
Marbled Murrelet Habitat Protection Plan

**Henry M. Jackson
Hydroelectric Project**
(FERC Project No. 2157)

**Public Utility District No. 1 of
Snohomish County**

Everett, Washington

March 2011



**MARbled MURRELET
HABITAT PROTECTION PLAN**

For the

HENRY M. JACKSON HYDROELECTRIC PROJECT

**FEDERAL ENERGY REGULATORY COMMISSION
PROJECT NUMBER 2157**

Submitted by:

**PUBLIC UTILITY DISTRICT NO. 1
OF
SNOHOMISH COUNTY**

Everett, Washington

March 2011

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1.0 Introduction

The Marbled Murrelet Habitat Protection Plan (MMHPP) describes the specific measures Public Utility District No. 1 of Snohomish County (District) will implement to avoid or minimize the Project-related impacts to marbled murrelets and their habitat. The MMHPP will be in effect for the term of the new license.

Recent surveys by the District and others have documented the presence of marbled murrelets (a federally-listed threatened species) in the Sultan Basin, and have resulted in the designation of forest in and near the Jackson Hydroelectric Project (Project) boundary as “occupied” by nesting marbled murrelets.

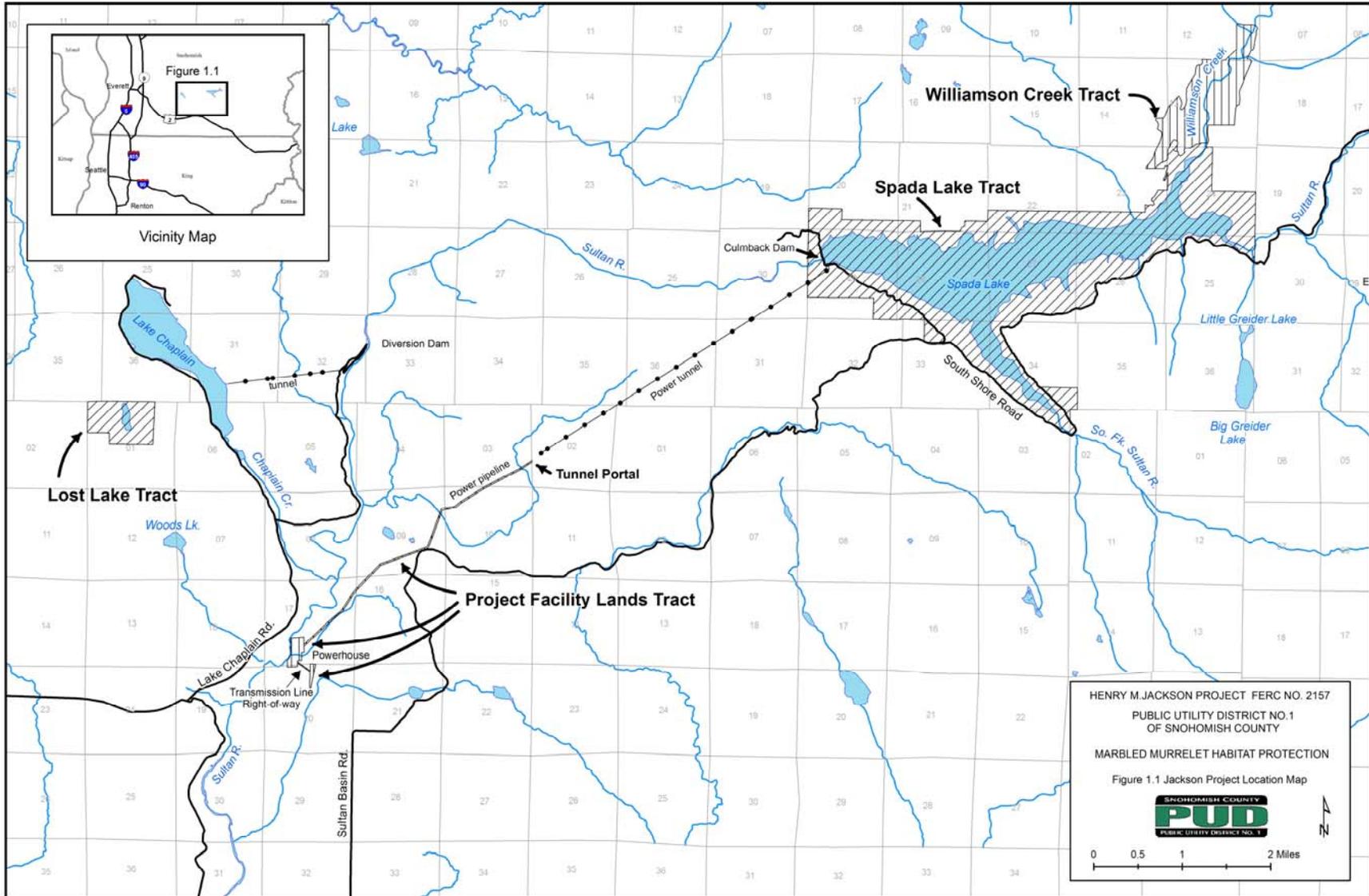
Three general types of Project-related activities have the potential to impact nesting marbled murrelets and/or their habitat: 1) the pruning, topping and felling of road-side danger trees; 2) overstory thinning and creation of snags, decaying live trees, coarse woody debris and forest canopy gaps during implementation of the Jackson Project Terrestrial Resource Management Plan (TRMP); and 3) the creation of new recreation trails and associated facilities as required under the new Federal Energy Regulatory Commission (FERC) license.

The goal of the Marbled Murrelet Habitat Protection Plan (MMHPP) is to avoid or minimize potential impacts to nesting marbled murrelets and suitable marbled murrelet nesting habitat during routine road maintenance on and near Project lands, during implementation of the TRMP, and during the creation, use and maintenance of new recreation trails and associated facilities. While conducting these activities, the District will identify potential marbled murrelet nest trees and protect them from modification or felling. Nearby live conifers that are large enough to provide lateral cover to potential nest trees will also be protected where feasible. To help ensure effective implementation of the MMHPP, the District will also maintain current maps of suitable and occupied marbled murrelet nesting habitat on Project lands.

The MMHPP that was included in the Final License Application for the Jackson Hydroelectric Project was updated in March 2011 as required by the US Fish and Wildlife Service (USFWS) in their Endangered Species Act-Section 7 Consultation, Biological Opinion dated February 2011 (BiOp), section Incidental Take Statement: Terms and Conditions “T&C 4 Update MMHPP to reflect new information in this Opinion.”

1.1 Project Lands

The Project area consists of approximately 2,548 acres of upland, wetland and natural lake along with 1,908 acres of reservoir, all in the Sultan River Basin of Snohomish County, Washington (Figure 1-1). The TRMP divides the Project lands into four management tracts: Lost Lake, Project Facility Lands, Spada Lake, and Williamson Creek (see TRMP for detailed descriptions of all tracts). This MMHPP will be applicable to suitable marbled murrelet habitat (current and future) on all TRMP lands. As of 2009, suitable and occupied marbled murrelet habitat are only present in the Spada Lake and Williamson Creek tracts, so the MMHPP will only be implemented in those areas at the time of issuance of the new license. If suitable marbled murrelet habitat develops and/or marbled murrelets are detected in other tracts over the term of the license, the MMHPP will be implemented there as well.



1.2 Regulatory Restrictions on Marbled Murrelet Habitat

The Federal Endangered Species Act (ESA) lists the marbled murrelet as a threatened species and restricts take throughout its range. The U.S. Fish and Wildlife Service (USFWS) provides informal guidance on steps that can be taken to avoid take of marbled murrelets, and consults formally with other Federal agencies that have identified the potential for their actions to affect the species. The issuance of a hydropower license by the FERC is a Federal action that is subject to compliance with the ESA. The FERC has designated the District as the Commission's non-federal representative for purposes of conducting informal consultation under Section 7 of the ESA. This MMHPP has been prepared to support that consultation.

Take of marbled murrelets on non-federal forestlands in Washington is largely avoided through implementation of the Washington Forest Practices Rules (FPR; Washington Administrative Code 222), which have been promulgated by the Washington Forest Practices Board under the authority of the Forest Practices Act (Revised Code of Washington 76.09). Specific provisions in the current (2009) FPR define suitable and occupied marbled murrelet habitat in Washington, and specify protocols for identifying habitat and surveying for the presence of marbled murrelets. Those definitions and protocols are used in this MMHPP as well, except for the definition of the "critical nesting season" and "daily peak activity," as required by the USFWS BiOp.

The FPR classify timber harvesting and other forest management activities with the potential to cause take as Class IV – Special forest practices, and provide detailed guidelines for determining whether a forest practice is a Class IV – Special with regard to marbled murrelets. Most forest landowners design their activities to avoid designation as Class IV – Special, thereby eliminating the potential for take. That is the approach taken in this MMHPP as well. The measures described in Section 2.2 have been designed to avoid impacts to marbled murrelets wherever feasible, and to minimize impacts where avoidance may not be feasible (e.g., emergency road maintenance).

This MMHPP has been prepared to be consistent with the FPR. In implementing the MMHPP, the District will continue to comply with the FPR, including acquisition of the appropriate Forest Practices Approvals where needed. In addition, the District will comply with the BiOp Terms and Conditions (page 112).

2.0 HABITAT PROTECTION

2.1 Background

2.1.1 Current (2008) Distribution of Occupied and Suitable Habitat

Old-growth and mature conifer forest in the Spada Lake Tract was assessed as suitable marbled murrelet habitat according to the FPR definition (WAC-222-12-090) in 2007. The suitable habitat was surveyed for marbled murrelets as four survey areas (Culmback West, Culmback East, Olney Pass and South Fork Spada Inlet) in 2007 and 2008 according to Pacific Seabird Group protocol (Evans et al. 2003) (Figure 2-1). Occupancy was confirmed in the Culmback West survey area, and presence was confirmed in the other three (Biota Pacific 2008). Since Culmback West, Culmback East and Olney Pass survey areas are contiguous, all are considered occupied. While no occupancy detections were made at South Fork Spada Inlet in 2007 or 2008, the survey area is contiguous with occupancy detections on State lands from the 1990s (Northwest ¼ of Section 2, Township 28 North, Range 9 East), and is considered occupied as well.

Stands of contiguous mature and old-growth forest in Williamson Creek were also assessed as suitable. They were surveyed as two survey areas (Williamson Creek North and Williamson Creek South) (Figure 2-2) (Biota Pacific 2008). Occupancy was confirmed in the Williamson Creek North survey area in 2007. While no occupancy or presence detections were made at Williamson Creek South in 2007, the survey area is contiguous with Williamson Creek North, and is considered occupied as well.

2.1.2 Potential Future Habitat Conditions

The Project lands contain stands of second-growth forest that are not currently classified as marbled murrelet habitat. Many of these stands are being managed for late-seral forest under the TRMP, and could develop conditions that would trigger a reclassification as suitable marbled murrelet habitat under the FPR definition (WAC 222-16-010). These lands should be reassessed when habitat maps are updated each decade (see Section 2.2.1). Spada Lake, Williamson Creek, and Lost Lake tracts are the most likely locations for reclassified habitat, as the majority of the Project Facility Lands Tract is being managed for early seral forest and non-forest habitats.

Sensitive Fish and Wildlife Information

Figure 2-1 Marbled murrelet survey areas in the Spada Lake Tract.

Sensitive Fish and Wildlife Information

Figure 2-2 Marbled murrelet survey areas in the Williamson Creek Tract

2.1.3 TRMP Prescriptions for Occupied and Buffer Habitat

All occupied marbled murrelet habitat within the Project boundary is in mature and old-growth stands designated for passive management under the TRMP. These stands will be preserved as old-growth forest with minimal intervention. There will be no timber harvesting, snag creation, coarse woody debris, or gap creation within occupied stands.

Second-growth conifer and mosaic (mixed) forest stands adjacent to occupied habitat will also be managed for late-seral conditions, but they will require varying levels of active manipulation until they reach a stand age of 100 years. Overstory thinning, snag creation, coarse woody debris creation and gap creation may all occur as needed in second-growth stands. Active management in second-growth stands that are also serving as buffers to occupied marbled murrelet habitat (within 300 feet of occupied habitat) will be conducted in a manner consistent with the FPR to minimize impacts to occupied habitat.

2.2 Impact Avoidance and Minimization Measures

2.2.1 Updating of Habitat Information

The District will prepare and maintain maps of the Project lands and adjacent areas showing suitable marbled murrelet habitat, occupied marbled murrelet habitat, and other forest within 300 feet of suitable and occupied marbled murrelet habitat. For mapping purposes, suitable and occupied marbled murrelet habitats will be defined according to the FPR. At intervals of 10 years or less, the District will update the maps to reflect current habitat conditions. The District may conduct surveys for nesting marbled murrelets in all suitable habitat that is not known to be occupied and has not been surveyed for 10 or more years. If the District chooses not to survey suitable habitat, such habitat will be considered occupied for purposes of this MMHPP. Hereafter in this MMHPP, all references to occupied habitat include suitable habitat that has not been surveyed for 10 or more years. Surveys will be conducted according to the current protocol of the Pacific Seabird Group, or another protocol endorsed by the USFWS and WDFW.

2.2.2 Roadside Danger Trees

Relevance to the Project

An estimated 3 miles of Project roads pass through occupied habitat, or through forest that is within 300 feet of occupied forest. This number of affected road miles could increase during the term of the new license as forests in and near the Project boundary mature and additional acres become suitable for marbled murrelet nesting, and while the District assumes management responsibility for additional miles of existing Washington Department of Natural Resources (WDNR) roads along the south shore of Spada Lake. Among the routine maintenance activities conducted by the District are the pruning, topping and felling of roadside danger trees (trees capable of falling onto and blocking the road and/or striking passing vehicles). Conducting these activities in forest that is occupied or could be occupied by marbled murrelets has the potential to directly or indirectly impact nesting success. The pruning, topping or felling of trees in which marbled murrelets are present during the nesting season could lead to the injury or death of young birds. Similar activities outside the nesting season could reduce the availability of suitable nest sites in successive seasons. The pruning, topping or felling of other dominant or codominant overstory trees in forest surrounding occupied nesting habitat could expose nest trees to increased wind damage and make individual nests more vulnerable to disturbance and predation.

Avoidance and Minimization Measures

Prior to the scheduled pruning, topping or felling of roadside danger trees in occupied marbled murrelet habitat, District biologists will evaluate each tree proposed for such activity. The District will not prune, top or fell roadside danger trees in occupied habitat that contain marbled murrelet nesting platforms (as defined in the FPR), unless the roadside danger tree poses an imminent threat to the operation of the Project or safe use of a Project road. A roadside danger tree will be considered an imminent threat if it is leaning toward a road at an angle of greater than 20 degrees from vertical, is upslope from a road and being undercut by erosion, or is otherwise in a condition that would lead a professional forester or other similarly qualified person to conclude it has a reasonable potential to fall on or across the road without warning. As required in the “Terms and Conditions” (T&C) of the BiOp to fulfill “Reasonable and Prudent Measures”, “RMP 3. Minimize the extent and likelihood of effects to murrelets from habitat modification”, the District will:

“T&C 1. Use the USFS manual (2008), ‘Field Guide for Danger Tree Removal Identification and Response’ as additional guidance to the MMHPP when identify(*ing*) and removing danger trees in and adjacent to murrelet habitat.”

“T&C 2. If suitable nesting trees are to be felled during (*the*) nesting season, they should be removed as early or as late in the nesting season as possible.

” T&C 3. Contact the FWS to discuss potential options to reduce effects to murrelets prior to the removal of potential nest trees in occupied or suitable and unsurveyed habitat during the nesting season.”

The District will not prune, top or fell roadside danger trees in or within 300 feet of occupied habitat during the critical marbled murrelet nesting season (April 1 through September 22), unless the roadside dangers tree poses an imminent threat to the operation of the Project or safe use of a Project road, as described in the previous paragraph. Outside the critical marbled murrelet nesting season and regardless of imminent threat to the operation of the Project or safe use of a Project road, the District may prune, top or fell roadside danger trees in or within 300 feet of occupied habitat that do not contain marbled murrelet nesting platforms. Any tree-felling in or within 300 feet of occupied habitat that takes place within the critical nesting season (because it poses an imminent threat) will only be performed from two hours after official sunrise to two hours before official sunset to avoid the daily peak activity period as defined by USFWS in the BiOp.

2.2.3 TRMP Implementation

Relevance to the Project

Second-growth forest on the Project lands will be enhanced for late-seral wildlife species by thinning the overstory and creating snags, decaying live trees, coarse woody debris and small openings (gaps) in the canopy. The TRMP sets a goal of creating three snags and decaying live trees per acre every 8 to 12 years. It also prescribes the felling of live trees to create coarse woody debris. Gaps will be created at the discretion of District biologists, and thinning will be done on a limited basis where it is economically and operationally feasible and likely to accelerate late-seral forest development. Once second-growth stands reach 100 years old, the District will conduct no more thinning and create no more snags, decaying live trees, coarse woody debris, or gaps.

All currently-identified stands of occupied habitat on the Project lands are more than 100 years old, so none of the TRMP activities will be conducted within currently-identified occupied habitat. Maps of suitable habitat on the Project lands will be updated every 10 years (see Section 2.2.1), and new suitable marbled murrelet habitat will be surveyed or treated as occupied. New suitable habitat could be less than 100 years old, however, so the potential for TRMP activities to occur in suitable or occupied habitat needs to be addressed. TRMP activities also could occur in second-growth forest adjacent to occupied habitat, where avoidance and minimization measures will need to be followed.

Avoidance and Minimization Measures

The following restrictions will apply during implementation of the TRMP:

- a) No thinning, snag creation, decaying live tree creation, coarse woody debris creation or gap creation will occur within occupied marbled murrelet habitat.
- b) Thinning, snag creation, decaying live tree creation, coarse woody debris creation and gap creation may occur within 300 feet of occupied marbled murrelet habitat, provided that:
 - i) The activity must result in a residual stand density of at least 75 trees per acre greater than 6 inches diameter at breast height (DBH), of which at least 25 trees per acre are greater than 12 inches DBH and at least 5 trees per acre are greater than 20 inches DBH.
 - ii) No live coniferous trees with marbled murrelet nesting platforms (as defined in the FPR), live coniferous trees with a DBH of 32 inches or greater, or other live dominant or codominant trees within 100 feet of either of these two types of trees, may be modified or felled, except that live western redcedar and Pacific silver fir of any size may be modified to create snags or decaying live trees at a density of up to one per 20 acres per decade.
 - iii) No activity may be conducted during the critical marbled murrelet nesting season (April 1 to September 22).
- c) No thinning, snag creation, decaying live tree creation, coarse woody debris creation or gap creation will be conducted within 0.25 mile of occupied marbled murrelet

habitat from April 1 to September 22 during the daily peak activity period (one hour before official sunrise to two hours after official sunrise, and one hour before official sunset to one hour after official sunset) in the critical marbled murrelet nesting season. In addition, the Terms and Conditions described in the BiOp will be followed.

2.2.4 New Recreation Trails and Associated Facilities

Relevance to the Project

At the request of stakeholders, the District has included in the Jackson Project Recreation Resource Management Plan (RRMP) the creation of new trails and associated trailhead facilities (picnic sites, restrooms and parking area) to improve public access to the Sultan River and to the north side of Spada Lake. A portion of the new trail to the Sultan River and the associated trailhead facilities could be in occupied marbled murrelet habitat, and might require the felling of large trees. Such felling could impact marbled murrelet habitat by eliminating existing nest trees, reducing the number of potential future nest trees, or making remaining trees more vulnerable to wind damage and predation. If the felling takes place within the marbled murrelet nesting season, it could disrupt actively nesting birds. Another potential impact could be increased human activity along the trail or at the trailhead/picnic area, which could disrupt actively nesting marbled murrelets or make them more vulnerable to predation.

Avoidance and Minimization Measures

The following conditions will apply to new recreation trails and associated facilities created on non-federal lands in or within 300 feet of occupied marbled murrelet habitat:

- a) The District will lay out trails and associated facilities to minimize the total area of trail and/or facility within 100 feet of potential nest trees (coniferous trees with marbled murrelet nesting platforms), while giving due consideration to other potential environmental and safety considerations.
- b) The District will not fell coniferous trees with marbled murrelet nesting platforms, or live dominant or codominant trees directly adjacent to coniferous trees with platforms, to create a new recreation trail or associated facilities, unless doing so is necessary to make the trail or associated facilities safe, keep the overall area of site disturbance to a reasonable level, and/or avoid impacting slope stability, surface

erosion or water quality. If the District determines that the felling of such trees is necessary, the District will fell such trees outside the critical marbled murrelet nesting season (April 1 through September 22).

- c) The District will provide wildlife-resistant containers for human refuse during trail and associated facility construction and use, and will empty as needed to prevent wildlife access to refuse. The District will post signs alerting users of the need to contain all refuse.
- d) The District will not conduct the following activities within the specified threshold distances of occupied marbled murrelet habitat and will avoid the daily peak activity period (two hours before official sunrise to two hours after official sunrise, and two hours before official sunset to two hours after official sunset) in the critical marbled murrelet nesting season (April 1 through September 22), as required by the USFWS BiOp.

Activity	Threshold Distance
Blast > 2 pounds	1.0 mile
Blast ≤ 2 pounds	120 yards
Impact pile driver, jackhammer, rock drill	60 yards
Helicopter, single-engine airplane	120 yards
Chainsaw	45 yards
Heavy equipment	35 yards

3.0 MONITORING AND REPORTING

The District will update maps of occupied and suitable habitat, as described in 2.2.1 of this MMHPP. Survey results or important changes to suitable or occupied habitat will be communicated with FERC every 5 years and to USFWS in conjunction with the preparation of the TRMP annual report.

4.0 IMPLEMENTATION SCHEDULE

The District will update maps of suitable and occupied habitat at intervals of 10 years or less, as described in Section 2.2.1 of this document. Minimization measures will be applied as needed, whenever danger trees are felled or TRMP activities are conducted within 300 feet of occupied habitat. The measures will also be applied if new recreation trails are created in or within 300 feet of occupied habitat.

5.0 REFERENCES

- Biota Pacific Environmental Sciences. 2008. Jackson Hydroelectric Project (FERC Project No. 2157) Revised Study Plan 11: Marbled Murrelet Surveys Final Technical Report. Prepared for Public Utility District No. 1 of Snohomish County, Everett, WA.
- Evans Mack, D., W.P. Ritchie, S.K. Nelson, E. Kuo-Harrison, P. Harrison, and T.E. Hamer. 2003. Methods for surveying Marbled Murrelets in forests: a revised protocol for land management and research. Pacific Seabird Group Technical Publication Number 2. Available from <http://www.pacificseabirdgroup.org>.
- U.S. Fish and Wildlife Service. 2011. Endangered Species Act – Section 7 Consultation, Biological Opinion. USFWS Reference No. 13410-2010-F-0609. Henry M. Jackson Hydroelectric Project, Project 2157-000, Federal Energy Regulatory Commission. Consultation Conducted By: U.S. Fish and Wildlife Service, Washington Fish and Wildlife Office. February 2011.

APPENDIX A

STAKEHOLDER CONSULTATION

Appendix A

STAKEHOLDER CONSULTATION

Record of Consultation

Relicensing stakeholders, including WDFW, USFWS, USFS, the Tribes and others, were consulted prior to the submittal of the Notice of Intent to relicense (NOI) and Pre-application Document (PAD), and again during the scoping and study proposal process. They were informed of study progress and received drafts and final versions of the terrestrial resources studies (See the Updated Study Report for more information). On 8 September 2008, a meeting was held for the Jackson Project Relicensing Terrestrial Resources Group (TRG) to review the terrestrial study reports and to discuss proposed Protection, Mitigation and Enhancement (PM&E) measures for terrestrial resources, including a proposed Marbled Murrelet Habitat Protection Plan (MMHPP). A PowerPoint presentation was given at the meeting and paper copies of the presentation and of draft PM&E measures were distributed to those in attendance. Digital copies were also emailed to all TRG members. Meeting minutes are included in Appendix B. Comments were received from the USFS and were incorporated into the Marbled Murrelet PM&E and the MMHPP.

The Preliminary License Proposal (PLP) that was filed with the FERC on 31 December 2008 included the proposed Marbled Murrelet PM&E measure and a discussion of marbled murrelets in the Project area. No comments were received regarding marbled murrelets.

A meeting for the TRG was held on 23 February 2009 to discuss terrestrial PM&E measures and plans in the PLP. Meeting minutes and comments are included in Appendix B.

The District has engaged in discussions with WDFW, USFS and USFWS representatives regarding the contents of the Marbled Murrelet PM&E and the MMHPP. The MMHPP was expanded from the PM&E measure to include measures suggested by the Stakeholders, put into a format consistent with the other terrestrial plans, and included in the FLA.

The District met with the USFWS on March 15, 2011, to discuss the USFWS Biological Opinion; the MMHPP has been updated based on the Biological Opinion and clarifications identified in the District's March 30, 2011 letter to the USFWS.

Table A-1. Stakeholder comments on the Marbled Murrelet PM&E and MMHPP, and District responses to comments.

STAKEHOLDER COMMENT	DISTRICT RESPONSE
US Forest Service, Don Gay via email dated September 19, 2008	
<p>On the draft murrelet PME, in the summary, I would suggest that the measure be expanded to protect/conserves/minimize removal of not only nest trees, but those adjacent trees that provide cover to potential nest sites (at least for the trail portion that would occur on National Forest System lands). This is provided for in the second bullet under specifics of trails on page 12.</p>	<p>As suggested in the comment, the PM&E was revised to clarify the District's intent to protect/conserves/minimize the removal of adjacent trees that provide cover to potential marbled murrelet nest trees in occupied habitat on all Project lands. These revisions were carried forward into the MMHPP.</p>
<p>On the first bullet on that page, I'm not sure that the trail layout should consider all coniferous trees w/in 100' of potential nest platforms, just those that provide cover to the potential platform. There could be areas with lots of small (< 15') conifers that would have no influence on nesting suitability for murrelets.</p> <p>For the second bullet, I have the same comment (specify the types of conifers of concern).</p>	<p>The PM&E was revised to specify the protection of live dominant and codominant trees directly adjacent to coniferous trees with marbled murrelet nesting platforms, as these are the trees most likely to provide cover for marbled murrelet nests. Smaller trees would not need to be protected. These revisions were carried forward into the MMHPP.</p>
<p>Not having seen the trail proposal, I don't know if there is any plan/possibility of refuse cans at the parking area/trailhead, but if there is, the third bullet would apply to the trail to access the river.</p> <p>Thank you for considering these suggestions.</p>	<p>The PME and MMHPP state the District will provide wildlife-resistant containers for human refuse during trail and associated facility construction and use. As suggested in the comment, this would include parking areas and trailheads in the vicinity of occupied marbled murrelet habitat.</p>
Tulalip Tribes, letter dated October 20, 2008	
<p>The following recommendations are meant to serve as a starting point for the discussion and development of Protection, Mitigation and Enhancement measures (PMEs) designed to protect terrestrial resources. The PME's include those for implementation of a Terrestrial Resource Management Plan (TRMP), formalization of a Noxious Weed Plan, and development of a Marbled Murrelet Habitat Protection Plan. These recommendations should be considered preliminary and will need to be refined further under the direction of the Terrestrial Resources Work Group (or its successor).</p>	<p>Comment noted.</p>

STAKEHOLDER COMMENT	DISTRICT RESPONSE
<p>The Tulalip Tribes appreciates the opportunity to provide Project input, and is generally satisfied with the information contained within the Terrestrial Resources PMEs. Recommendations that follow reflect our ideas to further promote the success of the Project.</p>	<p>Comment noted.</p>
<p>Abbreviated terms should be specified at first use for the following: Page 1 Paragraph 1: “WDFW” and “USFWS” Page 1 Paragraph 2: “FERC” Page 1 Paragraph 3: “PME”. Additionally, on page 3 <i>Description of the Action</i>, TRMP and WHMP were specified previously in the document.</p>	<p>The District agrees with these suggested acronyms. All abbreviations and acronyms will be defined at their first use in the MMHPP.</p>
<p>Physical habitat alteration seems to be the prime Project-related impact. While physical habitat alteration is an important component to address, the overall habitat impacts that are listed initially should include noise and other permanent disturbances to nesting and fledging birds. More specifically, trails and associated facilities will create a permanent disturbance to nesting marbled murrelets thereby reducing the amount of available suitable habitat. Restricting public access during sensitive periods should be considered, and suitable or occupied habitat buffers should be employed.</p>	<p>While the scientific literature suggests marbled murrelets are not particularly sensitive to human presence in the vicinity of active nests, the MMHPP contains a number of measures to avoid or minimize human disturbance. Most District activities with the potential to disturb nesting marbled murrelets (felling of roadside danger trees, forest habitat enhancement and recreation trail construction) are restricted near suitable and occupied habitat during the marbled murrelet nesting season (April 1 through August 31). Those activities that might need to occur near suitable or occupied habitat during the nesting season, such as the felling of danger trees, would be conducted outside the marbled murrelet daily peak activity periods at dawn and dusk to further reduce the potential for disturbance. Comparable restrictions on public recreation access would be impractical, however, because the marbled murrelet nesting season coincides with most of the summer recreation season.</p>
<p>The Marbled Murrelet Habitat Protection Plan (MMHPP) should also place a greater emphasis on minimizing impacts from predation such as nest predation by corvids. An increase in human use via recreational activities (i.e., trails) and routine maintenance, as well as a patchwork habitat due to habitat enhancement or maintenance will likely cause an increase in corvid species. Furthermore, the MMHPP should include limitations on the amount of alteration conducted as a result of enhancement/restoration activities within suitable or occupied marbled murrelet habitat to ensure</p>	<p>The MMHPP requires the placement of wildlife-resistant refuse containers at trailheads and picnic areas to minimize the attraction of ravens, crows and jays (potential corvid predators of marbled murrelets). The MMHPP also prohibits all wildlife habitat enhancement and restoration activities, including gap creation and snag creation, within occupied marbled murrelet habitat and suitable habitat that has not been surveyed for marbled murrelets. On the remaining Project lands, the Jackson</p>

STAKEHOLDER COMMENT	DISTRICT RESPONSE
<p>that habitat is not rendered unsuitable.</p>	<p>Project Terrestrial Resource Management Plan (TRMP) prohibits even-aged timber harvesting, and the associated potential for habitat fragmentation, except in site-specific locations where WDFW and USFWS determine it is needed for habitat enhancement. It is anticipated these measures will minimize the fragmentation and degradation of suitable and occupied marbled murrelet habitat, and the attraction of corvids.</p>
<p>Within the <i>New Recreation Trails and Associated Facilities</i> section, the first bullet should be clarified. It is unclear whether trails and associated facilities will be constructed within marbled murrelet habitat. The Tulalip Tribes strongly recommend that trails and associated facilities avoid occupied or suitable habitat, and recommend a larger buffer than 100 feet. In addition, the Tribes recommend changing the language in the second bullet: “permission is granted to remove suitable nesting trees if a slope is unstable or considered unsafe”. We recommend that the same process of review utilized for Roadside Danger Trees be employed for removal of trees associated with trails and other facilities.</p>	<p>A small portion of the proposed Culmback Dam Trail would run through occupied marbled murrelet habitat, but construction and use of the trail would be expected to have negligible impacts on nesting marbled murrelets. The felling of potential nest trees and adjacent cover trees would be kept to a minimum, and all felling and construction activity would occur outside the marbled murrelet nesting season. Human activity on the trail is expected to be light, and human use of hiking trails is not considered to be particularly harmful to marbled murrelets.</p>
<p>While most data in Washington suggests that marbled murrelet fledging activities would have occurred prior to August 31, more conservative dates limiting activities between April 1 and September 15 will further minimize disturbance to fledglings.</p>	<p>As noted in the comment, most data for Washington suggest marbled murrelet fledging is completed by August 31. This is reflected in Washington Forest Practices Rules, which define the marbled murrelet critical nesting season as April 1 through August 31. Restrictions on Project-related activities in occupied habitat after August 31 would be overly conservative, particularly given the limited nature of the activities (felling of roadside danger trees and recreational trail construction). With a few exceptions, these activities would not involve the felling or modification of nest trees, potential nest trees or trees providing cover to nest trees, so they would have relatively little potential to impact nesting marbled murrelets at any time during the nesting season. Prohibiting them from occurring through September 15 would leave the District with little time to complete them before winter snow accumulations make doing so impossible.</p>

STAKEHOLDER COMMENT	DISTRICT RESPONSE
<p>The Tulalip Tribes understands that the District will consider all unsurveyed habitat as occupied; however, we recommend that surveys be conducted more frequently than every ten years to ensure that the most appropriate marbled murrelet management decisions will be employed for the purposes of the project.</p>	<p>Surveys are proposed at 10-year intervals to account for new suitable marbled murrelet habitat that grows during the term of the license. Occupied habitat will not be resurveyed; it will be considered occupied for the term of the license and protected accordingly. Given the slow rate at which new marbled murrelet habitat develops, and the all-inclusive approach the District takes to identifying suitable habitat, it is believed that a 10-year interval is frequent enough to identify and protect all occupied habitat on Project lands. When evaluating habitat for marbled murrelet surveys, the District intentionally applies a broad definition of suitability to include all areas that could develop potential nest structures in the near future. The majority of the lands that are not currently considered occupied are young second-growth forest that will not develop potential marbled murrelet nest structures for several decades. It is therefore highly unlikely that any of the unsurveyed forest will become suitable marbled murrelet habitat between survey years.</p>



Providing quality water, power and service at a competitive price that our customers value

March 30, 2011

Tim Romanski
U.S. Fish and Wildlife Service
510 Desmond Dr. SE, Suite 102
Lacey, WA 98503

**Re: Jackson Hydro Project (FERC No. 2157)
Biological Opinion Clarification**

Dear Tim:

Thank you for taking time on March 15, 2011, to meet with us and discuss the U.S. Fish and Wildlife Service Biological Opinion for the Henry M. Jackson Project, FERC Project No. 2157 (Project).

As we discussed during the meeting, the Biological Opinion (BiOp) includes certain factual statements and obligations within the BiOp or Incidental Take Statement (ITS) that may be considered ambiguous. The purpose of our meeting was to address these potentially ambiguous provisions within the BiOp and ITS in order to avoid potential confusion and delay during implementation of the new Project License. The following is a summary of the topics discussed during our meeting with clarifications from your March 28, 2011 email. If you disagree with this summary of the topics and clarifications, please contact me as soon as possible.

1. Page 73 of the BiOp states that the action area contains approximately 884 acres of marbled murrelet suitable habitat. In preparing the license application, the District surveyed and identified 884 acres of suitable habitat within the existing Wildlife Habitat Management Plan lands (which include the City of Everett's Lake Chaplain Tract) and National Forest Service Lands below Culmback Dam. For purposes of implementing the District's new Project License, there will be approximately 820 acres of suitable habitat within the District's new project boundary and adjacent NFS lands below Culmback Dam. The 820 acres of suitable habitat are considered occupied. Per your email dated March 28, 2011, the USFWS concurs with this change. As stated below, it is anticipated that this amount will increase over the license term.

Furthermore, the amount of suitable habitat within the new project boundary is subject to change during the next license term. The District will update the maps of suitable habitat every ten (10) years as described in the Marbled Murrelet Habitat Protection Plan (MMHPP). Likewise, every ten (10) years, the District may conduct occupancy surveys on Terrestrial Resource Management Plan (TRMP) suitable habitat. To the extent that TRMP suitable habitat is not surveyed for occupancy, that habitat will be considered occupied (regardless of whether it was previously occupied). Per your email dated March

28, 2011, the USFWS currently considers occupancy surveys to be valid for a period of only 5 years.

2. Pages 96 through 99 of the BiOp describe the upcoming Marsh Creek Slide Modification. During the meeting, the District clarified that, due to fish protection in-water work windows, it currently envisions commencing work on the Marsh Creek Slide on or around August 1, 2011. To minimize potential acoustic impacts on nearby potentially suitable habitat (which will not be surveyed for occupancy prior to the slide modification work), the District will conduct all work beginning two hours after sunrise and ending two hours before sunset. Additionally, to further minimize any impact, the District will station all noise creating generators for the jackhammers and other equipment on the road above the river on the west side. You indicated that so long as the District implemented these safeguards, the District's Marsh Creek modifications would be consistent with analysis within the BiOp and covered by the BiOp ITS for marbled murrelet.

3. On Page 99, the BiOp states that the marbled murrelet nesting season is from April 1 to September 22. This nesting season is longer than Settlement Agreement's MMHPP nesting season (April 1 through August 31). The District understands the importance of working outside the nesting season within or adjacent to suitable habitat that is either occupied or potentially occupied (i.e. not surveyed for occupancy), when possible. However, at times project operations and maintenance may require work within the nesting season. Per your email dated March 28, 2011, for any deviation from the nesting season (April 1 to September 22), the District will consult and request approval from the USFWS. The District understands that there are three categories of hierarchical protection when working within the nesting season based on dates and nesting chronology:

- Most conservative – work will be conducted before April 1 or after September 22
- Conservative (99% hatched and fledged) – work will be conducted before April 1 or after September 4
- Less conservative (applied in special circumstances) – work will be scheduled before April 1 or after August 15

In the event that it is necessary for the District to conduct this work within the nesting season, the District will honor time of day restrictions (work will be scheduled to commence 2 hours after sunrise and be completed 2 hours before sunset). Additionally, the District will, whenever possible, adhere to the threshold distances to protect the marbled murrelet from noise disturbance associated with construction activities (BiOp Table 9 at page 99). For suitable habitat that has been surveyed for occupancy, these threshold distances will be measured from marbled murrelet occupancy detection sites. For suitable habitat areas that are potentially occupied (i.e. not been surveyed for occupancy), the entire area will be presumed to be occupied and the threshold distance will be measured from the outside edge of the suitable habitat. The USFWS intended that

these terms and conditions only apply to suitable habitat that is: 1) occupied or 2) potentially occupied (i.e. have not been surveyed for occupancy). These requirements do not apply to suitable habitat that is not occupied (based upon occupancy surveys). The District will update the MMHPP to reflect this change.

For example, with respect to the road maintenance on the 6122 Road (see BiOp at page 102), the District will implement timing restrictions during the nesting season (April 1 through September 22) to prevent disturbance to nesting murrelets in occupied or potentially occupied suitable habitat. Chainsaws and heavy equipment would be limited for construction activities within the previously specified distances of the surveyed occupancy detection site and would only be conducted beginning 2 hours after sunrise and ending 2 hours before sunset during the nesting season (April 1 through September 22). FWS will be consulted prior to implementation if these restrictions cannot be met.

4. On Page 112, RPM 2 – T&C 1 and RPM 3 – T&C 3 include requirements that apply to “suitable habitat”. The USFWS intended that these terms and conditions apply to suitable habitat that is: 1) occupied or 2) potentially occupied. These requirements do not apply to suitable habitat that is not occupied. With respect to RPM 2 – T&C 1, for suitable habitat that has been surveyed for occupancy, 0.5 mile threshold distances will be measured from marbled murrelet occupancy detection sites. For suitable habitat that has not been surveyed for occupancy, the entire area will be presumed to be occupied.

5. Regarding the discretionary conservation recommendations on page 112 and 113, the District intends on implementing these measures to the extent feasible. Specifically, with respect to Conservation Recommendation 3, to the extent that it is feasible to implement these measures, the USFWS intended that these terms and conditions apply to suitable habitat that is: 1) occupied or 2) potentially occupied. USFWS did not intend that these requirements apply to suitable habitat that is not occupied. For occupied habitat, the threshold distances will be measured from marbled murrelet occupancy detection sites. For suitable habitat areas that have not been surveyed for occupancy, the entire area will be presumed to be occupied.

6. Finally, during our review, we noticed a few minor errors and items that needed clarification. The attached table identifies those areas and our understanding of the issues. Because these clarifications are minor and do not change the overall take analysis, we do not plan to file these errata with FERC.

To ensure that the MMHPP is consistent with the USFWS BiOp, the District will be filing an updated MMHPP with the FERC. As such, as stated above, if you disagree with this summary of the corrections and clarifications, please contact me as soon as possible so that we can resolve these issues prior to the Commission issuing the new Project License.

Thank you for your continued involvement with the relicensing of the Jackson Project.

Sincerely,

A handwritten signature in black ink, appearing to read "Keith Binkley". The signature is written in a cursive style with a large initial "K".

Keith Binkley
Manager, Natural Resources Department
KMBinkley@snopud.com
(425) 783-1769

Cc: Matt Love, Van Ness Feldman

Comments on USFWS BiOp

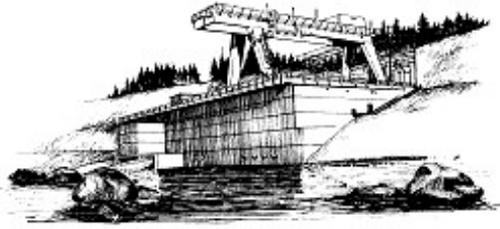
Number	USFWS Statement (page)	District Clarification/Understanding
1	Page 6. First Paragraph. States there is a 1-mile long transmission line extending from the power plant to the Lake Chaplain Substation.	The Final License Application Executive Summary for Exhibit E erroneously states that the Project has a 1-mile long transmission line. However, there are no single purpose transmission lines in the proposed Project Boundary. Jackson energy is transmitted into the District loop distribution system at the Powerhouse substation. We make this point to clear up any confusion on this matter.
2	Page 16. Table 1. A-LA-5 Downramping Rate Conditions. Staff the powerhouse during potential electrical storms during initial testing of flow continuation system, and until the bypass system proves effective at preventing fish stranding.	Staffing of Powerhouse will occur until the Pelton bypass system proves operationally effective. This means that the infrequent down ramps of the river when a unit trips off line will be within the allowed downramping rates.
3	Page 69, 71. All habitats below the Diversion Dam (9.7 stream miles) are currently accessible by bull trout and five species of anadromous salmon.	Steelhead trout and Chinook, coho, pink, and chum salmon access the lower Sultan River. Proper reference would be to five species of anadromous salmonids.
4	Page 70, first paragraph. The Sultan River supports a robust population of pink salmon (odd year run). Bull trout are known to prey heavily on pink salmon fry (Lowery 2009, page 29) and salmon carcass flesh. In even years, the forage PCE is likely impaired to some degree, due to impairment of spawning and rearing of salmonids.	Using a relative comparison of the pink salmon populations during the robust odd years with the less than robust even years seems flawed in terms of measuring impairment of the forage PCE.
5	Page 73, last paragraph of the section, “Conservation Role of the Action Area for Marbled Murrelets”, the last sentence states: “All old growth stands, stands 100-years old or older, and stands that will become 100-years old during the license term will be protected providing viable nesting habitat for murrelets in the actions area.”	This paragraph appears to generally summarize the TRMP management obligations with respect to TRMP lands. See Section 1.4 of TRMP. The District notes that it has no control over management of NFS lands or other property not under District ownership or easement.

6	Page 79, first sentence. The ARC would annually coordinate scheduling of the April, May, and September whitewater flow releases and the proposed process flows discussed in A-LA 8.	Should read as: The ARC would annually coordinate scheduling of the April or May, and September whitewater flow releases and the proposed process flows discussed in A-LA 8.
7	Page 82, second paragraph. LWD from Spada Lake Reservoir would be used to build the structures and to provide material for the proposed side-channel enhancement projects.	Where applicable, LWD from Spada Lake Reservoir will be used to build the structures but this LWD will most likely be suited for within side channel applications as opposed to the mainstem of the Sultan River. In order to meet the species and dimension requirements, the majority of the LWD for the mainstem structures will be hauled in from off-site.
8	Page 82, third paragraph. Most of the construction of LWD structures would be accomplished outside the active channel or in dewatered side channels.	Most of the construction of LWD structures would be accomplished along the lateral margins of the river in dewatered sections or in dewatered side channels.
9	Page 83, second paragraph. Installation of the structures....could cause mortality of eggs.....	Installation of the structures will occur in accordance with approved work windows during the month of August and will therefore not impact eggs.
10	Page 94, last paragraph under PCE (2). ...providing beneficial water temperatures in Reach 1 and Reach 2...	Should also include reference to Reach 3.
11	Page 99, second paragraph. "Threshold distances for disturbance to murrelets from several activity types are shown in Table 9. The District will adhere to these threshold distances during the nesting season."	The District will adhere to these threshold distances in and near <u>occupied or unsurveyed suitable murrelet habitat</u> during the nesting season and limit work to between 2 hours after sunrise to 2 hours before sunset. When these threshold distances cannot be met, FWS will be consulted prior to implementation.
12	Page 104, second paragraph of <u>T-LA 2 Noxious Weed Management Plan</u> . "Mowing in suitable habitat would	Mowing in <u>occupied or unsurveyed suitable murrelet habitat</u> would occur outside of the murrelet nesting season (April 1

	occur outside of the murrelet nesting season (April 1 to September 22) or at threshold distances from suitable habitat to protect the murrelet from noise disturbance (Table 9) will be implemented.”	to September 22) or at threshold distances (Table 9) from the occupancy determination site to protect the murrelet from noise disturbance. (Note: Noxious weed management relative to murrelets is not mentioned in the MMHPP or the NWMP. The only time noxious weeds can be feasibly managed is during the nesting season.)
13	Page 105 under <u>Hazard Tree Removal</u> , first paragraph, last sentence. “Murrelet occupancy was detected in 2007, but this site is not within or adjacent to the trail alignment.”	The current trail alignment is estimated to be about 500 feet upstream of the station where occupancy was observed.
14	Page 111 under “AMOUNT OR EXTENT OF TAKE (Marbled Murrelet)” first paragraph. “The FWS expects the harm of murrelet chicks or eggs associated with the 20 hazard trees to be removed during the nesting season.”	The District interprets this to mean: “The FWS expects the harm of murrelet chicks or eggs associated with the potential removal of 20 <u>dominate or co-dominate hazard trees in occupied marbled murrelet suitable habitat</u> during the nesting season” There would be no take if the tree is located in suitable habitat that is not occupied.
15	Page 111, under “AMOUNT OR EXTENT OF TAKE (Marbled Murrelet)” second paragraph. “The FWS expects the harassment of adult marbled murrelets within 45 yards of the 20 hazard trees to be removed during the nesting season.”	The District interprets this to mean: The FWS expects the harassment of adult marbled murrelets within 45 yards of the potential removal of 20 <u>dominate or co-dominate hazard trees in occupied marbled murrelet suitable habitat</u> during the nesting season.” There would be no take if the tree is located in suitable habitat that is not occupied.
16	Page 113 Conservation Recommendation #5. “The survey results and field notes of monitoring efforts for listed species should be documented and sent to the FWS on an annual basis, in order to maintain and update baseline information, and to facilitate future consultations.”	The District interprets this to mean: The District will provide the information to FWS in conjunction with the preparation of the annual report for any year that we conduct surveys or update maps.

APPENDIX B

STAKEHOLDER MEETING SUMMARIES



Jackson Project Relicensing Terrestrial Resources Group

Monday, September 8, 2008

Meeting Summary

Start Time: 9:05 a.m.	End Time: 12:10 p.m.
Subject: Terrestrial Resource Group Meeting Summary	
Attendees: <ul style="list-style-type: none">• American Whitewater – Tom O’Keefe• Biota Pacific – Marty Vaughn• City of Everett – Julie Sklare• District – Karen Bedrossian, Jeff Kallstrom, Bruce Meaker, Kim Moore, Dawn Presler• FERC – David Turner (via conference phone)• Meridian Environmental Inc – Pam Klatt• North Cascades Conservation Council et al. – Rick McGuire• Smayda Environmental Associates, Inc.– Kathy Smayda• US Forest Service – Don Gay, Ann Risvold• WA Dept of Fish and Wildlife – Rich Johnson	

DISCUSSION ITEMS

Introductions

The group introduced themselves and their organizations.

Study Results Presentation

Karen, Kathy and Marty presented study results information contained in the attached slides.

Special Status Plant Survey discussion included the following:

Four lichens considered rare by the US Forest Service were located during the survey. Three of the species were in locations on non-NFS lands that are not impacted by the project. The fourth species was found on both NFS and private lands and is fairly common in the Project vicinity, despite its rare status. No special management methods were recommended by the FS for this species.

Noxious Weed Survey discussion included the following:

Blackberry is considered an invasive species, but it is not included on Snohomish County’s noxious weed list. It is very common throughout the county. The District has a District-wide Vegetation Management Plan that covers general weed management for all District properties, including Jackson.

Wetland Survey discussion included the following:

Rich noted that the wetland rating system is misleading to persons unfamiliar with it. The rating system can somewhat counter-intuitively assign high scores to wetlands in the poor condition. The pristine wetlands in the project area ended up with low ratings because of their limited opportunities for improving water quality and reducing flooding and erosion. Karen noted that reading the descriptions of the wetlands provides a better understanding of the quality of the wetland rather than reviewing the rating alone, that the system provided a standardized method of describing the wetlands, that the habitat scores and descriptions are useful, and that this system is the accepted method at both the state and county level. She and Bernice Tannenbaum discussed this issue with the author of the rating system while taking his wetlands rating class. (Note: this issue is addressed on the first page of the Western Washington Wetland Rating System ([Ecology Publication # 04-06-025.])).

- **Action:** Karen – per Rich’s request, provide a cross reference for SP10 Amphibian wetland numbers with those from the SP9 Wetland Survey, since the two studies numbered the wetlands differently.
- **Action:** Dawn – resend link to SP9 and SP10 draft report appendices on web site.

Amphibian Survey discussion included the following:

Slide 21 should state that three (not four) state monitor species are potentially present. A fourth species, Oregon spotted frog, is listed as State Endangered, but its presence in the area is very unlikely.

Bull frogs (an invasive species) were found at Lost Lake, Chaplain Marsh and off-channel habitats along the lower Sultan River. While they are common in lowlands throughout western Washington, they were not found in the upper Sultan Basin.

Rich noted that there may be opportunities for management in the fluctuation zone and river channel to provide better habitat for amphibians; management activities could include timing and amount of flows/drawdown. Although, he is not necessarily saying the District should do so based on other resource needs/benefits. Karen noted that in the report conclusion it states that increase in flows on the river could have a negative impact on amphibians, and that existing conditions at the reservoir indicate that the amphibians are using areas outside the drawdown, so impacts from stranding are minimal.

Marbled Murrelet Survey discussion included the following:

The District has been operating as if the Culmback Dam West and East are occupied habitat since presence was first detected in the 1990s. Rich expressed gratitude that the District was treating the extent of occupancy as the entire survey area, as per PSG protocols.

Spotted Owl Survey discussion included the following:

The definition used during the study for suitable habitat is pretty broad since spotted owls have been found in non-typical or marginal habitat. Incidental potential sightings of spotted owls were treated as a possible sighting during the study and additional stations were added in those areas.

Karen noted that “owl detection” on the maps does not refer to spotted owls but to other species.

Marty discussed the latest research on the interaction of spotted and barred owls. They are competitors for the same habitat/food sources; this competition displaces the spotted owl. There is also some evidence of predation; however, the two species are not natural predators. There is some potential for spotted owl habitat improvement over the long term in the region, particularly on public lands, but the prospects for recovery of the species are still not good because of the presence of the barred owl.

Proposed Protection, Mitigation and Enhancement (PM&E) Measures Presentation

Karen, Kathy and Marty presented proposed PM&E information contained in the attached slides.

Noxious Weed Management Plan discussion included the following:

The District proposes a plan for the management of the 7 noxious weed species for which control must be provided under State and County regulations. The plan calls for an annual report and meeting, and review for additions/deletions from the County's list. The State gives authority for noxious weed control to the County governments.

During the discussion several stakeholders questioned why all noxious weeds would not be managed under the proposed plan. Karen stated that the plan will focus on the noxious weeds that are required to be controlled by state and county regulation. The survey included other noxious weeds and invasive species not listed as noxious weeds. The weed management plan will include general measures to prevent the introduction and spread of weeds, which will be effective both on the target weed species and other invasive species. The plan will bring prevention and management into the planning stages of ground-disturbing activities. Marty noted that the number of weeds for management is a concern due to the cost; managing for all invasive species, including those that have become widespread like blackberry and reed canarygrass, could be cost prohibitive.

The FS noted that they have concerns about the potential spread of weed species onto NFS lands, including several species not included in the draft weed management plan. They indicated that they recognize the difficulty of managing for species that are very common and widespread, such as blackberry and reed canarygrass, but would like to have other, less widespread species considered for addition to the plan. Ann Risvold indicated she will provide a list of FS weed species of concern to Karen.

Ann asked if the District uses herbicides. Karen responded that herbicides are not allowed in the watersheds due to water quality concerns as the water is for municipal drinking water supply. The two areas where knotweed is located are outside the watersheds and herbicides have been used, in combination with cutting, to treat those locations.

David noted that there are two options for the plan: 1) have a separate weed management plan or 2) incorporate the plan into the Terrestrial Resource Management Plan.

- **Action: Ann** – forward list of USFS weeds of concern to Karen.
- **Action: Kathy** – finalize draft Noxious Weed Plan for stakeholder review ASAP so it can be included in the PLP.

Marbled Murrelet Protection Plan discussion included the following:

The District proposes a plan for the protection of marbled murrelet habitat as it relates to road maintenance. Additional activities to be included in the plan are snag management and trails development; Marty will update accordingly for stakeholder review and comment. The District currently ensures protection of marbled murrelet habitat through the Washington Forest Practices Rules. Marty explained the implications of continuing to work through the Forest Practices Rules versus a PME with an incidental take statement for murrelets. A PME and incidental take statement are recommended because they would consolidate and clarify all murrelet habitat protection for District activities (including recreation trail development), and give the District more operational flexibility than the Forest Practices Rules.

A danger tree is one that is defined as having the potential to fall over a road or other facility where it could cause damage, restrict access or cause bodily harm.

Terrestrial Resources Management Plan discussion included the following:

The District is proposing a TRMP to cover the lands the District owns, including 1,745 additional acres around Spada Lake not covered in the original HEP analysis and 139 acres near Williamson Creek not currently in the WHMP or original HEP analysis. The City's lands on the Lake Chaplain Tract, which are used primarily for filtration plant/water supply purposes, as well as timber management, would not be in the TRMP, but would be managed under the current WHMP as an off-license agreement through which the District would maintain oversight of wildlife management activities. The City of Everett will no longer be a co-licensee for the project, and the preference is to continue managing the tract according to the WHMP, but under a separate, off-license agreement. Karen noted that the City of Everett had a timber management plan for the land prior to the preparation of the WHMP and proposed to include the Chaplain Tract in the WHMP as a means to provide more mitigation, while still harvesting timber. By implementing the harvesting plan in the WHMP rather than implementing the existing more aggressive timber management plan for the tract, wildlife habitat was improved. The value to the WHMP was measured by the HEP analysis as the difference between the two plans. The intention of including the lands in the WHMP was not to optimize the wildlife values, but to improve them over the original timber harvesting plan.

Rick expressed concern that there are differing beliefs on the management goals for these lands, the WHMP was outdated when it was written, more lands should be acquired, and the WHMP should be totally re-evaluated. He and Rich both suggested the WHMP places too much emphasis on management for deer. Rich expressed that he had very little disagreement with our current management but that he would like to see a change in management to less even-age stand management and focus on SP6 changes. Karen understands that there are differing philosophies on the management goals; however, the District is managing according to the goals established by the stakeholders under the WHMP's development and the objectives established by the State's current management plan, which includes managing habitat for deer. The WHMP emphasizes habitat for old-growth wildlife species because this was clearly a priority when it was written in the late 1980's, but it also includes management for deer because "in-kind" habitat mitigation was requested by the wildlife agencies as well. Don Gay, USFS asked if WDFW had had a recent change in policy to de-emphasize management for deer. Karen noted that a detailed response to NCCC comments was provided in the ICP response filed with FERC and that FERC made a determination on requests for modifications to study plans.

Rich expressed concern about not having regulatory authority over the Lake Chaplain lands if they are not in the project boundary. Enforcement efforts would be the obligation of the State rather than FERC. He did support the efforts currently underway at the Spada Lake Tract to promote late successional habitat. The District stated that the side agreement could include some oversight provisions, and that the side agreement warrants further discussion.

David Turner stated that the licensee needs to demonstrate to FERC that the Lake Chaplain lands are no longer needed within the project boundary for their original purpose (wildlife mitigation) or for any new purpose, such as recreation.

Tom asked if any lands would be added to the TRMP to replace the Lake Chaplain tract. Karen explained how the 1,745 acres at Spada Lake were added after the HEP analysis was conducted and 139 acres at Williamson Creek would be added, and how the total mitigation value and acreage would be more than adequate under the current FERC view of continuing project impacts.

- **Action: Rich** – identify specific habitat enhancement activities in SP6 that WDFW (including game management) would like to see occur on the mitigation lands so the District can begin analysis cost/benefit for the license application.
- **Action: Jeff** – develop bullet points or whitepaper on TRMP as it relates to an off license agreement relating to Lake Chaplain so Rich has something to give to his AG’s Office for their review and approval of direction and for review by the TRG.
- **Action: Dawn** – route ICP response and FERC’s study plan determination to TRG.

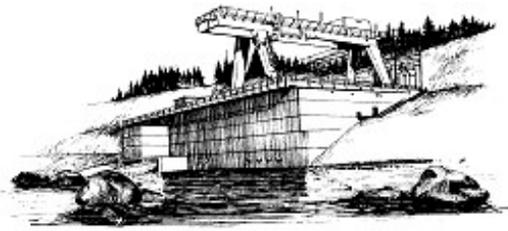
Next Steps for Process

The District will consider and update the PM&E documents based on comments received today at the meeting; the updated PM&Es will be routed via email for TRG review and comment next week. The TRG will have a 2-week comment period. The District seeks TRG input so what is proposed in the Preliminary Licensing Proposal (PLP) is close to/if not the final. In order for input into the PLP, Karen needs to have a “final” proposal ready for analysis by November 1.

Members can contact Karen via email and phone to discuss the proposals. A meeting will be scheduled for October 1, 9:00-11:00 to continue discussion of PM&E issues that do not get resolved between this and the next meeting.

- **Action: Marty** – forward the updated Marbled Murrelet PME to Don Gay for review.

END MEETING



Jackson Project Relicensing Terrestrial Resources Group

Monday, February 23, 2009

Meeting Summary

Start Time: 2:05 p.m.	End Time: 3:40 p.m.
Subject: Terrestrial Resource Group Meeting Summary	
Attendees: <ul style="list-style-type: none">• Biota Pacific – Marty Vaughn• City of Everett (City) – Julie Sklare• District – Karen Bedrossian, Jeff Kallstrom, Bruce Meaker, Kim Moore, Dawn Presler, Matt Love (outside counsel at VanNessFeldman)• Snohomish County (SnoCo) – Carly Summers (via phone)• Tulalip Tribes (Tribes) – Reid Allison• US Forest Service (USFS) – Kristen Bonanno (via phone)• WA Dept of Fish and Wildlife (WDFW) – Rich Johnson	

DISCUSSION ITEMS

Introductions

The group introduced themselves and their organizations.

Status of Relicensing; Settlement Process and Protocols

The entire Terrestrial Resources Group (TRG) was invited to this meeting. Since the attendees were familiar with the status of relicensing and the settlement process, these topics were not heavily discussed. The Confidentiality Agreement and Ground Rules are ready for signature by the agencies with an expectation of a required sign-off by each party by the March 11 Aquatic Resources Settlement Group meeting.

Review of PM&Es in PLP

Karen reviewed the PM&Es and Management Plans (in PLP Appendices) for terrestrial resources including the 1) TRMP, 2) Noxious Weed Plan, and 3) Marbled Murrelet Habitat Protection Plan.

TRMP – see handout

- Williamson Creek – additional acres (not in current WHMP) contain second-growth and wetland and are contiguous with Williamson Creek. Rich stated that WDFW prefers active management to accelerate habitat growth/diversity to allow for a variety of species.
- Lost Lake – no commercial harvest has been done there by the District but it is economically feasible to do so.

Noxious Weed Plan – no comments

Marbled Murrelet Habitat Protection Plan – received comments from Don Gay (USFS) which were incorporated into the version filed in the PLP. Tim Romanski provided comments to Karen on PLP version stating that USFWS is not likely to allow “take” for marbled murrelets. Access trail in upper river gorge area in marbled murrelet habitat could pose a problem. Karen will further discuss with Tim.

Issues

WDFW would like to see in TRMP:

- bigger gaps (1/4 acre), not necessarily more gaps, to provide a variety of habitat and not monocultural habitat
- Snag creation in mature growth areas, including larger diameter snags but in balance with the needs of marbled murrelets
- Fewer roads the better - better for wildlife
- Annual review good, but due to staffing concerns not sure if they will actively participate. 10 years for plan review too long to be proactive. 3-5 years may be better for plan review.
- Flexibility in the plan. Provide management concepts but not as detailed prescriptions as in current WHMP.

Karen and Biota are currently working on a draft TRMP. The District will provide a copy of the working draft to Rich and Mark Hunter by 16 March to be reviewed/commented on before Rich’s one-month vacation that begins on 25 March. The TRG review of the TRMP will occur following that review.

WDFW expressed a desire to ensure that the general public continues to have the ability to access Project lands during state-approved hunting seasons. The Tribe expressed a similar interest for their members; no other terrestrial resource issues were identified. WDFW also mentioned concern that the Lake Chaplain Tract is managed for deer; however, the public is not allowed in the area for hunting.

Lake Chaplain Tract (LCT)

The City would like to have a meeting with WDFW and the City forester to discuss the management of the LCT. Rich said that he is interested in the meeting and site visit in March up to the 20th.

A list of issues Rich noted for the LCT were:

- Current clear cuts – he believes there is a short term gain but it is lost within 15 years when it doesn’t provide browse any more and stays unproductive until the next cut.
- Minimize the use of clear cuts in favor of thinning
- Minimize size of clear cuts
- Lengthen seral stage (increase length of rotation)
- Minimize number of roads
- Develop corridors between the different habitat types
- Land not open to public should be managed for old growth

Rich would prefer management that targets critters losing habitat rather than target for deer. Karen pointed out that the WHMP was designed specifically to avoid and reduce the unproductive stages of clear cuts and that the overall wildlife habitat management program for Jackson Project will provide well over 100% of mitigation for late seral species. Rich would like for the District and City to look at the overall landscape. Karen said that mitigation was designed to make up for losses resulting from the Project (project nexus).

LCT management plan would be an off-license agreement signed by the District, City of Everett, WDFW and possibly the Tribes. USFS and Snohomish County indicated they were unlikely to be a signing party but would like to see drafts of the TRMP and LCT management plan.

Assignments:

Karen, Rich and Julie will set up a meeting for Rich and anyone else he wants to attend from WDFW to talk to the City forester in March.

Karen will send Rich and Mark Hunter a working draft version of the TRMP by 16 March so that Rich can review it prior to being gone during the month of April when the other stakeholders will be reviewing the draft plan.

Dawn will provide Karen with Justin Casing and Carly Summers' email addresses and will send terrestrial related emails to both Justin and Carly as requested by Carly.

END MEETING