

## Memorandum

TO: Eric V. Rickerson, State Supervisor, Washington Fish and Wildlife Office

FROM: Tim Romanski, Acting Manager, Division of Consultation and Conservation Planning

SUBJECT: Findings and Recommendations on Issuance of Enhancement of Survival Permit (TE67854B-0) for the City of Everett's Safe Harbor and Cooperative Habitat Enhancement Agreements for the Lake Chaplain Tract, July 2015

### I. DESCRIPTION OF PROPOSAL

#### Background

The City of Everett (Everett) has submitted an application for an enhancement of survival permit (permit) under Section 10(a)(1)(A) of the Endangered Species Act of 1973 as amended (16 USC 1531 *et seq.*) (ESA) associated with their Safe Harbor Agreement (Agreement) for the northern spotted owl (*Strix occidentalis caurina*; spotted owl) and marbled murrelet (*Brachyramphus marmoratus*; murrelet). The permit associated with implementation of the SHA authorizes incidental take of the two species.

The Safe Harbor and Cooperative Habitat Enhancement Agreements is a dual purpose document to satisfy ESA requirements and also State Forest Practice Rules (WAC 222) as a Cooperative Habitat Enhancement Agreement (CHEA). The CHEA is a separate permitting process conducted by the Washington State Department of Natural Resources. As such, this Statement of Findings is not evaluating the CHEA per WAC 222, but is limited to our responsibilities for ESA section 10(a)(1)(A).

The proposal is described in detail in the document entitled Safe Harbor and Cooperative Habitat Enhancement Agreements, Lake Chaplain Tract (LCT), July, 2015 (SHA) and analyzed in the Biological Opinion (Opinion), Categorical Exclusion (Cat Ex) and within this Statement of Findings. The SHA also includes an Implementing Agreement (IA) which describes the responsibilities of the parties and procedures for implementing the SHA.

The 3,729 acres of covered lands surround, or are in close proximity, to Lake Chaplain, in Snohomish County, Washington. The lands are owned and managed by Everett for the primary purpose of drinking water production, and secondarily, timber production. All but about 715 acres of the covered lands are forested. The permit covers forest management activities for a 50-year duration.

## **Analysis of Effects:**

In this document we analyze the SHA for satisfying the issuance criteria defined in the regulations to issue an enhancement of survival permit under section 10 (a)(1)(A) of the Act. As part of this responsibility, we must determine that the covered species are reasonably expected to receive a net conservation benefit (69 FR 24084).

### *Baseline:*

The SHA policy (64 FR 32717) defines baseline conditions as “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 Service and the property owner”. Establishing an appropriate baseline is necessary for developing an SHA.

The SHA definition of baseline can apply either 1) population estimates and distribution, and or 2) habitat characteristics that provide seasonal or permanent use by the covered species. We chose to use habitat for describing the baseline instead of relying on a population estimate. It is our view for this SHA that the habitat baseline is a more robust approach and ultimately provides a higher level of conservation than the population estimate for this SHA. Everett was supportive of the habitat approach.

While we use habitat to define the baseline, there was some marbled murrelet and spotted owl survey data to help inform use of the covered lands by these species, but it was not conclusive. The survey effort for spotted owls was more thorough than the survey effort for marbled murrelets, however. A considerable portion of the LCT received spotted owl surveys without any observations of the species. The marbled murrelet surveys in 2007 and 2008 also did not detect the species, but not all the suitable habitat was surveyed. There had been some historic observations of marbled murrelets on Lake Chaplain from the early 1990’s. These observations did not meet protocol audio visual surveys, and thus the forest area did not qualify as an “occupied site”. However, the stand of forest that the murrelets were observed flying over is designated as baseline habitat (SHA figure 4-1) so there is no risk due to harvest of it during the SHA. In 2014, marbled murrelet surveys not on LCT properties but in the vicinity of the Diversion Dam, documented the species, which resulted in a baseline habitat polygon there (see SHA for baseline habitat around diversion dam). Thus, for long-term conservation purposes and ease of compliance monitoring, we decided to use habitat characteristics to delineate baseline. Table 1 shows the LCT by land designations and where, in our view, have the highest chance of species occupancy, now and over the next 50 years.

**Table 1.** Land designations on the LCT and the chance of species occupancy now, and in the future (over 50 year time frame). These subjective ratings are based simply on species habitat associations and where the most structurally diverse forest is expected.

	<b>SPOTTED OWL</b>		<b>MARBLED MURRELET</b>	
	<b>Now</b>	<b>Future</b>	<b>Now</b>	<b>Future</b>
<b>BASELINE HABITAT</b>	low	mod - high	high	high
<b>SMA – deferred acreage</b>	low	mod	low	mod
<b>MANAGED FOREST</b>	low	mod	low	low

The SHA describes the available data and methods used to determine the baseline for the spotted owl and the murrelet (SHA 3.3; 4.1.1; appendix C). The baseline for this Agreement also satisfies the CHEA standard, which includes all habitat. Because of the relatively small project area along with the available forest inventory data, biologists were able to conduct field inspections of potential habitat to facilitate baseline habitat delineations.

The baseline for both species is 447 acres in 4 separate polygons (SHA 4.4.1; figure 4-1). These are the areas that, due to complex forest habitat, have the highest chance of occupancy, now and over the 50 year term of the SHA. On site field investigations (SHA appendix C) were conducted to delineate the baseline in 2013, which resulted in 3 polygons of baseline habitat. However, in 2014, murrelet audio-visual surveys not on LCT properties, but close to the diversion dam, documented occupancy. As a result, LCT lands adjacent the diversion dam have also been designated as baseline habitat, (SHA 3.3.1 and Figure 3-2) for a total of 4 separate baseline polygons.

The baseline habitat for this SHA is very robust relative to known spotted owl occupancy status. The spotted owl occupancy survey effort in 2007 and 2008 came up negative (SHA figure 3-4). The presence of barred owls, the lack of historic spotted owl sites in the area (no overlap of covered lands with regulatory 1.8 mile spotted owl circles), and the minimal amount of high quality habitat adjacent to the LCT (such as might be found on federal lands or some DNR lands designated for spotted owl conservation) may influence the presence of spotted owls on the covered lands.

The LCT also does not occur in a Spotted Owl Special Emphasis Area (SOSEA; WAC 222-16-086), which are geographic areas in the state (state and private lands) that have been identified as areas for providing demographic and/or dispersal support for spotted owls. The nearest SOSEA is about 19 miles north of the LCT. The nearest known spotted owl territory is approximately 5 miles northeast of the LCT. Considering these factors, it seems reasonable this is not a landscape

that is overly hospitable to spotted owls. Nevertheless, spotted owl ecology includes individual dispersal and they could potentially move into areas, (if not permanent residency – temporary) that are not generally thought of as favorable for their persistence. This is not unprecedented. With this in mind, the areas designated as baseline (and other areas on the LCT) could function as spotted owl habitat now, and even more so in the future as those forested areas become more structurally complex over time.

As described above, marbled murrelet audio-visual surveys were conducted in the LCT in 2007 and 2008 (SHA figure 3-4). They did not detect the species from these surveys, however, the survey effort was not inclusive. Prior to these surveys in the early 1990's, there were observations of murrelets on Lake Chaplain, and also flights over the forest on the west side of the lake. In 2014, murrelet audio visual surveys were conducted within one mile of Everett's diversion dam, with the majority of the survey effort off LCT lands. This survey resulted in an occupied detection north of the diversion dam on adjacent ownership. However, potentially suitable habitat associated with that detection continues southward in the Sultan River gorge, with some habitat on LCT property (albeit, identified as marginal by the contractor). When this information became available, the two state agencies, the Service, and Everett added the contiguous habitat associated with the occupied detection to the baseline habitat for the Agreement. Thus, there is no risk that this habitat will be harvested during the life of the Agreement (SHA 4-1).

Over the 50-year permit period, disturbance events (windstorms, disease, etc.) could degrade habitat on the covered lands. If more than 10 percent of the baseline habitat becomes non-functional, Everett will coordinate with the Service, WDNR and WDFW to make a good faith effort to modify the SHA in a manner to achieve the original goals and objectives of the SHA (SHA 7.6).

#### *Net Conservation Benefits:*

As part of our responsibilities for issuing an Enhancement of Survival Permit, we need to determine the SHA "is reasonably expected to provide a net conservation benefit to the covered species" (69 FR 24084). The SHA describes conservation measures that are expected to provide a net conservation benefit to both species (SHA 4.1; 4.2).

The conservation benefits to the two covered species are focused on habitat quality and quantity over a 50-year time frame. There is an expected increase in the amount of habitat due to the SHA, and also the quality of that habitat due to forest maturation. Some of the conservation measures are more beneficial to one species than the other. For example, managing for snags and down logs will benefit spotted owls, but won't benefit marbled murrelets. Table 2 identifies which species will likely benefit due to specific conservation measures.

**Table 2.**

<b>CONSERVATION MEASURE (SHA Section 4)</b>	<b>SPOTTED OWL BENEFIT</b>	<b>MARBLED MURRELET BENEFIT</b>
Extended harvest rotation	substantial	some
Special Set Asides	substantial	substantial
Green Trees	substantial	some
Unstable Slopes	some	some
Enhanced Riparian & Wetland buffers	some	some
Forested Wetlands	some	some
Baseline habitat deferral	substantial	substantial
Baseline habitat improvement over time (more complexity)	substantial	substantial
Reforestation, PCT, CT	substantial	none
Snags and Downed logs	substantial	none

One of the significant benefits of the SHA is the longer harvest rotations associated with the SHA. With the SHA regeneration harvests will be at age 60 or later. Where even-age management is intended (SHA, Figure 4-1), regeneration harvests will occur at age 60 years or later. Where uneven-age management is intended, regeneration harvesting will not recur within harvest groups until regenerated trees reach age 120 years (4.1.6.1).

Without a SHA, Everett could be inclined to grow forest for shorter durations to avoid the possibility of creating spotted owl or murrelet habitat which could incur future land use restrictions. However, with the SHA there is no fear (by Everett) of the species colonizing the LCT because the SHA specifies measures that allow for this outcome.

A major conservation benefit to both covered species is the deferral of 1,066 acres (approximately 35% of the covered forest lands, baseline acres included). During the term of the Agreement these stands will mature to 90 to 214 years of age.

In addition to the baseline habitat blocks, two categories of special set-aside areas (SSAs), totaling approximately 210 acres, will be established on the covered lands. There are approximately 20 acres of old-growth management areas (OMAs) and approximately 190 acres of permanent mixed forests (PMFs) that will be retained to provide mature mixed forest habitat. These areas will not be harvested during the term of the agreement and are expected to provide additional habitat beyond the baseline for both species.

Legacy trees will be retained in green tree areas at a minimum rate of 9.5 trees per acre of harvest according to the preferences (SHA Table 4-1). When sufficient numbers of desired

species are not available, western hemlock may be substituted for hardwoods, Douglas-fir may be substituted for western red cedar, and large diameter trees may be substituted for smaller target diameters. When inventory data indicates insufficient stocking of larger target diameters, small diameter trees may be substituted to the extent necessary. Green tree areas will not be harvested for the duration of the SHA (SHA 4.1.3.1).

Washington State Forest Practices Rules (WAC 222-30) establish riparian and wetland management zones (buffers) for various stream and wetland types and specify conditions under which harvesting may occur within the buffers. The buffers under this agreement are more robust than the standard Forest Practice Rules and result in more trees within the buffer zones. These buffers will be enhanced on LCT forest lands as follows:

- Fish habitat streams (Type S and Type F): Buffer zones will be at least equal to the total width of the riparian management zones specified by Forest Practices Rules. Portions of the lake buffer lying west of the Lake Chaplain Road may be harvested with adjacent even-age harvest units to protect facility infrastructure from windthrow damage. Otherwise, buffer trees will only be harvested where stream-crossing roads or cable yarding corridors are necessary.
- Non-fish habitat streams (Type Np and Type Ns): Buffer zones will be at least 50 feet wide along the entire stream length. Buffer trees will only be harvested where stream-crossing roads or cable yarding corridors are necessary.
- Wetlands (Type A and Type B): Buffer zones around non-forested wetlands, greater than 5 acres, will be at least 200 feet. Portions of the wetland buffer lying west of the Lake Chaplain Road may be harvested with adjacent even-age harvest units to protect facility infrastructure from windthrow damage. Otherwise, buffer trees will not be harvested during the term of the agreement.

Buffer zones are well distributed across the LCT and total approximately 310 acres outside of baseline blocks and SSAs. The portions that could potentially be harvested to protect facility infrastructure from windthrow damage total approximately 22 acres; thus, at least 288 acres will not be harvested, except for necessary stream-crossing roads or cable yarding corridors, during the term of the agreement (SHA 4.1.4).

Snags and downed wood occurring naturally in deferred-harvest areas will be supplemented during regeneration harvest activities. Ten percent or more of trees grown under the LCT silvicultural regime are projected to equal or exceed 20 inches DBH before regeneration harvest occurs. Two such trees per acre will be transformed into snags by topping at a height of sixteen feet or more. The tops of these trees will serve as downed wood. In addition, old-growth stumps from western red cedar and Douglas-fir trees, along with logs exhibiting unique habitat value, such as large diameter logs exhibiting active wildlife usage, will be protected during harvest operations. Other decaying logs exhibiting no more than a trace of intact bark will also be retained as downed wood (SHA 4.1.5).

*Incidental Take:*

The Service acknowledges there are two forms of incidental take associated with Safe Harbor Agreements, incidental take associated with management activities, and as a result of the return to baseline (69 FR 24084). With this specific SHA, a return to baseline is not anticipated. This SHA measures baseline in acreage – there are 447 acres in 4 separate polygons. Those acres will not be harvested. There are other areas of the LCT, which are not designated baseline habitat, but are deferred from harvest for the term of the Agreement (see above). Through forest growth over the 50 year time frame, there is a good chance that some of these acres will grow into habitat for both species. Since those acres won't be harvested, and if they recruit into habitat as thought, there will be a supplemental level of habitat above the baseline that is protected for the duration of the SHA. Thus, a return to baseline as traditionally viewed, isn't an option with this SHA.

The baseline habitat, and other areas of long-term deferral probably have the highest chance of future spotted owl and murrelet nesting occupancy. If nesting occurs in areas with that status, the site will be protected over the full term of the agreement, due to the fact that these are no-harvest areas. If occupancy occurs outside of these deferral areas, the site would be protected for a minimum of 5 years before Everett could "take" the site. If an assumption is made that the covered species breed every other year, it's plausible that there could be up to 3 years of productivity before the site is rendered unusable.

There will be potential take of both covered species associated with ongoing forest management activities, as described in the Biological Opinion and the SHA. There is also the potential for incidental take of a known occupied site that occurs outside of the 1,066 acres of deferred forest. In this case, Everett would protect the site for a period of 5 years before they could exercise habitat removal of the site (4.1.7). Habitat removal associated with a known occupied site would be outside of the breeding season.

Landowners participating in SHA's have the right to terminate their voluntary agreements prior to the expiration date (64 FR 32717). Everett has the option of terminating their SHA prior to

the 50 year permit term. If they terminate early, they would be subject to the ESA rules in place at that time. Our experience to-date with other SHA's in Washington, and how Everett has managed its lands to date, does not lead us to believe Everett will terminate prematurely.

## **II. COORDINATION AND PUBLIC COMMENT**

The Service published a Notice of Availability in the Federal Register for the draft Safe Harbor Agreement, draft Implementing Agreement, and draft Categorical Exclusion on May 5, 2015 (80 FR 25709). Publication of the notice initiated a 30-day public comment period. We also sent an email message to 169 addresses notifying respondents of the 30 day public comment period. The draft documents were available for review on our web site.

For the development of the SHA, the Service worked closely with the Washington State Department of Natural Resources (WDNR) and the Washington Department of Fish and Wildlife. This was particularly the case in establishing the baseline for the spotted owl and marbled murrelet (SHA Appendix C). The Service also met with WDNR staff in Olympia to discuss the public review process.

On October 28, 2014, we had a brief telephone conversation with the Tulalip Tribe to describe the project and inquire if they wanted more opportunity to talk. We also notified them by telephone prior to the release of the Federal Register Notice announcing the availability of the draft documents. They responded in an email to the City, and the City forwarded to us, that they were pleased with Everett's actions (see email from Julie Sklare to Mark Ostwald, May 7, 2015) and chose to not comment on the draft documents.

We received a letter from WDNR in support of the Agreement. We also received a letter from the Washington Forest Law Center (WFLC) that had many questions and concerns. We met face-to-face with WFLC staff in our office on July 1, 2015, to go over their issues and provide clarification. They followed up that meeting with a letter dated July 8, 2015. We subsequently responded to their letters in an internal memo available in this administrative record.

## **III. ISSUANCE CRITERIA FOR ENHANCEMENT OF SURVIVAL PERMIT, ANALYSIS AND FINDINGS**

Section 10(a)(1)(A) authorizes issuance of Enhancement of Survival Permits for listed species. The issuance criteria and our respective finding are found below:

- 1. The take will be incidental to an otherwise lawful activity and will be in accordance with the terms of the Agreement:**

We find that the proposed take will be incidental to otherwise lawful land-use activities. We note that Everett has historically followed Washington State Forest Practice rules (WAC 222) and will continue to do so under the Agreement.

Activities that might result in incidental take include, but are not limited to: 1) any authorized activity occurring within a stand of habitat that may degrade or remove key features of habitat or make that habitat unusable; 2) any timber harvesting, incidental tree removal, or other forest management activity adjacent to or in proximity of habitat that could degrade the adjacent habitat through indirect effects or could result in harassment of the species.

- 2. The implementation of the terms of the Safe Harbor Agreement is reasonably expected to provide a net conservation benefit to the affected listed species by contributing to the recovery of listed species included in the permit, and the Safe Harbor Agreement otherwise complies with the Safe Harbor policy available for the Service.**

The Everett Agreement is expected to provide a net conservation benefit by contributing to recovery of the spotted owl and the marbled murrelet. The conservation measures are described in detail in the SHA and are summarized above. An increase in habitat quality and quantity on the covered lands are the primary basis for the net conservation benefit.

There is some uncertainty if the species are currently present (except for marbled murrelets in the baseline block associated with the diversion dam) and some uncertainty if they are not present, whether they will colonize the LCT in future years. However, habitat will be available for the species for potential future colonization.

We judiciously considered the available data for species presence and habitat information for determining a baseline, and worked closely with Everett on its establishment. The conservation measures were deliberately structured to benefit the spotted owl and marbled murrelet. The resulting SHA complies with the Safe Harbor Policy.

- 3. The probable direct and indirect effects of any authorized take will not appreciably reduce the likelihood of survival and recovery in the wild of any listed species.**

The effect of the Service's proposed issuance of the Permit was evaluated as a formal intra-Service consultation, in accordance with section 7(a)(2) of the ESA. In the Biological Opinion, incorporated herein by reference, the Service concluded that the SHA and permit will not likely jeopardize the continued existence or appreciably reduce the likelihood of survival and recovery of the spotted owl, marbled murrelet, or other listed species.

**4. Implementation of the terms of the Safe Harbor Agreement is consistent with applicable Federal, State, and Tribal laws and regulations.**

The covered activities are for forest management practices and Everett will continue to get forest practice permits from the WDNR. There are no practices associated with the Safe Harbor Agreement that would be in conflict with Federal, State, and Tribal laws and regulations

We worked closely with the WDNR and WDFW on the development of the Agreement. We also offered consultation with the Tulalip Tribe, but they were satisfied with the Safe Harbor Agreement and didn't feel the need to talk with us (see May 7, 2015, email from Tulalip Tribe to City of Everett).

**5. Implementation of the terms of the Safe Harbor Agreement will not be in conflict with any ongoing conservation or recovery programs for listed species covered by the permit;**

The Agreement is consistent with the Final Revised Recovery Plan for the Northern Spotted Owl (2011). Recovery Action 14 encourages the Service to develop Habitat Conservation Plans and Safe Harbor Agreements with private landowners. By providing spotted owl habitat, both immediately and over the 50 year time frame, the Agreement satisfies Recovery Criterion 3 – Continued Maintenance and Recruitment of Spotted Owl Habitat.

The Agreement is also consistent with the Recovery Plan for the Marbled Murrelet (1997). The Recovery Plan identified the loss of nesting habitat as the predominant threat facing the species. It also stated the importance of nesting habitat that is closest to Puget Sound. The Agreement protects existing habitat and grows more habitat over the 50 year Agreement term, within about 20 miles from the marine environment.

We have also determined that the SHA will not impact the Puget Sound Chinook , and Puget Sound Steelhead, both NOAA ESA listed species. The SHA is also not in conflict for other listed species (see Biological Opinion and Categorical Exclusion).

**6. The applicant has shown capability for and commitment to implementing all terms of the Safe Harbor Agreement.**

The City of Everett has owned and managed the Lake Chaplain Tract since the beginning of the twentieth century. Maintaining water quality and quantity for municipal use while simultaneously managing the forest has been a primary goal of Everett. Revenues from timber harvest are predominantly re-invested in the infrastructure that is necessary to supply the drinking water for over one-half million customers.

Prior to entering this SHA, approximately two-thirds of the LCT forest lands were managed according to the provisions of a wildlife habitat management plan. The original wildlife habitat management plan was written to mitigate the impacts to wildlife from the construction and operation of the Henry M. Jackson Hydroelectric Project (Public Utility District No. 1 of Snohomish County). Transferring forest- wildlife management from the wildlife plan to this Agreement (SHA/CHEA) was acceptable under the wildlife plan's adaptive management provision. The SHA/CHEA concentrates forest management for two ESA listed species, where the previous wildlife plan focused on big game and primary excavator species.

Everett relies on a professional forester to manage their timberlands, and that person is expected to have the primary responsibility for implementing the SHA. Other Everett staff may from time to time also have some responsibilities under the SHA. We believe those individuals will have the skills to implement the SHA. Furthermore, we will be receiving monitoring reports and we also have independent ability to make site inspections to determine SHA compliance.

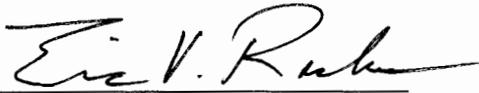
We are confident that Everett has the capability for and commitment to implementing all the terms of the SHA. We think that this SHA is relatively straightforward to implement. The forest management approach does not involve complicated practices and there are no highly sophisticated scientific studies to conduct. Thus, we are confident in Everett's commitment to performing satisfactorily.

#### **IV. GENERAL CRITERIA AND DISQUALIFYING FACTORS - ANALYSIS AND FINDINGS**

The Service has no evidence that the permit application should be denied on the basis of the criteria and conditions set forth in 50 CFR 13.21(b) (excluding 13.21(b)(4)), and 50 CFR 13.21(c)(1-4). Section 13.21(b)(4) is not applicable to section 10 permits; and, in Safe Harbor Agreements, this concept is addressed in the issuance criteria contained in section 17.22(c)(2)(iii) and 17.32(c)(2)(iii). The Service has also reviewed the suspension and revocation regulations at section 13.27 (a) and 13.28 (a) 1 through 4, and found no reason to deny issuance of the Permit based upon those factors. The Applicant has met the criteria for issuance of the Permit and does not have any disqualifying factors that would prevent the Permit from being issued under current regulations.

## V. RECOMMENDATION ON PERMIT ISSUANCE

Based on the foregoing findings with respect to the proposed action, permit application and adequacy of the SHA, I recommend issuance of a section 10(a)(1)(A) permit (permit #TE67854B-0) to authorize incidental taking of spotted owls and marbled murrelets on the Lake Chaplain Tract.



Eric V. Rickerson  
Eric V. Rickerson, State Supervisor  
Washington Fish and Wildlife Office

11/20/15

Date