

APPENDIX C

STAFF RESPONSE TO COMMENTS ON THE DRAFT EIS

The Commission issued a draft EIS on April 7, 2006, and the U.S. Environmental Protection Agency’s notice of availability was issued on April 14, 2006. Comments on the draft EIS were due June 16, 2006. The following entities filed comments:

<u>Commenting Entity</u>	<u>Date Filed</u>
Dan O’Donnell	May 8, 2006
Swinomish Indian Tribal Community	June 8, 2006
Skagit County Public Works Department	June 14, 2006
Puget Sound Energy	June 15, 2006
Sauk-Suiattle Indian Tribe	June 15, 2006
National Marine Fisheries Service	June 15, 2006
Larry Kunzler	June 15, 2006
The Nature Conservancy	June 15, 2006
Washington Department of Ecology	June 16, 2006
U.S. Department of Interior	June 16, 2006
Washington Department of Fish and Wildlife	June 16, 2006 ⁵⁰
U.S. Forest Service	June 16, 2006
Upper Skagit Indian Tribe	June 16, 2006
City of Mount Vernon, Washington	June 16, 2006
Skagit County Dike Districts No. 1, 12, and 17, and the City of Burlington, Washington	June 16, 2006
Skagit Fisheries Enhancement Group	June 19, 2006
Skagit County Planning and Development Services	June 21, 2006

In this appendix, we summarize the comments received, provide responses to those comments, and indicate how we have modified the text of the final EIS. The comments are grouped by proposed license article or topic for convenience.

General Comments

1. Comment: Several commenters note that the Settlement Agreement is the product of many stakeholders working over several years; that the agreement is an interrelated set of protection, mitigation, and enhancement measures which cannot be separated into component parts; and that any modification or removal of measures may cause the Settlement Agreement to unravel and cause the Baker River Project to become a contested proceeding. These commenters recommend the Commission adopt the proposed license articles contained in the Settlement Agreement, without modification, as conditions of any new license.

⁵⁰ Two separate letters both filed June 16, 2006.

Several commenters also note that stakeholders have worked in a collaborative manner; have balanced diverse public interests; and have worked with Commission staff in reaching the Settlement Agreement. They say we are now using different assumptions or have changed the rules in the middle of the proceeding because we are not recommending certain measures in the draft EIS that they thought we would approve.

Response: We recognize the hard work that the Settlement Parties have put into this proceeding. The Settlement Parties have worked together using the Commission's alternative licensing procedures and have reached a comprehensive settlement agreement. Nevertheless, we must conduct our own independent analysis of the proposed measures in the Settlement Agreement and make a recommendation for a project that we find would be best adapted to the comprehensive development of the waterway on which the project is located.

In conducting our analysis, we found that some measures in the Settlement Agreement do not have a clear nexus to the project (are not tied to project effects or purposes), are not needed to fulfill any project-demonstrated need, should not be Puget's responsibility, or do not provide benefits that justify their costs. We do not recommend including these measures in a license.

We have not used different assumptions and have not changed the rules in the middle of this proceeding but instead applied the Commission's policies. These policies include the Commission's preferences for a clear nexus between a measure and project effects or purposes, specific measures versus general funds, a demonstrated need for a measure, as well as for measures within the Commission's jurisdiction. The Commission has recently addressed many of the above policies in the following orders: Order Approving Settlement and Issuing New License for the Tapoco Project No. 2169-020 issued January 25, 2005, at 110 FERC ¶ 61,056; Order Approving Offer of Settlement, Amending License, and Denying Rehearing for the Roanoke Rapids and Gaston Project No. 2009-030 issued March 4, 2005, at 110 FERC ¶ 61,241; Order on Offer of Settlement and Issuing New License for the Lamoille Project No. 2205-006 issued June 20, 2005, at 111 FERC ¶ 62,313; and Order Approving Settlement and Issuing New License for the Pelton Round Butte Project No. 2030-036 issued June 21, 2005, at 111 FERC ¶ 61,450.

2. Comment: Many commenters want the Commission to include measures that would provide funds to the Forest Service or other third parties instead of our recommendations for specific actions (that would use these funds). Commenters say establishing funds is a flexible and cost-effective approach for Puget and the Settlement Parties to use for this project.

Response: The Commission carries out its regulatory responsibilities for licensed projects through its licensees and cannot rely on third parties to fulfill these responsibilities. While a licensee may hire a third party (including the Forest Service) to

perform a requirement of the license, the ultimate responsibility for ensuring compliance with the terms and conditions of the license rests with the licensee. In general, we do not recommend license conditions that requiring funding to third-parties. Instead, we recommend a licensee implement specific measures.

3. Comment: The Forest Service says we are using the project boundary as an artificial line around Baker Lake to determine whether a recreation site should or should not be included in the license. The Forest Service says this is arbitrary, inconsistent with other projects, and has led us to erroneous conclusions.

Response: As discussed in PacifiCorp, 80 FERC ¶ 61,337 (1997), a project boundary indicates that the lands within the boundary are used in some manner for project purposes. Section 3(11) of the FPA defines a project as a complete unit of development, including all “reservoirs, lands or interests in lands the use and occupancy of which are necessary and appropriate in the maintenance and operation of such unit.” A project boundary reduces ambiguity for purposes of license administration and compliance by clarifying the geographic scope of the licensee’s responsibilities under its license. However, a project boundary does not define those responsibilities and does not always reflect the full geographic extent of those responsibilities.

Our analysis in the draft EIS frequently identifies where a proposed facility or action would be located (or where this is unclear) relative to current project boundaries. However, we do not make recommendations on the basis of whether a particular facility or action would occur on project lands, but instead focus on whether the particular facility or action is needed for project purposes. If we find that a facility or action is needed for project purposes, we may also recommend that the Commission include the underlying lands within the project boundary under any new license.

4. Comment: The Forest Service says the Commission cannot determine whether Forest Service conditions are directly related to project purposes and/or effects and cannot determine the validity of such conditions. The Forest Service says the Commission must include all of its’ section 4(e) conditions in any new license unchanged and unqualified. In the draft EIS, we say we don’t recommend some of the Forest Service’s preliminary section 4(e) conditions, “However, we recognize that the Commission may include valid final section 4(e) conditions in any license issued for the Baker River Project.” The Forest Service indicates this statement should be removed or revised in accordance with its’ above comments.

Response: We defer to the order any further discussion regarding the validity of Forest Service section 4(e) conditions. Nevertheless, whether these conditions are mandatory or not, we recommend our Staff Alternative as best adapted to a comprehensive plan for developing the Baker River basin.

5. Comment: The Swinomish Indian Tribal Community and the Sauk-Suiattle Indian Tribe say the tribes are, by federal court order, co-managers of the fisheries resources in the Skagit River basin along with the WDFW and the Upper Skagit Indian Tribe. The tribes say the Commission should consider their recommendations under section 10(j) rather than section 10(a) of the FPA. Further, the tribes say the Commission is bound by its trust responsibilities to protect tribal lands and resources and is bound by the Presidential Memorandum of April 28, 1994, which urges executive departments and agencies to assess the impact of federal government activities on tribal trust resources.

Response: Our consideration was made under section 10(a) of the FPA rather than under section 10(j), because the tribes are not fish and wildlife agencies within the meaning of our regulations at 18 CFR §4.30(b)(9)(i). Nevertheless, we have fully considered the tribes' comments and recommendations for protecting tribal resources and recommend a Staff Alternative based, in part, on the tribes interests.

Specific Comments

Many commenters provided a series of specific comments, corrections, and clarifications on the draft EIS. We have carefully reviewed these comments, corrections, and clarifications, and have made appropriate changes to the final EIS. All substantive comments are addressed below, by proposed license article and/or topic.

Fish Propagation (Proposed Article 101)

6. Comment: The Swinomish Indian Tribal Community, Sauk-Suiattle Indian Tribe, and Upper Skagit Indian Tribe say that by law it's the WDFW and the tribes' responsibilities to manage fish resources in the Baker River basin. The tribes recommend the Commission retain the language in Proposed Article 101(e) that says: "Licensee shall continue the existing programs described in the schedule below unless modified or terminated at the direction of the Sauk-Suiattle Indian Tribe, Swinomish Indian Tribal Community, Upper Skagit Indian Tribe, and WDFW ("Fish Co-managers") (emphasis added)." They assert that staff's recommended language in the draft EIS which states "(4) operating facilities as recommended by the Sauk-Suiattle Indian Tribe, Swinomish Indian Tribal Community, Upper Skagit Tribe, and WDFW. . ." is inadequate given WDFW and the tribes' legal authority (emphasis added).

In addition, the Swinomish Indian Tribal Community and Sauk-Suiattle Indian Tribe say that the hatchery manager should be an employee of the Fish Co-managers as proposed in Proposed Article 101(i) since day-to-day decisions should be made by the Fish Co-managers.

Puget states that the species mix within the scope of the hatchery program is a matter best left to WDFW and the Fish Co-managers. Puget recommends the

Commission use the language in Proposed Article 101 permitting the Fish Co-managers to determine the species mix.

Response: Modification or termination of programs required in the license at the direction of the Sauk-Suiattle Indian Tribe, Swinomish Indian Tribal Community, Upper Skagit Indian Tribe, and WDFW would be inconsistent with the FPA. It has long been held that the Commission cannot relinquish to resource agencies its responsibility to assess plans and designs, but must retain final approval authority over project structures and operations. See First Iowa Hydro-electric Corp. v. FPC, 328 U.S. 152 (1944).

Here, Puget and the tribes are seeking to give final approval over operations and structures to the Fish Co-managers. The Swinomish Indian Tribal Community and the Sauk-Suiattle Indian Tribe also recommend the hatchery manager be an employee of the Fish Co-managers. We do not contest the tribes' claims that they have responsibilities to manage fish resources in the Baker River basin; however, the Commission must retain its final approval authority over project structures and operations. Likewise, any hatchery manager must also be accountable to Puget so the Commission can exercise its final approval authority, if necessary. The Commission cannot look to third parties to fulfill conditions required by a license.

7. Comment: The Swinomish Indian Tribal Community and the Sauk-Suiattle Indian Tribe say the Commission should require Puget to provide funds to the Fish Co-managers for a reservoir nutrient enhancement program rather than our recommendation for Puget to implement this program.

Response: As discussed above in our response to comments No. 2, the Commission prefers specific measures to funds and can only require a licensee (not a third-party) to fulfill the license conditions. We recommend Puget implement a reservoir nutrient enhancement program rather than provide funds to the Forest Service for this action.

8. Comment: The Upper Skagit Indian Tribe recommends the Commission include the implementation schedule attached to Proposed Article 101 in our recommended measure because the schedule contains critical timing components that are directly tied to the biology and stock status of sockeye salmon.

Response: The above-mentioned "schedule" addresses timing but also addresses the operation of proposed fish propagation facilities. We recommend including this schedule and its operations in any license except for two provisions that would: (1) resume a sockeye fry productivity study in 2006 and, (2) allow the Fish Resource Parties to modify the schedule and criteria without prior Commission approval. Our reasons for these two exceptions are explained in section 5.1.3.

Downstream Fish Passage (Proposed Article 105)

9. Comment: The Swinomish Indian Tribal Community and the Sauk-Suiattle Indian Tribe say the Commission should require Puget to provide \$800,000 if Phase II downstream fish passage facilities are not needed at the Upper and Lower Baker developments (total \$1,600,000 if both phases are unnecessary) as originally contained in Proposed Article 105. Proposed Article 105 says Phase II fish passage facilities are not needed if Phase I meets performance criteria. The above funds (if any) would be used for riparian habitat restoration and acquisition under Proposed Article 505. The tribes say the above funds are needed because: (1) Proposed Article 505 by itself was less than desired by the tribes; (2) Puget is willing to commit additional funds for riparian habitat restoration and acquisition to meet resource goals; and (3) the Commission should recognize the important resource values of Proposed Article 505 and commit additional funds if costs are reduced by the phased approach to fish passage.

Response: We recommend the performance standards contained in Proposed Article 105 for downstream fish passage facilities at both the Upper and Lower Baker developments. Should Puget satisfy these standards with only Phase I facilities, then Phase II is unnecessary and no further action is needed. Should Puget fail to satisfy these standards, Puget should file an amendment to the plan, developed in consultation with the appropriate parties, for Commission approval. We do not recommend Puget pay in lieu of funds as proposed in Proposed Article 105.

Flood Regulation (Proposed Article 107)

10. Comment: The City of Mount Vernon, Washington, the Skagit County Dike Districts No. 1, 12, and 17, and the City of Burlington, Washington (the Flood Control Interests), point out that 28,000 residents and important city, county, and federal infrastructure lies within the Skagit River floodplain downstream of the project. The Flood Control Interests say that there have been four floods since 1991, which have caused an estimated \$71 million in damages in Skagit County. They also state that a 100-year flood would cause an estimated \$1 billion in damages and would inundate the cities and cripple key infrastructure including transportation, water supplies, and sanitary sewer systems.

The Flood Control Interests say the flood control provisions contained in Proposed Article 107(a) at the Upper Baker dam are inadequate. They ask the Commission to retain the existing cap of 100,000 acre-feet of storage under Article 32 of the current license. According to the Flood Control Interests, our recommendation in the draft EIS for a maximum of 74,000 acre-feet of storage at Upper Baker is a step backwards from the current license.

The Flood Control Interests say the flood control provisions contained in Proposed Article 107(b) at the Lower Baker dam are highly speculative and unlikely to ever be realized for several reasons. First, the Corps must complete its GI study and funding for the study is questionable; the study has not yet been funded through FY 2007. Second, assuming the Corps completes its study, the Corps must then find that additional flood control at the project is the most economically viable alternative within the Skagit River basin. Third, assuming the Corps makes the above finding, the Corps would then need Congressional authorization to operate any additional flood control storage. Finally, the Flood Control Interests say the Corps has higher dam safety standards than the Commission and would likely require major modifications to Lower Baker dam to implement any additional flood control. Such modifications could cost over \$100 million and a portion of this cost would likely be borne by local jurisdictions.

The Flood Control Interests ask the Commission to require additional flood control now, instead of deferring any action until such time as the Corps completes its GI study and receives any Congressional authorization. The Flood Control Interests says the Commission clearly has the authority under the FPA to require flood control, independent of the Corps. Deferring any action and relying upon reopeners simply delays and transfers the responsibility for flood control from the Commission to the Corps, according to the Flood Control Interests.

Finally, the Flood Control Interests say the draft EIS fails to consider the impacts of additional flood control at Lower Baker dam. In addition, flood control plays an important role in preventing and controlling the negative water quality impacts of floods, which can introduce sewage, animal waste, petrochemicals, and pollutants to river waters. Such cumulative effects must also be considered when looking at the benefits of additional flood control.

In summary, the Flood Control Interests say the draft EIS strikes an inappropriate balance under the FPA because it does not provide viable flood control protection downstream of the project.

Response: The Skagit River Valley is subject to periodic floods and we recognize the risk this situation presents. The Corps took action in the 1950s and the 1970s by obtaining flood control space in both Upper Baker and Ross Dams to address this situation and to minimize the damage and costs periodic floods would have on development in the floodplain.

With respect to flood control at the Lower Baker dam, we acknowledge the Flood Control Interest's concern that the Corps first complete its GI study, make a finding that additional flood control at the project is warranted, and then obtain Congressional authorization before invoking the flood control provisions in Proposed Article 107(b). However, the Corps has indicated that this is the process it must follow in order to

operate using additional storage. Regarding the Corp's dam safety procedures, it's premature at this time to determine what modifications to Lower Baker dam would be needed to accomplish the additional flood control in Proposed Article 107(b); however, any modifications to the Lower Baker dam would be reviewed by both the Commission and the Corps using the same dam safety standards.

We do not recommend retaining the existing cap of 100,000 acre-feet of storage at Upper Baker Dam as required by Article 32 of the current license for several reasons. First, under some flood flow conditions, the Upper Baker dam would need structural modifications to pass high flows when operating at lower reservoir levels in order to keep the lower part of the flood pool from filling before flood control operation is initiated. Second, the feasibility of modifying the dam has not been determined and the cost of any modifications would likely be significant. Third, the incremental benefit of providing 100,000 compared to 74,000 acre-feet of storage is relatively small when compared to forgone energy costs and could be significantly negative when the cost of structural modifications is included. Lastly, Puget's June 15, 2006, comments on the draft EIS stated that providing 100,000 acre-feet of storage at Upper Baker may be inconsistent with the flow regime and operation standards contained in the Settlement Agreement.

See sections 3.3.2.2 and 5.1.3 of the final EIS for additional information and discussion on this issue. Requiring 100,000 acre-feet of flood control storage at Upper Baker dam with structural modifications to increase the discharge capacity of the dam when operating at the lower elevation would impose an irretrievable commitment of resources on Puget and, based on the information currently available, would produce minimal incremental flood protection benefits. Subject to further study by the Corps, Proposed Article 107 could provide up to 103,000 acre-feet of flood protection which is as good or better than the 100,000 acre-feet of storage provided under Article 32 of the current license.

The Flood Control Interests say the Commission has the authority under the FPA to independently require flood control, and asks for additional flood control now, instead of deferring any action to the Corps. It would be difficult for us to advise what flood control measures are necessary and sufficient in the context of a basin-wide flood control system, which includes the Baker Lake and Ross Lake flood control projects. The Corps manages the entire system for flood control. Any actions taken at one project must be coordinated with other actions in the system by one administering entity; in this case, the administering agency is the Corps.

Our recommended language under Proposed Article 107 would require Puget to "review project operations and develop any procedures to address imminent flood events, which may include lowering project reservoirs below flood regulation storage levels, and file a plan for Commission approval with: (i) any proposed changes to project operations, and (ii) an analysis of how any proposed changes affect the safety and

adequacy of project structures.” We believe this requirement would ensure Puget takes all reasonable actions to address imminent floods prior to the Corps completing its GI study and making any further flood control recommendations for Commission approval. In addition, we have added language to our recommended measures under Proposed Article 107 to permit Puget to temporarily modify storage requirements if required by an emergency and if the Corps agrees to the modifications. We have changed section 3.3.2.2 in the final EIS to better explain our rationale for this approach.

We added the water quality benefits associated with the project’s current flood control measures and any additional flood control that may be developed through the Corp’s GI study process, in section 3.3.3.1, Water Quality, Affected Environment, Hazardous Materials.

11. Comment: The Flood Control Interests say the new turbines at the Lower Baker dam would increase the maximum generating capacity from 4,100 to 5,600 cfs at certain times of the year; this is a 37 percent increase in flow. They say various studies have found that this increase would affect river levels anywhere from 1 to 3 feet near the cities of Burlington and Mount Vernon.

Response: Project-related flow fluctuations can affect downstream Skagit River levels by 1 to 3 feet when Skagit River flows are low. However, when Skagit River flows are high, as happens during flood conditions, project-related flow fluctuations have much less of an effect. For example, at a 10-year frequency flood, a flow of 5,000 cfs from the Baker River increases the Skagit River stage at RM 21.6 (Burlington area) by about 0.8 foot. At a 50-year frequency flood, a flow of 5,000 cfs from the Baker River increases the Skagit River stage at RM 21.6 by about 0.1 foot. These effects are reduced even further at RM 12.96 (Mount Vernon area) with distance downstream of the project. Increasing the flow by 1,500 cfs will have little effect on river levels near the Cities of Burlington and Mount Vernon during flood conditions - when river stages are important.

In addition, during any floods greater than an unregulated flow of 90,000 cfs at Concrete, the Corps’ current protocol is to direct Puget not to release more water than what is entering Lower Baker Dam. This protocol would not change with the increased generating capacity and would not likely alter the releases during flood conditions when river stages are important. If the Corps is able to justify flood control storage in Lower Baker Dam in the future, the flood control operation would not be adversely affected by an increase in generator capacity and will likely improve the ability for operators to maintain the flood control space available prior to the flood which will improve the probability of utilizing the dam to reduce outflows during the peak stages of the flood.

12. Comment: Skagit County supports our recommendation in the draft EIS to include Proposed Article 107, with minor modifications, in any new license issued for the project. However, Skagit County has one question related to our statement on page 3-54

that says: “Appropriate reopener provisions in the license would ensure the Commission could require additional flood control measures in the future. . .” Skagit County wants us to clarify that such a reopener would not be needed to implement the 74,000 acre-feet of storage at Upper Baker dam or the 29,000 acre-feet of storage at Lower Baker dam available under Proposed Article 107, but instead would be included in case additional storage is needed above these amounts in the future.

Response: Skagit County is correct. The Corps would not need a reopener to direct Puget to provide up to 74,000 acre-feet of storage at Upper Baker dam or to direct Puget to provide up to 29,000 acre-feet of storage at Lower Baker dam. We added the reopener language to our recommended measure under Proposed Article 107 to help clarify our intent.

13. Comment: Mr. Dan O’Donnell points out that on October 21, 2003, a Skagit River flood crest was lowered 1.5 to 2.0 feet at Mount Vernon via operation of the project under the IPP. He recommends we revise pages 3-53 and 3-54 in the draft EIS to make it clear Puget would follow the IPP until the Corps completes its GI study; that the IPP should take precedence in this case; and that the Commission should not defer to the Corps but instead should ensure appropriate reopener provisions are added to the license.

Response: Under the current schedule, the Corps would complete its GI study by 2009 and the IPP would be in effect until 2012 when the new turbine-generator units are installed and operating in the Lower Baker powerhouse. Consequently, the IPP would “take precedence in this case” until 2012. We have modified sections 2.2.2 and 3.3.2.2 to clarify these points. However, we recommend deferring to the Corps with regards to any additional flood control as stated on page 3-54 of the draft EIS and as discussed in our response to comment No. 10 above.

14. Comment: Mr. Kunzler provided annotated photographs of the Upper and Lower Baker dams showing what the proposed flood control water surface elevations would look like relative to lake levels at the time the photos were taken.

Response: These photographs provide a perspective on what the two reservoirs look like at different lake levels. This information and Mr. Kunzler’s website are now part of the record available to the Commission for review in considering the final requirements of any license.

Gravel Augmentation (Proposed Article 108)

15. Comment: The Swinomish Indian Tribal Community and the Sauk-Suiattle Tribe say the Commission should tie implementation of this proposed article to aggradation or degradation of the riverbed in the Skagit River downstream of the project. In addition, the tribes’ say augmenting gravel should be done in accordance with triggers

contained in the Gravel Augmentation Plan which should be based on additional study and monitoring. Further, the tribes say substrate size distribution is likely more important than aggradation in determining the benefits of a gravel augmentation program.

Response: We do not recommend substantive changes to Proposed Article 108. We recommend Puget monitor substrate profiles and establish triggers for determining when gravel augmentation is appropriate. We also recommend Puget determine how best to place different substrate sizes to meet the biological needs of salmonids and other aquatic organisms.

Large Woody Debris (Proposed Article 109)

16. Comment: Skagit Fisheries Enhancement Group says our recommendation to store all LWD within project boundaries instead of requiring Puget to transport LWD to mutually agreeable stockpile areas in the Baker River basin would greatly increase hauling charges and limit time (due to weather) that LWD would be available to others for fisheries enhancement work. Skagit Fisheries Enhancement Group asks the Commission to leave Proposed Article 109 as stated in the Settlement Agreement or to increase the project boundary to include the area affected by the project downstream of the Baker River.

Response: Proposed Article 109 would allow Puget to put LWD stockpiles anywhere within the Baker River basin. Puget has not identified where these stockpiles would be located and under this proposed article, Puget would not be responsible for the stockpiles if located outside the project boundary. In the draft EIS, we note that opportunities exist on project lands to stockpile LWD and we recommend limiting these stockpiles to within project boundaries. However, should Puget decide to permanently designate one or more LWD stockpiles on non-project lands, we would not object, subject to Puget assuming responsibility for the long-term operation and maintenance of these stockpiles and the inclusion of these lands within a project boundary. The location of LWD stockpiles and Puget's long-term responsibilities should be identified by Puget in our recommended LWD Management Plan. We have modified our recommended LWD Management Plan accordingly.

Shoreline Erosion (Proposed Article 110)

17. Comment: The Forest Service says we omitted portions of Proposed Article 110 and recommends the proposed article as contained in the Settlement Agreement.

Response: In our recommended measure for Proposed Article 110, we omit provisions for scheduling and consultation (and funding to third parties) but retain those substantive provisions that would require: site specific plans to control erosion, selection criteria, prioritizing sites, survey protocols and procedures, treatment methods, and

reporting requirements. In summary, we recommend Puget develop a Shoreline Erosion Control Plan generally consistent with Proposed Article 110.

Historic Properties Management (Proposed Article 201)

18. Comment: The Forest Service says we need to update the final EIS with additional information on historic properties. They point out that the new/modified fish passage facilities would adversely affect the Baker Hydroelectric Historic District (District), a historic property eligible for the National Register of Historic Places. In particular, replacing the existing floating surface collectors at Upper and Lower Baker dams would result in an unavoidable adverse effect to the District. Puget is addressing this effect by documenting the existing surface collectors that would be replaced. The Forest Service also says additional adverse effects to Spawning Beaches 1 and 2 appear to be unavoidable under both the Proposed Action and the Staff Alternative. Other elements of Proposed Articles 102, 103, and 104 would alter characteristics of the District that qualify it for inclusion in the National Register of Historic Places.

Response: We updated the final EIS with the above information as recommended by the Forest Service. Based on the Forest Service's comments, we now recommend Puget develop a final Historic Properties Management Plan (HPMP) based on its "draft" HPMP dated November 18, 2004. Implementing a final HPMP and a Programmatic Agreement would address project effects by documenting and/or protecting historic properties. We modified section 3.3.7.2, section 3.3.7.3, and section 5.1, accordingly.

19. Comment: The Forest Service says the final EIS should disclose cumulative effects to all historic properties, including standing historic structures included in the Baker Hydroelectric District and the Washington Cement Company Historic District.

Response: The project has direct effects to the Baker Hydroelectric District and the Washington Cement Company Historic District - not cumulative effects. Our assessment of cumulative effects to historic properties in section 3.3.7.4 is appropriate.

20. Comment: The Forest Service says we should clarify in the final EIS whether we recommend Proposed Article 602 (Contingency Funds) in addition to Proposed Article 201 to protect historic properties.

Response: We recommend Proposed Article 201 with some modifications as discussed in section 5.1.3. We do not recommend Proposed Article 602 as discussed in section 5.1.4. We changed sections 3.3.7.2 and 5.1.1 to clarify our recommendations versus Puget's proposal.

In addition, we find an inconsistency in the Forest Service's condition no. 8 (Heritage Resource Protection), filed June 16, 2006, pursuant to section 4(e) of the Federal Power Act, which would require Puget to implement: (1) Proposed Article 201 (a Programmatic Agreement and an existing Historic Properties Management Plan (HPMP)) and (2) a final HPMP based on the draft HPMP submitted to the Commission as an attachment to the Programmatic Agreement. Further, in its December 16, 2005, filing, the Forest Service recommends Puget develop a final HPMP within 6 months of any license. Hence, there are three distinct Forest Service recommendations for Puget to: (1) implement an existing HPMP (Proposed Article 201); (2) implement a final HPMP based on the draft HPMP submitted to the Commission and attached to the Programmatic Agreement; and (3) develop a final HPMP within 6 months of license issuance as a stipulation of the Programmatic Agreement.

As noted in our response to comment No.18, we recommend Puget develop and implement a final HPMP as a stipulation of the Programmatic Agreement.

Recreation Management Report (Proposed Article 301)

21. Comment: Several commenters say Proposed Article 301 is needed to consolidate into one annual filing the monitoring results of other proposed recreation articles (proposed articles 302-315) for stakeholder and Commission review. They say this article would help stakeholders and the Commission track Puget's implementation of recreation measures at the project.

Response: In the draft EIS, we did not recommend the measures in the following proposed recreation articles: 303-304, 309-310, 312-314, 316, and 318, and for the remaining recreation articles (302, 305-308, 311, and 315) we recommended an individual plan with individual monitoring and reporting requirements. However, we now recommend including most proposed recreation measures (except proposed articles 304 and 318) with certain modifications as license conditions. Given our current recommendations, we agree that a consolidated monitoring report would be appropriate. We have modified the text in section 3.3.8.2 and section 5.1 to show these changes.

Aesthetic Management (Proposed Article 302)

22. Comment: Several commenters say we should include funds to the Forest Service for vegetation management as originally contained in Proposed Article 302 including vegetation management: (1) at Panorama Point, Horseshoe Cove, Shannon Creek, Bayview, and Maple Grove campgrounds, and (2) between Forest Service developed sites and/or viewpoints and Baker Lake in two to four locations averaging less than one-quarter acre in size. Commenters say the above sites are needed for project purposes and that vegetation management is an ordinary and necessary practice to maintain recreation sites in proper condition.

Response: In the draft EIS, we did not find a demonstrated need for the campgrounds identified in item number (1) above including: Panorama Point, Horseshoe Cove, Shannon Creek, Bayview, and Maple Grove. However, we now recommend including these campgrounds as project facilities. Further, we agree that vegetation management at project campgrounds is an ordinary and necessary practice to maintain recreation sites in proper condition. Therefore, we recommend including vegetation management for the above campgrounds in any license issued (we recommend Puget manage vegetation rather than provide funds to the Forest Service as discussed in our response to comment No. 2). We still do not have sufficient information to determine the nexus and need for the facilities identified in item (2) above; we do not recommend this portion of Proposed Article 302.

Upper Baker Developed Recreation (Proposed Articles 303, 309, 310, 312, 313, and 314)

23. Comment: The Forest Service comments that currently it is a struggle to attain and maintain sustainable facilities and the following proposed articles provide a funding mechanism to the Forest Service to: (1) redevelop the Baker Lake Resort (Proposed Article 303); (2) redevelop Bayview Campground (Proposed Article 309); (3) construct up to six miles of new trails in the project vicinity (Proposed Articles 310); (4) monitor site use and occupancy levels at Horseshoe Cove, Panorama Point, Bayview, and Shannon Creek Campgrounds, and the Baker Lake Resort (Proposed Article 312); (5) operate and maintain Panorama Point, Horseshoe Cove, Shannon Creek, Bayview, and Maple Grove Campgrounds, and the Baker Lake Resort (Proposed Article 313); and (6) maintain the Baker River Trail, Baker Lake Trail, and Baker Lake Trailheads (Proposed Article 314). All funds would be provided in accordance with Appendix A-5 in the Settlement Agreement.

The Forest Service notes that under Staff's Alternative: (1) there is no shoreline camping adjacent to Baker Lake and shoreline camping would add to a diversity of experiences at the project; (2) the sites are overused on weekends during the summer and are therefore needed under the license; (3) the Baker Lake Resort will permanently close after 2008 if not included in the license leading to a net loss of 30 to 50 sites which would exist under the proposed redevelopment plan; and (4) redevelopment, upgrades, and proper long-term maintenance and operation of these campgrounds would not occur without these proposed measures included in the license.

Interior recommends we reanalyze the need for additional recreation facilities in the final EIS. In particular, Interior cites an increasing demand for trails in Washington State and recommends we reanalyze the need for trails as well.

The State of Washington Interagency Committee for Outdoor Recreation wants to know why we did not recommend the Baker River Trail, but recommended a similar trail for the Priest Rapids Project No. 2114.

In its comments on Proposed Articles 309, 310, 313, and 314, Puget notes that the Staff Alternative eliminates mechanisms that were proposed to address project-related effects to Bayview Campground, the Upper Baker Trail and Trailhead, and Upper Baker developed recreation maintenance.

Response: At the public meeting on the draft EIS, the staff discussed that, if the staff were to recommend operation and maintenance of recreation sites by Puget, based upon further information filed by the parties, the staff would also recommend making these facilities part of the project and bringing them into the project boundary. Neither Puget nor the Forest Service expressed any objection. Based on comments filed on the draft EIS and at the staff's May 1, 2006 public meeting, we find that requiring operation and maintenance of Panorama Point, Horseshoe Cove, Shannon Creek, Bayview, and Maple Grove campgrounds, and the Baker Lake Resort and including them as project facilities would fulfill a need for shoreline camping. In addition, the construction and maintenance of an estimated six miles of trails and including the trails as project facilities would fulfill a need for trail development in the vicinity of the project, as identified by the SCORP.

We analyze a hydropower project on a case-by-case basis. As stated in the EIS, we do not recommend making the Baker River Trail a project facility because it provides access primarily to the North Cascades National Park, which is north of Baker Lake and is not associated with the project. However, we do recommend including a short section of this trail (approximately 1-mile-long) from the Baker River South Trailhead to the Baker River North Trailhead. Including this section would create a continuous loop around Baker Lake for hiking.

Therefore, we recommend the measures (except for the funding provisions and Forest Service standards) contained in Proposed Articles 303, 309, 310, 312, 313, and 314 (the short section of Baker River Trail) be included in any license. Our current recommendation is that Puget prepare an Upper Baker Developed Recreation Plan that addresses the redevelopment, operation, and maintenance of the recreation sites - campgrounds, trails, trailheads, and the Baker Lake Resort - at Baker Lake (except the Upper Baker VIS and Interpretive Services that we recommend as a separate plan). The plan should provide for monitoring of recreation use and occupancy levels at Horseshoe Cove, Panorama Point, Bayview, and Shannon creek Campgrounds and at the Baker Lake Resort. These facilities should be made project facilities and should be included in the project boundary. We have modified the text in section 3.3.8.2 and section 5.1 accordingly.

Baker Reservoir Recreation Water Safety (Proposed Article 304)

24. Comment: Several commenters state that the Commission should include the water safety plan contained in Proposed Article 304 in any license issued. They say this plan is needed to: (1) provide funds to the Forest Service for constructing and installing 8 to 12 bulletin boards at locations to be determined, (2) provide displays and tear-sheet maps for visitors with information about reservoir safety and provide these at specified locations, and (3) construct and install floating log booms or suitable structures to separate existing designated swimming areas from boat traffic on the reservoir at Horseshoe Cove and the Baker Lake Resort.

Response: As discussed in the EIS, Puget has an existing public safety plan for the project and there is no need for Puget to develop a second plan for Commission approval. Under the Commission's purview, Puget's public safety plan would be reviewed regularly during the new license term and modified accordingly. Any modifications would be incorporated into Puget's existing public safety plan for the project, including public safety at the Horseshore Cove Campground swimming area and Baker Lake Resort swimming area. For further discussion see section 5, Staff's Conclusions.

Lower Baker Developed Recreation (Proposed Article 305)

25. Comment: WDFW appreciates the Staff Alternative for including the Lower Baker Developed Recreation Plan, but voiced its concern that requiring Puget to develop a specific site, which has some access issues, may be too restrictive. WDFW suggests that the license language allow the licensee to have the option of locating the facilities at another location. Skagit County supports the Staff Alternative for Lower Baker recreational development at the existing Lake Shannon boat launch site and notes the steps it has taken to secure public access.

Response: In light of Skagit County's new information, we modified the text in section 3.3.8.2 to reflect the agreements among Puget, Skagit County, and Glacier Northwest for continued public access and we modified the text in section 5.1, accordingly.

Upper Baker Visitor Information Services (Proposed Articles 306 and 307)

26. Comment: The Forest Service comments that funding for Forest Service personnel at its Visitor Information Station (VIS) in Sedro-Woolley is related to project purposes despite the fact that this office is located about 30 miles to the west of the project. The Forest Service states that its personnel at this office provide directions, maps, and other information to Forest visitors traveling to the project and specifically, Baker Lake. The Forest Service recommends the Commission include the above funding

in the license as originally contained in Proposed Article 306. All funds would be provided in accordance with Appendix A-5 in the Settlement Agreement.

Response: We already recommend Puget prepare an Interpretation and Education Plan that would include constructing a VIS at Baker Lake and staffing this facility from Memorial Day to Labor Day as contained in Proposed Article 306. This plan would also cover interpretative services at the project as contained in Proposed Article 307. Our recommended Interpretation and Education Plan, combined with Puget's existing Lower Baker Visitor Center, are sufficient to ensure public education, interpretation, and visitor information services at the project; therefore, we do not recommend Puget fund Forest Service staff at its VIS in Sedro-Woolley. See section 5.1.3.

27. Comment: Several commenters point out that the Upper Baker VIS under Proposed Article 306 would have a parking area, information kiosks, and sanitation facilities. Also, the Interpretive Services Funding under Proposed Article 307 would include materials to emphasize Baker Lake and themes for local culture and history, aquatic, terrestrial, and other natural resources, stewardship and project features. These commenters state that Staff Alternative for an Interpretation and Education Plan does not address these specific proposals.

Response: We have modified the text in section 3.8.2.2 to address the above themes in an Interpretation and Education Plan; however, we still recommend Puget develop an Interpretation and Education Plan in concert with the Historic Properties Management Plan for consistency between the staff-recommended plans.

Dispersed Recreation Management (Proposed Article 308)

28. Comment: The Forest Service states that the draft EIS incorrectly concludes that intermittent use does not pose the same health concerns that heavier use poses. Although it may be less likely that resource damage may occur, any user can potentially cause significant resource damage during their visit. Regular monitoring, maintenance, and ranger patrols are needed to maintain the sites and discourage inappropriate behavior through visitor contacts.

Response: The staff utilized the same data contained in the Huckell/Weinman Associates Dispersed Site Inventory Report Study (Study R12) as the stakeholders, including the Forest Service. The staff notes in the EIS that dispersed sites are created by users in areas where the Forest Service allows this type of activity. Regardless, the staff-recommended Dispersed Recreation Management Plan for the Baker River Project would assist the Forest Service's management of its dispersed sites that, under Proposed Article 308, would be brought into the project boundary. We have modified the text in section 3.3.8.2 and section 5.1, accordingly.

Upper Baker Developed Recreation Monitoring (Proposed Article 312)

29. Comment: The Forest Service recommends that the Commission require Puget to develop a plan to annually monitor site use and occupancy at the following Upper Baker existing facilities: Panorama Point, Horseshoe Cove, Shannon Creek, Bayview, and Maple Grove Campgrounds, and the Baker Lake Resort. Should occupancy at these campgrounds exceed 60 percent during July and August for two consecutive years, Puget would be required to provide funds to the Forest Service to expand overall capacity. These comments reflect the original intent of Proposed Article 312.

Puget comments that the Staff Alternative eliminates mechanisms that were proposed to address project-related recreational impacts.

Response: In the draft EIS, we did not recommend including the above campgrounds and the Baker Lake Resort as project facilities. However, because we now find that these facilities are needed for project purposes (see response to comment No. 23), we also find that it's appropriate to monitor recreation use and occupancy, and expand overall capacity when needed, as described in Proposed Article 312 (we recommend Puget implement these measures rather than provide funds to the Forest Service as discussed in our response to comment No. 2). To determine whether additional recreation site development at the Baker River Project is necessary, Puget should also consult with the Commission. The monitoring and additional recreation site development would be added to our recommended Upper Baker Developed Recreation Plan; therefore, we do not find that a separate monitoring plan as described in Proposed Article 312 is necessary. We have modified the text in section 3.3.8.2 and section 5.1 to show these changes.

Forest Service Road Maintenance (Proposed Article 316)

30. Comment: The Forest Service recommends that the Commission require Puget to provide funds to the Forest Service for routine maintenance on up to 25 miles of the following roads: FR 11 (Baker lake Highway), FR 1106 (Depression Lake), FR 1107 (Anderson Road), FR 1118 (Horseshoe Cove and Bayview), FR 1122 (Lower Sandy Creek), FR 1136 (Lower Boulder Creek), FR 1137 (Panorama Point), FR 1142 (Baker Lake Resort), FR 1150 (Shannon Creek Campground) and FR 1168 (Baker River Trailhead North). Funds would also be included for paving FR 1106. All funds would be in accordance with Appendix A-5 in the Settlement Agreement.

Puget comments that the Staff Alternative eliminates mechanisms that were proposed to address project-related impacts on the roads. Also, Puget notes that its personnel utilize the roads for project-related operations and maintenance responsibilities.

Response: In the draft EIS, we did not recommend including the following sites as project facilities including: Panorama Point, Horseshoe Cove, Shannon Creek, Bayview, and Maple Grove Campgrounds, and the Baker Lake Resort. Because we now recommend including these sites as project facilities (see response to comment No. 23), we also recommend Puget maintain the roads that provide access to these campgrounds and the Baker Lake Resort. As discussed in section 3.3.8.2, the following roads are used by Puget personnel and by recreationists to access project lands and water: (1) FR 11 (Baker Lake Highway) from the Forest Service/Skagit County maintenance line to the Baker River Trailhead, (2) FR 1106 (Depression Lake), (3) FR 1107 (Anderson Road) from FR 1106 to the Baker Lake Trailhead south, (4) FR 1118 (Horseshoe Cove and Bayview Campgrounds), (5) FR 1137 (Panorama Point Campground), (6) FR 1142 (Baker Lake Resort), (7) FR 1150 (Shannon Creek Campground), and (8) FR 1168 (Baker River Trailhead North). We recommend Puget be responsible for maintaining these roads. We have modified the text in section 5.1 accordingly.

We also recommend that Puget maintain FR 1122 (Lower Sandy Creek) and FR 1136 (Lower Boulder Creek) if the three to six dispersed campsites (as noted in Proposed Article 308) are accessed by these roads and therefore, included in Puget's Dispersed Recreation Management Plan under Proposed Article 308. As we have previously stated, if measures on non-project lands are found to be necessary for project purposes, then those lands must be included in the project boundary. We have modified the text in section 3.3.8.2 and section 5.1 accordingly.

Law Enforcement (Proposed Article 318)

31. Comment: WDFW, Forest Service, Interior, and Puget disagree with our recommendation to exclude Proposed Article 318 from any order issuing a license. Under Proposed Article 318, Puget would facilitate the development of a Law Enforcement Plan with local law enforcement agencies in the project vicinity. The above parties say project reservoirs, particularly Baker Lake, draw significant numbers of visitors and therefore, increase the need for additional law enforcement in the project vicinity. These parties say a Law Enforcement Plan would help prevent unintended, illegal, or over-harvesting of fish and wildlife species; protect fish, wildlife, and cultural resources from vandalism, and; help law enforcement agencies with general crowd control. Recreational use of the reservoirs would increase over time according to the above parties, increasing the need for a Law Enforcement Plan.

Response: As discussed in section 5.1.4, law enforcement in the project vicinity is not a matter of Commission jurisdiction, but is the responsibility of local law enforcement agencies. We do not recommend including Proposed Article 318 in any license issued.

32. Comment: WDFW disagrees with our finding that Proposed Article 318 is outside the scope of section 10(j) of the FPA. WDFW says the proposed article is a specific measure to improve fish and wildlife habitat by preventing unintended, illegal, or over-harvesting of fish and wildlife resources.

Response: Proposed Article 318 would require Puget to provide funds and to facilitate the development of a Law Enforcement Plan for federal, state, and local law enforcement agencies. This proposed article is not a specific measure to protect fish and wildlife within the meaning of the Commission's regulations at 18 CFR §4.30(b)(9)(ii).

Water Quality (Proposed Article 401)

33. Comment: Ecology says the draft EIS provides a good summary of water quality conditions but recommends the Commission require Puget to comply with its water quality certificate (once issued).

Response: Any timely-filed water quality certificate conditions would become part of any license issued.

34. Comment: The Flood Control Interests say additional flood control would help prevent and control the negative water quality impacts of floods, which can introduce sewage, animal waste, petrochemicals, and pollutants to river waters.

Response: We added the water quality benefits of the project's current flood control measures and the benefits of any additional flood control measures developed later to section 3.3.3.1.

Terrestrial Resources Management Report (Proposed Article 501)

35. Comment: The Forest Service says the Commission should include Proposed Article 501 because a Terrestrial Resources Management Plan "would develop objectives and establish habitat needs to guide management on Project wildlife habitat lands through the term of the next license." Interior says individual terrestrial measures are all related and a comprehensive plan is needed to analyze and monitor these measures as a whole. Puget says our interpretation of Proposed Article 501 is incorrect. Puget says this article would not duplicate measures in other proposed license articles but instead would consolidate and conform terrestrial reporting into a single protocol, similar to Proposed Article 102.

Response: We agree that a proposed measure to consolidate monitoring results into one annual filing would help the Settlement Parties and the Commission keep track of how Puget implements terrestrial measures at the project. Our concern was that Proposed Article 501, as written, would require Puget to duplicate substantive measures

from multiple license articles. However, with Puget's above clarification, we recommend including this measure with modified language to ensure the plan only consolidates monitoring and reporting requirements into one annual filing.

Deciduous Forest Habitat (Proposed Article 502)

36. Comment: The Forest Service says Study T7-B shows that continued water level fluctuations in Baker Lake preclude the development of 225 acres of deciduous forest along the shoreline. Interior says Study T7-B shows that a minimum of 24 acres of upland deciduous forest and 48 acres of riparian deciduous forest would develop over the next 30 years (Scenario No. 6) if the project were not relicensed. WDFW says continued lake level fluctuations greatly reduce deciduous forest. All three agencies recommend Puget provide funds in accordance with Proposed Article 502. The Forest Service indicates that funding in accordance with Proposed Article 502 would enable Puget to acquire and/or enhance 175 - 218 acres of deciduous forest habitat.

Response: Our recommended measures would reduce water level fluctuations in Baker Lake and Lake Shannon compared to current conditions, but would nevertheless continue to limit shoreline vegetation. Downstream flow fluctuations would also be reduced compared to current conditions, but would likewise continue to affect aquatic habitat and riparian vegetation in the Baker and Skagit Rivers downstream of the project.

We recommend Puget acquire and/or enhance deciduous forest habitat in accordance with Proposed Article 502 with some modifications. Acquiring this habitat would enhance conditions for migratory birds and other forest dwelling species that inhabit deciduous forest habitats, protect a declining and valuable resource in the Baker River basin, and offset the effects of new project construction.

37. Comment: The Forest Service says we failed to consider that red alder stands established in the first half of the twentieth century become senescent at 80 years and usually absent within 100 years. Further, we don't mention in the cumulative effects section that herbicides, routinely applied to private timber lands, would prevent red alder stands from developing.

Response: We revised the final EIS to reflect this information.

38. Comment: WDFW says reduced flows below hydroelectric dams negatively affect cottonwood trees and the yellow-billed cuckoo which prefer cottonwood tree habitat.

Response: We have added information about the value of deciduous forest habitats to various migratory birds.

39. Comment: FWS says the Shoreline Erosion Control Plan does not offset ongoing losses of deciduous forest habitat.

Response: We have clarified that future losses of deciduous forest habitat caused by shoreline erosion would be addressed by the Shoreline Erosion Control Plan.

Elk Habitat (Proposed Article 503)

40. Comment: The Swinomish Indian Tribal Community, Sauk-Suiattle Indian Tribe, and WDFW say we only recommend Phase I of Proposed Article 503 and are silent on Phase II or the “General” part of the proposed article. They say eliminating Phase II reduces the resource value of Proposed Article 503 by roughly two-thirds. In addition, these entities say Phase II intentionally does not contain specific acreage targets, but instead contains funding targets to ensure flexibility. They say flexibility is needed because it is not possible to know in advance which properties may be available for acquiring elk habitat and at what cost.

WDFW points out that the draft EIS estimates that 2,223 acres of riparian habitats were affected by original inundation of the two reservoirs and that currently, 2,215 acres in the fluctuation zone of Baker Lake and 815 acres in the fluctuation zone of Lake Shannon are periodically exposed and non-vegetated. WDFW says these lands would provide elk forage, especially in the winter, and again recommends Phase II of Proposed Article 503.

WDFW, Interior, and Forest Service point out that Study T-21 indicates that 298 acres of elk habitat are affected by recreation, operation, and maintenance activities on project lands and that even more acreage is affected on adjacent non-project lands. Interior recommends the final EIS include an assessment and an analysis of these effects on non-project lands. The Sauk-Suiattle Indian Tribe comments that project activities on lands owned by the licensee are likely to disturb elk and it is essential that the Terrestrial Resource Implementation Group has the flexibility to acquire lands outside the river basin to attain the highest resource benefit for elk with available funds.

WDFW says that even though flow fluctuations in the Skagit River downstream of the project would be reduced part of the year and new ramping rates would be implemented, the project would continue to cause fluctuations affecting between 62 and 256 acres of riparian habitat adjacent to the Skagit River that, historically, have been heavily used by elk.

Response: We recommend Puget implement all phases of Proposed Article 503. To clarify our intent, we have eliminated most references to the initial 300 acres of elk habitat that would be acquired under Phase I and have modified sections 3.3.5.3 and 5.1.1, accordingly.

41. Comment: The Swinomish Indian Tribal Community, Sauk-Suiattle Indian Tribe, and WDFW say our recommendation that Puget first consider improving habitat on project lands or acquiring this habitat as close to the project as possible may require land acquisitions closer to the project than under guidelines developed by the Terrestrial Resource Workgroup. These entities indicate that there is likely too much disturbance on project lands to create foraging habitat or to acquire nearby adjacent habitat that would be of significant value to elk. Further, the WDFW does not recommend habitat acquisitions and/or enhancements on those lands between the Baker Lake highway and Baker Lake because such habitat may encourage elk to cross the highway causing safety issues for drivers and elk. When possible, WDFW recommends land acquisitions west of the highway to avoid traffic collisions. WDFW also does not recommend land acquisitions and/or enhancements at the southwest end of Lake Shannon or near the town of Concrete because of the potential for elk to damage crops and property as often occurs elsewhere in the Skagit River lowlands. WDFW says the best elk habitat would be farther away from human disturbance and agricultural areas. The WDFW says the Commission should use the geographic preferences for acquiring habitat that are already contained in Proposed Article 503.

The above three entities and the Forest Service say the Commission should leave the selection of lands to be acquired and/or enhanced to the local biologists on the TRIG and that it is essential the TRIG has the flexibility to acquire lands outside of the Baker River basin in order to attain the highest resource benefit for elk with available funds.

Response: We recommend Puget discuss in its Elk Habitat Plan the feasibility of creating cultivated pastures or making other elk foraging habitat improvements on project lands or consider acquiring foraging habitat and making improvements on non-project lands as close to the project as possible. However, our recommended language for this proposed measure does not restrict Puget to the above recommendation. In its Elk Habitat Plan, Puget would also provide its criteria and procedures for site selection, acquisition, and management. The actual evaluation and selection of individual parcels would be done by Puget in consultation with the TRIG and within the approved selection criteria. We do not recommend the geographic preferences contained in Proposed Article 503 because these preferences would essentially permit Puget to acquire and/or enhance lands anywhere. As discussed in section 5.1.3, we recommend Puget revise this aspect of its site selection criteria in our recommended Elk Habitat Plan to focus, to the extent possible, on project lands or non-project lands as close to the project as possible.

Aquatic Riparian Habitat Protection, Restoration, and Enhancement Plan (Proposed Article 505)

42. Comment: The Forest Service, Interior, WDFW, Skagit Fisheries Enhancement Group, Ecology, NMFS, Swinomish Indian Tribal Community, Sauk-Suiattle Indian

Tribe, and Puget comment that the Commission should include Proposed Article 505 in any license issued. The intent of the proposed article is to identify and acquire riverine/riparian habitat that would benefit both anadromous fish species and deciduous forest/wetland species. In general, these entities say this measure is needed to mitigate the effects of continued reservoir fluctuations on riparian habitat and to mitigate the effects of river fluctuations downstream of the project. These entities say there is a shortage of this habitat within the Baker and Skagit River basins.

The Forest Service says water level fluctuations in Baker Lake and Lake Shannon have prevented the development of riparian habitats and low-gradient, vegetated habitats, and have adversely affected hydraulically-connected wetlands adjacent to the reservoirs. Fluctuating water levels are also adversely affecting spawning habitat for fish along reservoir margins. In addition, the Forest Service says shoreline erosion caused by water level changes has resulted in the loss of shoreline vegetation and will continue such losses during the term of the license.

Interior says ongoing water level fluctuations in the project's reservoirs have prevented the development of riparian habitats along project shorelines. Interior says according to Study T7-B, an estimated 590 acres of riparian habitat would develop over the next 30 years (Scenario No. 6) if the project were not relicensed. In addition, Study A0-1a estimates that 60 acres of aquatic instream habitat, accessible to salmonids, is degraded by project drawdowns. Further, Interior says we inappropriately rely on Washington State's Shoreline Management Act and Forest Practice Rules to say riparian mitigation is not needed at the project. Finally, Interior says Proposed Article 505 is also needed to provide habitat for bald eagles and to provide cover, low velocity areas, and complex habitat for juvenile salmonids.

With respect to listed species under the ESA, Interior says the draft recovery plan for bull trout includes the protection and restoration of riparian habitats as one action needed to achieve bull trout recovery in the Puget Sound Management Unit. Priority areas for protection include foraging, migration, and over-wintering areas with existing high quality habitat. Secondary priorities include tributaries to mainstem migratory, foraging, and over-wintering habitats, and riparian areas along lake shorelines.

WDFW says that despite new minimum flows and ramping rates, flow fluctuations below the project would affect about 40 miles of the Skagit River and about 63 acres of riverside habitat needed for emergent salmonid fry. WDFW also points out the benefits of riparian vegetation to spotted owls and yellow-billed cuckoos.

The Skagit Fisheries Enhancement Group says the intent of Proposed Article 505 is to mitigate for the project's interruption of water, gravel, and LWD which simplifies aquatic habitat downstream, making it less productive for fish including Chinook and bull trout. River channels with interrupted gravel tend to incise into the existing gravel bed

thus dropping the surface water elevation and decreasing water flow to side and distributary channels. The creation of new side channels and oxbows is also inhibited by existing flood control at the project, according to this commenter.

Ecology says Proposed Article 505 is needed to mitigate the direct effects of reservoir fluctuations, a resulting lack of riparian vegetation, and impacts on species which use riparian vegetation for food, cover, nesting material, substrate, and shade. Ecology says Proposed Article 505 was intended to compensate for ongoing wetland effects that are not fully mitigated by Proposed Articles 504 and 510. Ecology says it will include Proposed Article 505 in its Water Quality Certification for the project.

Most of the above entities point out that a disproportionately large number of common and special status species occur in wetland and riparian habitats and that there is a shortage of riparian habitats and low gradient fluvial habitats within the project area. The Forest Service says, in particular, that low-gradient river bottom habitat with side channels is a limited aquatic habitat component within the Skagit River basin. Many anadromous fish stocks in the Skagit basin that rely on this type of habitat are in a depressed state, including stocks in the Baker and middle Skagit basins.

Most of the above entities also say Proposed Article 505 should be included in the license because its mitigation cannot be accomplished at the project or within the Baker River basin. Although we indicated in the draft EIS that insufficient information was provided on the proposal, commenters responded that there is not enough time to provide the specifics of a plan for our review. The above entities argue that these projects take years to develop and property availability is unknown. The Settlement Parties must carefully evaluate the benefits of specific projects and rank them, according to most commenters.

Response: Our recommended measures would reduce water level fluctuations in Baker Lake and Lake Shannon compared to current conditions but would nevertheless, continue to limit shoreline riparian vegetation. Downstream flow fluctuations would also be reduced compared to current conditions, but would likewise continue to affect aquatic habitat and riparian vegetation in the Baker and Skagit Rivers downstream of the project. In the draft EIS, we say fluctuating water levels in Baker Lake and Lake Shannon affect shoreline wetlands and wetland-dependent amphibians. In addition, fluctuating flows from the Lower Baker powerhouse affect anadromous salmonids in the Baker and Skagit Rivers. Flow fluctuations in the Skagit River decrease with distance downstream of the Baker River confluence and the interactive effects of both the Skagit River and Baker River Projects are largely attenuated near Mt. Vernon.

Nevertheless, we do not recommend Proposed Article 505 because it does not contain enough detail for us to assess its benefits or its nexus to project effects. It is unclear exactly what type of habitat would be acquired under this proposed article; how

many acres would be acquired; and what management actions would be taken (if any) on acquired lands. Also, it is likely most acquired land would be outside project boundaries; therefore, the relationship of the enhancement to project effects would be uncertain. We also note the high cost of the proposed Aquatic Riparian Habitat Protection, Restoration and Enhancement Plan (\$369,600 annually). Moreover, we already recommend other enhancements for Chinook salmon, bull trout, amphibians, and bald eagles, including provisions for upstream and downstream fish passage; increased minimum flows and ramping rates; fish passage between Baker Lake and Lake Shannon; more stable water levels in these two reservoirs; wetland enhancements; and bald eagle management as discussed above. For these reasons, we do not recommend Proposed Article 505.

43. Comment: WDFW provided some example projects that could be completed using funds provided under Proposed Article 505. These examples including: placing LWD, removing riprap to increase side channel habitat, planting riparian trees, constructing side channels, and installing fences to prevent livestock from entering stream channels. WDFW says some of these projects were completed under the new licenses for the Skagit River Project No. 553 and the South Fork Tolt River Project No. 2959.

Response: Although WDFW provides some project examples that could be implemented under Proposed Article 505, this information is still too general and non-specific in nature. As discussed above, without specific measures, we cannot assess the benefits or recommend implementation of Proposed Article 505. However, as discussed above, we recommend other measures to enhance the targeted resources.

44. Comment: Interior says Puget should provide additional information including the type and amount of habitat that would be acquired, the location of this habitat relative to project boundaries, any management activities that would occur on acquired lands, and the expected benefits of this habitat. However, Interior says the Commission has enough information on Proposed Article 505 to include this measure in any license issued. Interior says we have recommended other measures with the same amount or even less information. The Forest Service concurs with Interior saying we recommend Proposed Article 109, which provides fewer details than Proposed Article 505.

Response: We do not have sufficient detail to recommend Proposed Article 505 as discussed above. We do have sufficient detail to recommend Proposed Article 109 which only lacks the proposed location of LWD stockpiles.

Floating Loon Nest Platforms (Proposed Article 507)

45. Comment: Interior disagrees with our recommendation that Puget install all floating loon nesting platforms on Baker Lake or Lake Shannon. Interior recommends the Commission permit Puget to install one platform on a non-project reservoir should

loons fail to use platforms located at the project. This flexibility is needed to ensure at least one pair of loons nest successfully, according to Interior.

Response: As discussed in section 3.3.5.2, opportunities exist on project reservoirs for installing loon nesting platforms. If at the end of the 15-year trial period established in Proposed Article 507, loons still have not successfully nested at the project Puget may petition the Commission to modify its measures to install a platform on a non-project reservoir or may terminate the program in accordance with the proposed article. We see no reason at this time to require the use of nesting platforms on non-project reservoirs in any license issued.

Mountain Goats (Proposed Article 516)

46. Comment: The Swinomish Indian Tribal Community and Sauk-Suiattle Indian Tribe say our view of project-induced recreation effects is too narrow; we only consider these effects on project lands. They say the project draws large numbers of recreationist that don't limit their visits to project lands. According to the tribes, studies show a substantial number of recreationists at project reservoirs also hike into the high country in mountain goat habitat.

The Forest Service says data collected during the High-country Recreation Use survey,⁵¹ including surveys at Kulshan campground, determined that 23 percent of the use of three trails that access mountain goat habitat (Boulder Ridge, Shuksan Lake, and Anderson/Watson Lakes) is from individuals who stay overnight at Baker Lake campgrounds. Further, they indicate low-elevation recreation, in the immediate vicinity of project recreation facilities affects goats as well. The Forest Service says goats consistently winter near the northwest end of Baker Lake and have been seen near Baker Lake's southwest shore.

WDFW says mountain goats frequently use lower elevations at the project. Goats use mineral licks or seek shade and use lower elevations during the fall and winter when recreation from hiking, snowshoeing, skiing, mountain biking, and especially snowmobiling affects them. Snowmobilers use project parking lots to park their vehicles and access trails according to WDFW.

Response: The Forest Service says goats consistently winter near the northwest end of Baker Lake and have been seen near Baker Lake's southwest shore. WDFW says goats frequently use lower elevations at the project. Both agencies say goats are present on, or immediately adjacent to, project lands.

⁵¹ Cited as: PSE 2002a. High-country Recreation Use by Baker Lake Overnight Visitors. Draft Discussion Paper. 9 p.

Goats that use project and nearby non-project lands adjacent to Baker Lake would be subject to considerable disturbance from recreationists at staff-recommended recreation sites. Hikers that leave these sites and travel to higher elevation areas during the summer would also disturb goats – especially given the amount of hiking documented in Study R-13. Because of these project effects, we now recommend Proposed Article 516 be included in any license with some modifications as discussed in section 5.1.

Grizzly Bears (Proposed Article 517)

47. Comment: Forest Service and Interior say we minimize the importance of two grizzly bear sightings because they are the only sightings within the past 15 years and both were 4 and 10 miles from the project. Both agencies say there have been no formal grizzly bears surveys in the basin since these sightings were recorded and its inappropriate to conclude that bears are absent without new surveys. In fact, project-related recreation disturbance may be the reason no bears have been seen recently, according to the Forest Service. Further, each agency points out that grizzly bears range between 39 and 540 square miles, which means a sighting within 4 and 10 miles of the project is actually close for a grizzly bear. Finally, the Forest Service says we are being inconsistent when we dismiss mitigation for grizzly bears but recommend mitigation for marbled murrelets when the survey data for marbled murrelets is almost as old as that for grizzly bears (14 years).

The Forest Service and Interior point out that grizzly bears have been sighted in the vicinity of the project, the project lies entirely within a grizzly bear recovery zone, and increasing the population of this species is a priority action in the Grizzly Bear Recovery Plan Supplement for the North Cascades. Interior says core areas for grizzly bears within the recovery zone, which are defined as areas greater than 500 meters from an open road or high-use trail, are quite limited.

The Forest Service says water level fluctuations continue to preclude the development of 442 acres of spring forging habitat around project reservoirs, which grizzly bears prefer. Also, the combined effects of new project construction, recreation at developed campgrounds, dispersed campsites and trails, watercraft on project reservoirs, and project roads greatly reduces grizzly bear habitat effectiveness. The Forest Service and Interior recommend we analyze whether the project has already surpassed a threshold at which grizzly bear use is likely to occur at the project. In addition, Interior says we should analyze the growing trend to subdivide private timberlands for residential homes.

Finally, the Forest Service notes that Puget is able to implement a grizzly bear road closure program via a special use permit from the Forest Service similar to other activities licensees undertake under the Forest Service's special use program.

Response: We revised the Final EIS to reflect the lack of existing surveys, and that the grizzly bears home range could overlap with the project, subjecting bears to project-related recreation disturbances. We also included an analysis of reservoir fluctuations and the cumulative effects of project construction, roads, and recreation on grizzly bear habitat. However, given the low densities of bears, abundance of higher quality habitat elsewhere in the North Cascades Recovery Area, and lack of recent sightings, we still conclude that grizzly bears are likely to occur in the project area only infrequently and thus would not be adversely affected by the project. Nonetheless, because project-related recreation at Baker Lake and Lake Shannon is expected to increase over the term of any new license, as discussed in section 3.3.8.2, we expect that such recreation currently does or would discourage grizzly bear use of habitat within the project boundary. Puget's proposed road closure program would contribute to the recovery of the grizzly bear at a low cost. Our concern about whether Puget could implement a road closure program has been addressed. For the above reasons, we now recommend Proposed Article 517 with some modifications.

Contingency Funds (Proposed Article 602)

48. Comment: WDFW, Interior, and Puget disagree with our recommendation to exclude Proposed Article 602 from any order issuing a license. Under Proposed Article 602, Puget would be required to establish the TERF, RAM, HERC, and CREF funds to mitigate unforeseen impacts not otherwise addressed in other proposed articles. Funds may also be used to implement "alternative strategies" for resource protection, mitigation, and enhancement identified via adaptive management. WDFW says the measures to be implemented under the TERF and HERC funds would be very similar to those identified in other proposed articles and would likely include some fish passage measures, fish propagation, fish and wildlife research, aquatic habitat measures, and wildlife habitat measures. WDFW says because these funds were developed to address unforeseen issues, it is impossible to predict exactly how they would be spent over the next 30 to 50 years. Puget says Proposed Article 602 (along with Proposed Article 603) would permit Puget to solve problems at the local level and would promote continued collaboration among the Settlement Parties during the term of the license. Puget says the funds under Proposed Article 602 would minimize the potential number of disputes requiring Commission intervention.

The Upper Skagit Indian Tribe says the Commission should offer a replacement mechanism for describing how funds would be managed, how funds would appreciate, or what would take the place of this repository for unused funds should Proposed Article 502 not be included in any license.

The Forest Service says Proposed Article 602 is needed to avoid reopening the license for unforeseen needs, an action the Forest Service believes the Commission rarely

performs. In addition, the Forest Service provides some additional details on how each of the four funds under Proposed Article 602 would be used.

Response: As discussed above, we do not recommend the funds under Proposed Article 602 because there is insufficient information on the specific measures to be implemented using these funds. Without sufficiently specific measures, we cannot evaluate the measures' environmental effects or nexus to the project. We are not certain these funds would be needed or how these funds would be used. Moreover, we are already recommending a comprehensive set of measures that would adequately provide protection, enhancement, and mitigation of, environmental resources at the project.

49. Comment: WDFW disagrees with our determination that Proposed Article 602 is outside the scope of section 10(j) of the FPA. WDFW says the TERF and HERC funds created under this proposed article would implement adaptive management measures for fish, wildlife, and their habitats. As such, these two funds would protect, mitigate, and/or enhance fish, wildlife, and their habitats and should be considered under section 10(j).

Response: Proposed Article 602 would establish four general funds. Putting money in a general fund is not a specific measure to protect fish and wildlife within the meaning of 18 CFR §4.30(b)(9)(ii). As discussed above, without specific measures to evaluate, we cannot determine whether the actions accomplished by these funds would be specific measures to protect fish and wildlife.

Adaptive Management (Proposed Article 603)

50. Comment: WDFW, Interior, and Puget disagree with our recommendation to exclude Proposed Article 603 from any order issuing a license. Under Proposed Article 603, Puget would be required to use adaptive management in its implementation of all other proposed articles in the Settlement Agreement. Puget would be required to use "alternative strategies" when developing objectives, criteria, and using funds, as well as required to use a "plan amendment process" when changed circumstances warrant. WDFW says excluding Proposed Article 603, which is related to proposed articles 101 through 110, 401, 501 through 517, and 601 through 602, directly affects the implementation of the protection, mitigation, and enhancement measures for fish, wildlife, and their habitats. Without adaptive management for fish and wildlife measures being included in the license, WDFW says Puget is at risk of not being able to respond to changing conditions. Puget says Proposed Article 603 (along with Proposed Article 602) would permit Puget to solve problems at the local level and would promote continued collaboration among the Settlement Parties during the term of the license. Puget points out that the Commission encourages adaptive management in principle.

Response: In the draft EIS, we did not recommend Proposed Article 603 because its provisions are too vague to be enforceable and they lack specificity regarding

the implementation of individual measures. Neither WDFW, Interior, nor Puget have provided information that would cause us to change our recommendation. Consequently, we do not recommend including this measure in any license issued for the project. However, we note that Puget may request an amendment of any license condition whenever circumstances warrant such a change.

51. Comment: WDFW disagrees with our determination that Proposed Article 603 is outside the scope of section 10(j) of the FPA. WDFW indicates that adaptive management is a specific measure to protect fish and wildlife.

Response: Adaptive management by itself is not a specific measure to protect fish and wildlife within the meaning of 18 CFR §4.30(b)(9)(ii). As discussed above, without specific measures to evaluate, we cannot determine whether the actions that would be accomplished using, in part, the adaptive management provisions in Proposed Article 603, would be specific measures to protect fish and wildlife.

Other Comments

Wetlands and Amphibians

52. Comment: Interior and WDFW say study T7-B indicates that 190 acres of wetland habitat occur within the fluctuation zone of Baker Lake. The impacts to wetland-dependent fish and wildlife should be analyzed and discussed in this section of the final EIS.

Interior and WDFW say the final EIS should analyze the effects of attracting amphibians to the reservoirs, which is more likely to result in poor reproduction due to fluctuating water levels and the effects of exposing amphibian eggs and larvae to predators and cold water temperatures.

Interior says the final EIS should have an expanded discussion of the effects to wetland-dependent fish and wildlife such as anadromous salmon, migratory birds, waterfowl, eagles, and peregrine falcons due fluctuating water levels.

WDFW says the final EIS should provide an analysis of the types of wetland vegetation that would become established absent continued reservoir fluctuations.

Response: We have incorporated such additional information into the final EIS.

Comprehensive Plans

53. Comment: The Forest Service says various Forest Service campgrounds adjacent to Baker Lake are overused on peak weekends during the summer. They say the

draft EIS is inconsistent with the Mt. Baker-Snoqualmie National Land and Resource Management Plan (1990) because we do not recommend including various measures that would expand and maintain these campgrounds at the project.

Response: We now recommend making almost all proposed recreation measures in the Settlement Agreement, including campgrounds and trails adjacent to Baker Lake, into project facilities covered by any license. Our new recommendation should eliminate any inconsistency with the Mt. Baker-Snoqualmie National Land and Resource Management Plan.

Threatened and Endangered Species

54. Comment: Interior commented that the Affected Environment section should include a discussion about the importance of habitat complexity and riparian areas to bull trout.

Response: In the final EIS, we analyze the benefits to bull trout associated with habitat complexity. We also include additional analysis from Watson and Hillman (1997) on this subject.

55. Comment: Interior recommended that the Aquatic and Riparian Habitat measure in Proposed Article 505 be adopted in the final EIS to help enhance habitat for bull trout.

Response: As discussed above, in several recent orders, the Commission has clarified its long-held position that it does not favor general funds but instead, prefers a licensee undertakes specific measures to resolve project effects, especially in cases where it is not clear to what extent the funds would be used for activities related to the project.

56. Comment: On March 29, 2006, NMFS proposed listing Puget Sound steelhead as a threatened species under the ESA. NMFS indicates that project effects to steelhead and Chinook significantly overlap and that it will include a conference opinion for steelhead in its biological opinion for Chinook. However, NMFS indicates that it cannot initiate formal consultation for Chinook until the Commission finalizes its proposed action in the final EIS.

Response: We have updated sections 3.3.6.1 and 3.3.6.2 in the final EIS to include NMFS's proposed listing of Puget Sound steelhead. As discussed in section 3.3.6.2, we find that issuing a new license for the project, as recommended by staff, would not jeopardize the continued existence of steelhead. With regards to Chinook, we consider consultation to have been initiated on April 15, 2006, when NMFS received our letter requesting formal consultation and our accompanying biological assessment (the draft EIS) for relicensing this project. In addition, as documented in this final EIS, our

proposed action with regards to Chinook has not significantly changed from the draft to the final EIS. Consequently, as explained in our letter to NMFS issued July 7, 2006, NMFS's biological opinion for Chinook is due August 28, 2006.

Aquatic Resources

57. Comment: The Forest Service says project effects on adfluvial rainbow, anadromous/adfluvial cutthroat trout, and resident native char are not discussed in the draft EIS and no mitigation measures are included to offset these effects.

Response: In section 3.3.4.2, we refer to earlier discussions of project effects presented in section 3.3.2.2, Water Quality, Environmental Effects, which compare project effects to salmonid species (i.e., adfluvial rainbow, anadromous/adfluvial cutthroat trout, and resident native char). In other subsections of section 3.3.4.2, we compare project effects in more general terms to "salmonid spawning grounds or redds," "all aquatic species," and "fish," and refer to Resident Fish Species discussions in section 3.3.4.1. In many of these cases, the project affects adfluvial rainbow, anadromous/adfluvial cutthroat trout, and resident native char in a similar manner to anadromous species covered in more depth in section 3.3.4.2.

58. Comment: The Forest Service commented that pages 3-106 through 3-109 of the draft EIS (effects on fish habitat and redd dewatering due to Baker Lake reservoir fluctuations) provided an analysis of these effects on sockeye salmon, but neglected other at-risk species.

Response: In section 3.3.4.1 (Other Native Resident Species and Non-Native Fish Species), we provide further information on the presence of these species in the Baker River basin. For the native, non-game resident species, there is no specific information available on their abundance and distribution. The presence of introduced non-native eastern brook trout is considered a concern due to its ability to hybridize with bull trout. Regardless of species, the Proposed Action would slightly reduce the total amount of habitat subject to drawdowns when compared to Current Operations because the regulated minimum reservoir elevation for Baker Lake would be approximately 8 feet above Current Operations and Lake Shannon would be approximately 15 feet above Current Operations. Our analysis concentrated on how reservoir fluctuations in Baker Lake affect potential salmonid spawning habitat for bull trout, coho, and sockeye salmon. After further review of aquatic study request A-39 (R2, 2003h), our additional analysis in section 3.3.4.2 concludes that the other resident fish species that may be found in the project reservoirs are affected by reservoir fluctuations in a similar way as bull trout.