm ocean conditions and old-forest loss interact to reduce long-term occupancy of a threatened seabird. *Conservation Letters*. 2020;e12745. 9 pp.
- Burkhart, H.E., T.E. Avery, and B.P. Bullock. 2019. *Forest Measurements* (6<sup>th</sup> Edition). Waveland Press, Inc. ISBN: 978-1-4786-3618-2
- Husch, B., T.W. Beers, and J.A.A. Kershaw Jr. 2002. *Forest Mensuration* (4<sup>th</sup> Edition). John Wiley & Sons. ISBN: 978-0-471-01850-6
- Lorenz, T.J., M.G. Raphael, T.D. Bloxton, and P.G. Cunningham. 2017. Low breeding propensity and wide-ranging movements by marbled murrelets in Washington. *Journal of Wildlife Management* 81(2):306-321.
- Raphael, M.G., S.K. Nelson, P. Swedeen, M. Ostwald, K. Flotlin, S. Desimone, S. Horton, P. Harrison, D. Prenzlows Escene, and W. Jaross. 2008. Recommendations and supporting analysis of conservation opportunities for the marbled murrelet long-term conservation strategy. Washington State Department of Natural Resources, Olympia, WA.
- USFWS. 1998. *Endangered Species Consultation Handbook*. U.S. Fish & Wildlife Service and National Marine Fisheries Service.  
[www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf](http://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf)
- USFWS. 2024. Final Environmental Assessment for the Weyerhaeuser Timber Holdings, Inc., Safe Harbor Agreement. U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office, Lacey, WA. May 2024. 141 pp.
- USFWS. 2024. Intra-Service Biological Opinion for Weyerhaeuser Timber Holdings, Inc. Safe Harbor Agreement for the Marbled Murrelet in Washington. Service Reference 2023-0133338. U.S. Fish and Wildlife Service, Lacey, WA. 82 pp. + appendices.
- WDNR and USFWS. 2019. Final Environmental Impact Statement for the Marbled Murrelet Long-Term Conservation Strategy. September, 2019. Washington Department of Natural Resources and U.S. Fish and Wildlife Service. Olympia, WA. [www.dnr.wa.gov/mmltcs](http://www.dnr.wa.gov/mmltcs)
- Weyerhaeuser. 2024. Weyerhaeuser Operating Company, LLC Safe Harbor Agreement for the Marbled Murrelet (*Brachyramphus marmoratus*) in Washington. May, 2024. Weyerhaeuser Operating Company, LLC. Poulsbo, WA. 76 pp.