Fish Habitat Enhancement Plan

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

Public Utility District No. 1 of Snohomish County

November 2010

(Updated Scorecard 6/2012)
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ACRONYMS

A-LA  Aquatic License Article
ARC  Aquatic Resource Committee
CWA  Clean Water Act
District  Public Utility District No. 1 of Snohomish County
ESA  Endangered Species Act
FERC  Federal Energy Regulatory Commission
FHE  Fish Habitat Enhancement
FPR  Forest Practice Rules
HEA  Habitat Enhancement Account
HPA  Hydraulic Project Approval
PLA  Proposed License Article
PM&E  protection, mitigation and enhancement
RM  river mile
RSP  Revised Study Plan
SA  Settlement Agreement
SOAL  State Owned Aquatic Lands
USACE  United States Army Corps of Engineers
1. INTRODUCTION

1.1. Background
The Public Utility District No. 1 of Snohomish County (District) will be the sole licensee for the Henry M. Jackson Hydroelectric Project (Project) under a new license to be issued by the Federal Energy Regulatory Commission (FERC or Commission). The Project is located on the Sultan River in Snohomish County, Washington, near the City of Sultan. The original Project license was issued in 1961 and amended in 1981. In 1964, initial construction of Culmback Dam was completed to create Spada Reservoir – the major source of Snohomish County drinking water. In 1984, hydroelectric facilities were added and Culmback Dam was raised, completing the Project as it exists today. The Project includes a 262-foot high rock-fill dam (Culmback Dam); a 1,870-acre reservoir (Spada Lake or Spada Reservoir) operated for the City of Everett’s water supply, fisheries habitat enhancement, hydroelectric power, incidental flood control and recreational opportunities; a Powerhouse and various other facilities; wildlife mitigation lands; and several developed and undeveloped recreation and river access sites.

On October 14, 2009, the District filed with the FERC a comprehensive settlement agreement (Settlement Agreement) on behalf of itself, National Marine Fisheries Service, United States Forest Service, United States Fish and Wildlife Service, United States National Parks Service, Washington Department of Fish and Wildlife, Washington Department of Ecology, the Tulalip Tribes of Washington, the City of Everett, Snohomish County, the City of Sultan and American Whitewater (collectively referred to as “Settlement Parties”). The Settlement Agreement resolved among the signatories all issues associated with issuance of a new license for the Project, including reservoir operation, minimum instream flows, process flows, whitewater boating flows, ramping rates, fish passage, fish habitat improvements, wildlife habitat management, marbled murrelet protection measures, recreation, historic properties and license term.

The Settlement requests that the Commission adopt, without material modification, Proposed License Articles. These Proposed License Articles will implement a complex and interrelated suite of protection, mitigation and enhancement measures that will result in improved resource conditions and ecological processes in the Sultan River over the term of a new license. The Proposed License Articles mainly address flows, fish passage, fish and wildlife habitat enhancement and protection, water quality, municipal water supply, rule curves for reservoir operation, fish supplementation, recreation, historic properties, and noxious weeds. One of these Proposed License Articles is Proposed Aquatic License Article 12: Fish Habitat Enhancement Plan (A-LA 12) (see Appendix 1).

Consistent with the requirements of Proposed A-LA 12, the District has developed this plan in consultation with the ARC; documentation of consultation opportunities is included as Appendix 2.

1.2. Purpose
The primary purpose of the Fish Habitat Enhancement Plan (FHE Plan or Plan) is to guide the process for selection and implementation of projects to be funded by the Habitat Enhancement Account (HEA). The purpose of the HEA is to develop projects that will have direct benefits to the habitat and/or fish populations of the Sultan River and Basin. Expenditures from this account are informed by the results of habitat and population monitoring efforts and are subject to the discretion of the Aquatic Resource Committee (ARC).

Funded projects will be designed to provide additional Project-related enhancements to aquatic resources and hydrologic processes focused in the Sultan River basin; thereby, providing considerable benefits to Sultan River basin aquatic habitat and anadromous and resident fish populations throughout
the License term. These additional habitat enhancement projects, working in conjunction with other protection, mitigation and enhancement (PM&E) measures such as improved side channel connectivity, increased instream flows, and the anticipated fish passage at the Diversion Dam will likely substantially increase the quantity and quality of aquatic habitat and population performance of anadromous and resident fish in the lower Sultan River. Establishment of this ongoing FHE Plan and HEA will also allow for adaptive management as conditions change in the basin. The mitigation provided through the fund will best address habitat enhancement and restoration needs throughout the License term by allowing flexibility to ensure that these other habitat enhancement and restoration projects are developed and implemented during the License term.

The HEA provides the flexibility to the District and ARC to implement measures such as those identified above as needed throughout the term of the license. The HEA-funded projects can be implemented expeditiously; thereby, allowing the ARC to respond more nimbly to changes in resource conditions and monitoring results.

This Plan articulates:

- the process and schedule for selecting projects to be funded by the HEA,
- the process and schedule for implementing HEA-funded projects,
- administration of the HEA,
- involvement of the ARC, and
- reporting schedule and contents.

1.3. Coordination and Integration

1.3.1. District’s Role

Upon issuance of the new license and approval of the FHE Plan, the District will be responsible for implementing the FHE Plan. This responsibility will include:

- providing the funding to carry out the projects approved as described herein;
- coordinating with surrounding landowners regarding land management in or near the Project boundary that may affect or be affected by the measures provided;
- consultation with the ARC;
- monitoring resource effects; and
- reporting to the FERC.

The District will consult license articles and various management plans as needed, including the Marsh Creek Slide Plan.

1.3.2. ARC Involvement

The District will meet quarterly with the ARC on license implementation measures. As necessary, these meetings will address outstanding issues associated with the implementation of this Plan. Where this Plan requires consultation with the ARC, such consultation will occur through these quarterly meetings.

Because the ARC is composed of fishery habitat experts well acquainted with the Sultan Basin, the ARC will be well suited for determining the cost/benefits of and need for the enhancement projects. The ARC will meet regularly throughout the license term to assist in the implementation of the various aquatic license articles and to actively manage expenditures from the HEA by identifying and selecting additional projects that will provide habitat enhancements.
The ARC will be consulted each 4th quarter of the calendar year on the selection of projects to be funded. Additionally, the ARC will be consulted on an as needed basis if a time sensitive project (such as land acquisition) becomes identified.

2. **FISH HABITAT ENHANCEMENT PROJECTS**

2.1. **Goal**
The goal of each of the projects to be funded by this FHE Plan will be to provide considerable aquatic habitat benefits to Sultan River anadromous and resident fish populations, with priority given to projects within the Sultan River Basin, throughout the License term.

2.2. **Types**
The District will consult with the ARC to select specific HEA-funded fish and aquatic habitat enhancement and restoration projects (FHE projects). General projects categories include:

1. land/water rights acquisition via fee-title or easement for protection, enhancement or restoration;
2. on-ground/instream fish habitat enhancement projects conducted by the District;
3. purchase of extra Spada Lake water for various additional Sultan River process flow events; and
4. grant matching for on-ground/instream fish habitat enhancement projects conducted by other entities; including leverage funds for projects downstream of the Sultan River that provide benefit to the fisheries of the Sultan River see Section 4.2.

Examples of potential on-ground/instream fish habitat enhancement projects conducted by the District within and adjacent to the Sultan River include, but will not be limited to:

1. installation of boulder clusters to create in-channel flow deflection, habitat formation, instream habitat diversity, and/or gravel sorting and retention (range in costs of $15,000 to $35,000 per treatment);
2. side channel habitat development to provide additional rearing and spawning habitat (range in costs from $250,000 to $1.25 million per project);
3. removal, maintenance or construction of large woody debris for flow deflection, habitat formation, instream habitat diversity, and/or gravel sorting and retention (approximate cost of $150,000 per installation);
4. removal of barriers to upstream migration such as future slides or further improvements to passage at the Marsh Creek Slide to increase fish access to available fish habitat (range in costs from $50,000 to $350,000 per treatment);
5. gravel supply augmentation to increase spawning gravel quantity (range in costs of $50,000 to $200,000 per treatment);
6. physical manipulation of gravel bars and to reduce hardening and facilitate lateral channel movement (range in costs from $25,000 to $75,000 per treatment);
7. active management of riparian vegetation community including the removal of invasive species to reduce channel encroachment and the spread of invasive species (range in costs from $25,000 to $250,000 per treatment);
8. purchase of additional water for process or special purpose flows to provide enhanced sediment transport, and other natural functions (approximately $62.00 per acre foot of water, depending on prevailing market conditions); and
9. other projects that provide for adaptive management in the Sultan River.
Generally, funds will not be used to conduct studies or to fund projects that any entity is otherwise required by law to perform.

3. FHE PROPOSALS

3.1. Overview
Annually during the 4th Quarter ARC meeting, the ARC will review FHE proposals to make selections of projects to be funded under the FHE Plan for the following year. An FHE proposal must be submitted on a standard application form (see Appendix 3) and delivered to the District at least two weeks prior to the 4th Quarter ARC meeting. A reminder regarding due dates for the FHE submission and selection process will be provided to the ARC at the 3rd Quarter Meeting. As noted above in section 1.3.2, the ARC may meet more often than annually if a time sensitive project is identified.

When developing a project proposal, the proposal must:

1. Be sponsored and submitted by an ARC member;
2. Include all costs and schedules associated with permitting the proposed FHE project (see section 4.1.3. for potential required permits); and
3. Contain at least 10% of the budget request for ongoing monitoring and effectiveness evaluation (for on-ground/instream projects) or ongoing land management activities (see section 5.2. for examples of land management activities).

Proposals must be submitted for projects that:

1. Are in the Sultan or Snohomish basins;
2. Related to aquatic/fishery resource protection, enhancement or restoration;
3. Will be completed in 5 years (ongoing monitoring/evaluation may extend longer); and
4. Contain a work product (brief final report or similar) to be provided to the ARC upon project completion.

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1 An extension may be requested by the sponsor for the ARC’s approval if unforeseen circumstances require longer than the 5-year completion requirement for HEA-approved projects.
The District will collect all proposals and distribute them to the ARC at least two weeks prior to the ARC meeting (see Figure 1); this will allow the ARC an opportunity to review projects prior to the ARC meeting.

The Project Sponsor (ARC Member or Project Proponent) will be afforded an opportunity to make a brief presentation regarding the FHE project proposal and answer questions at the meeting prior to the final selection of the projects to be funded by the HEA.

### 3.2. Selection

After proposals are presented, ARC members will evaluate each project against the criteria and weighting as identified in Appendix 4. Given the expected number of potential FHE proposals to be submitted and the cap on funding, a mechanism to review and evaluate projects is needed. In general evaluation criteria can be grouped into five areas:

1. Geographic location relative to the Sultan River;
2. Types of projects relative to habitat improvement;
3. Nexus to project and/or identified recovery plans;
4. Cost/benefit of proposed project; and
5. Soundness of proposed project.

The evaluation criteria may be updated from time to time by the ARC. Points will be assigned to each criteria by each ARC member, weighted and averaged using the Evaluation Criteria Form found in Appendix 4. The projects will then be ranked in order of point score. A project must score at least 40 points to be funded by the HEA. Based on the priority for Sultan River Basin projects, highest scores, and fund balance, the ARC will determine by consensus if the proposed FHE project should be funded through the FHE Plan.
Participation by ARC representatives is imperative at the Funding Selection meeting. Each ARC representative must participate, or in the case of a known absence, provide written proxy scores via email based on the information provided in the FHE proposal before the meeting. If a representative is absent due to unforeseen circumstances, the District will contact the absent representative and identify the consensus outcome of the FHE Project Selection meeting. If the absent representative objects to the meeting outcome, the District will immediately schedule and conduct another ARC meeting. (See ARC Guidelines for consensus definition, voting by proxy, and absentee voting.)

3.3. Additional Funding Sources
If applicable, habitat projects may be deferred for up to one year in order to search out grant matching/leveraging opportunities. The District will work with the Project Sponsor to develop appropriate documentation to support the grant application. If the grant is not received, the District will initiate (develop contract or agreement documents) the selected FHE project immediately, unless a receipt of a grant was a condition of implementing the selected project. If a receipt of a grant was a condition for FHE implementation and the grant is not received, the monies will be made available in the next round of FHE project selections.

4. FHE PROJECT IMPLEMENTATION

4.1. District-Led Projects
For selected FHE projects that are within the Sultan basin, the District will generally maintain lead capacity for contract acquisition, administration and oversight of the work of the FHE project (see Figure 2). The District will be responsible for negotiating a scope of work and other contract documents acceptable to the District. These contract documents will, at a minimum, including a schedule for disbursement of HEA funds. The District will also follow applicable District directives and state and federal laws for contract selection, awards and payments. For projects that require selection of a consultant or contractor, the District will include one ARC member, if there is an ARC member interested, on the selection committee. The ARC member will bear all costs of his/her participation on the selection committee.

4.2. Other Projects
The ARC may implement other appropriate aquatic habitat enhancement and restoration projects developed by the ARC within the Snohomish River Basin using HEA funds; however, any measures identified in the FHE Plan for implementation in a location that is both (a) outside the Sultan River basin and (b) outside of the then-existing Project boundary, shall be limited to actions that do not result in an expansion of the Project boundary. Therefore, projects outside the Sultan River basin will be restricted to the District leveraging HEA funds with grant opportunities or non-District sponsored projects that will enhance the fishery of the Sultan River, and subject to availability of funds after Sultan River basin projects are prioritized.

For selected FHE projects that are outside of the Sultan basin, the ARC Sponsor or grant holder will assume lead capacity for contract acquisition, administration, and oversight of the work to be conducted for the FHE project. An agreement acceptable to the District will be developed between the District and the ARC sponsor or grant holder prior to disbursement of HEA funds.
4.3. Permitting Considerations

Implementation of HEA-funded projects will be in compliance with all applicable local, state, and federal laws and regulations. If conflicts exist between the objectives, implementation or management of the FHE project and any applicable law or regulation, the objectives, implementation and management will be followed to the extent possible while still complying with the law or regulation. ARC members will strive to alleviate permitting processes, hang-ups, etc. for their respective agencies’ permits by providing letters of support, coordinating information with permitting staff, and/or by other means to expedite the process. Permits that potentially may be required of HEA-funded projects, but not limited to, include:

4.3.1. Endangered Species Act

The Federal Endangered Species Act of 1973 (ESA), as amended, prohibits the “take” of species listed as threatened or endangered. The definition of take includes activities that harm or harass individuals of a listed species. Active enhancement of riparian and aquatic habitats (such as the manipulation of vegetation or modification of stream channels) where listed species are present can be considered take if the activity leads to the harm or harassment of individual animals. Management activities in riparian and aquatic habitats will be conducted in a manner that does not result in unauthorized take of listed species. Riparian and aquatic habitats with the potential to support listed species will be checked for the presence of such species prior to any enhancement activity, and the activity will be adjusted as needed to comply with the ESA.

4.3.2. Clean Water Act

Section 404 of the Clean Water Act (CWA) requires issuance of a permit by the U.S. Army Corps of Engineers (USACE) prior to any discharge of dredge or fill material into waters of the U.S., including wetlands. As part of the permitting process, applicants must also demonstrate compliance with the ESA, National Historic Preservation Act, Coastal Zone Management Act, and Section 401 of the CWA. Enhancement and restoration activities in aquatic habitats, such as culvert placement and stream restoration projects, may require Section 404 permits from the USACE. Such projects should be designed to minimize impacts to waters of the U.S.

4.3.3. Washington Forest Practices Act

Management activities on non-federal forestlands in Washington are generally subject to the Washington Forest Practices Act (RCW 76-09) and Forest Practices Rules (FPR). As such, certain forest management activities require prior approval through the Forest Practices Approval process, and others simply require conformance to the FPR without prior approval. Timber harvesting and other enhancement activities in forested riparian areas may require approval under the FPR.
4.3.4. Shoreline Management Act
Activities conducted within “shorelines of the state” (non-federal lands within 200 feet of lakes of 20 acres or more and streams with an average annual flow of 20 cubic feet per second or more) are subject to review and approval under the Washington State Shoreline Management Act and pertinent county and city Shoreline Management Master Programs. The shorelines of the Sultan River, Skykomish and Snohomish rivers, and larger tributary streams fall under the jurisdiction of the Shoreline Management Act. The shorelines of Spada Lake fall under the existing shoreline permit (ZA8103069). Riparian forest management activities within shorelines of the state come under the jurisdiction of the Forest Practices Act, and typically do not require separate approval under the Shoreline Management Act. Aquatic and riparian activities that do not fall under the jurisdiction of the Forest Practices Act may require formal approval under the Shoreline Management Act.

4.3.5. State Hydraulic Code
The Washington State Hydraulic Code (RCW 77.55) requires the issuance of a Hydraulic Project Approval (HPA) from the Washington Department of Fish and Wildlife for any activity that will use, divert, obstruct, or change the bed or flow of a water of the State. State waters include all marine and freshwaters, except those watercourses that are entirely artificial, such as irrigation ditches, canals, and storm water run-off devices. Most management activities that will occur in aquatic habitats, including culvert improvements to restore fish access to habitat, and stream restoration projects, will require an HPA.

4.3.6. State Owned Aquatic Lands
Washington State asserted ownership, through Article XVII of the State Constitution, to the, “beds and shores of all navigable waters in the state . . . ,” except those sold according to law. The State of Washington owns its aquatic lands in fee, and abutting owners and others wishing to use state-owned aquatic lands must obtain prior authorization for use of the land from the Washington Department of Natural Resources. Aquatic and riparian habitat protection, restoration and enhancement activities on SOAL would require such authorization.

5. ACCOUNT ADMINISTRATION

5.1. Fund Deposits
The District will deposit $2.5 million into an interest-bearing account within thirty (30) days after issuance of the License (Year 1). In addition, starting the tenth anniversary after issuance of the License (Year 11) and annually for the term of the License, the District will deposit $200,000 into this account. All funds are based on 2011 dollars and adjusted annually according to the U.S. Department of Labor, Bureau of Labor Statistics Consumer Price Index, All Urban Consumers, for Seattle-Tacoma-Bremerton (CPI-U). The District will maintain an accounting log of the HEA balance for ARC review at the 4th Quarter meeting or as requested. The District may, at its discretion, frontload payments into the Account by making payments ahead of the schedule described above.

5.2. Fund Use
The District will only use the HEA to fund projects developed pursuant to this FHE Plan. Each project will include a not-to-exceed initial budget and a schedule of payments from the HEA. Should a project exceed this initial budget, funds from the HEA may only be used for these excess costs if approved by the ARC and the project amended to include an updated budget and schedule of payments. If the ARC does not approve the budget increase, the District will not be obligated to finish the project. Any
monies not distributed will remain in the HEA, will gain interest, and will be available for the following year’s use.

The District will not use HEA funds for costs incurred by the District related to the administration or oversight of these projects. Administration or oversight includes such tasks as project selection activities, contract development and oversight, HEA account administration, and reporting to the ARC and the FERC.

If the District uses internal staff to conduct portions of the implementation or subsequent monitoring of the project as described in the FHE project plan, HEA funds will be used. Implementation includes such tasks as data collection, literature review, on-ground/instream surveys, ongoing monitoring, engineering, design, plan preparation or other implementation work that could be conducted by a consultant.

For HEA-funded land acquisitions, the expenses (appraisals, closing fees, title insurance, environmental assessments, etc.) and staff time necessary for the real estate transaction(s) will be deducted from the HEA. Additionally, any land management activities (such as noxious weed control, maintenance, waste clean-up, etc.) associated with the land acquisition will be funded through the HEA through the term of the License. The District will strive to minimize such land management activities to those activities that must be implemented to meet legal requirements; to meet District standards or management plans; or to provide appropriate environmental stewardship as determined by the ARC.

5.3. Fund Reserves

The ARC will maintain a reserve amount of $500,000\(^2\) in the HEA. As deemed necessary by the ARC during any year, this reserve may be tapped to fund time-sensitive modifications/enhancements along the Sultan River to improve fish passage through landslides, remove noxious weeds/invasive species, purchase property for enhancement, or implement another measure. If funds dip below the reserve level prior to year 2051, the ARC will suspend further HEA disbursements (except for further time-sensitive measures) until the reserve amount is met in the HEA. After the year 2051, the reserve amount will be available for FHE projects as determined by the ARC.

6. REPORTING

6.1. Project Completion

A brief report will be provided to the ARC upon project completion, and another brief report will be provided after any periodic monitoring identified in the funded project. The project completion report should include background information on the existing environment and the issues associated with it, the goal and objectives of the HEA-funded project, methodology used for enhancement, methodology and schedule for continued monitoring/management, and expected results. As appropriate, the report should include maps, figures and photos. The periodic monitoring reports should include a description of the method and results of monitoring future monitoring methodology changes and schedule; and photos of the FHE project. The District (or its consultant) will develop these reports for FHE projects with District oversight; the sponsor/grant holder will develop these reports for non-District oversight projects. Failure of the sponsor/grant holder to provide project completion or monitoring reports will result in the sponsor/grant holder not being considered for future HEA-funded projects.

\(^2\) Upon concurrence, the ARC can reduce the reserve amount; however, the minimum reserve must be $250,000.
6.2. Annual Report
By June 30 of each year, the District will develop and file an annual report fully describing its implementation of the FHE Plan during the previous calendar year and a list of planned projects for the current calendar year. The Annual Report will provide the following:

- A summary of resource projects implemented and lands/easements acquired during the year.
- A summary of any ongoing monitoring results of HEA-funded projects.
- A summary of any issues or concerns identified by members of the ARC during the year regarding implementation of the HEA-funded projects.
- A summary of all activities related to the HEA during the year, including an accounting of funding expenditures, interest earned, disbursements made, and adjustments made for inflation.
- A list of any changes to the FHE Plan proposed by consensus of the ARC during the year.
- A list of FHE Plan activities and expenditures planned for the current year.

The first annual report will be filed by June 30, 2012. The ARC will have at least 30 days to review and comment on the draft report prior to the District filing with the Commission. The District will provide copies of the annual report to the ARC.

6.3. Plan Review and Updates
Every 10 years, the District will review the FHE Plan for effectiveness in meeting the requirements of the license article and for improving the Plan based on new information and experience. The ARC will have at least 30 days to review and comment on any proposed modifications to the FHE Plan prior to the District filing it with the Commission. When filing the FHE Plan with the Commission, the District will include documentation of consultation, copies of comments and recommendations, and specific descriptions of how comments and recommendations from the ARC are accommodated by the Plan. If the District does not adopt a recommendation, the filing will include the District’s reasons based upon Project-specific information.

7. SCHEDULE

<table>
<thead>
<tr>
<th>Timing</th>
<th>Action</th>
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<tbody>
<tr>
<td>Year 1</td>
<td>Deposit $2.5 million into HEA</td>
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<tr>
<td>Year 1 through license term</td>
<td>ARC meets each 4th Quarter to discuss and rank FHE project proposals, or as needed to capitalize on projects that require expediency</td>
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<tr>
<td>Year 2 and annually through license term</td>
<td>File annual report by June 30</td>
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<tr>
<td>Years 11 and annually through license term</td>
<td>Deposit $200,000 into HEA</td>
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<tr>
<td>Years 11, 21, 31, 41</td>
<td>Evaluate effectiveness of FHE Plan</td>
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<tr>
<td>As described in individual project plans</td>
<td>Implementation of individual project plans funded by HEA</td>
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<tr>
<td>As described in individual project plans</td>
<td>Monitoring success of enhancement or restoration projects funded by HEA</td>
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Appendix 1
Proposed License Article
A-LA 12: Fish Habitat Enhancement Plan

Within one (1) year of License issuance, the Licensee shall file with the Commission, for approval, a comprehensive Fish Habitat Enhancement Plan (FHE Plan) to enhance fish habitat in the Sultan River basin. The primary purpose of the FHE Plan is to guide the implementation of projects designed to enhance aquatic habitat in the Sultan River basin. The Licensee shall develop the FHE Plan in consultation with the Aquatic Resource Committee (ARC). The Licensee shall allow a minimum of thirty (30) days for members of the ARC to comment and make recommendations before submitting the FHE Plan to the Commission. When filing the FHE Plan with the Commission, the Licensee shall include documentation of consultation, copies of comments and recommendations, and specific descriptions of how comments and recommendations from the ARC are accommodated by the Licensee’s plan. If the Licensee does not adopt a recommendation, the filing shall include the Licensee’s reasons based upon Project-specific information.

Upon Commission approval, the Licensee shall implement the FHE Plan.

The FHE Plan shall consist of the following actions:

1. **Habitat Enhancement Account (HEA):** The Licensee shall deposit $2.5 million into an interest-bearing account within thirty (30) days after issuance of the License. In addition, starting the tenth anniversary after issuance of the License and annually for the term of the License, the Licensee shall deposit $200,000 into this account. All funds are based on 2011 dollars and adjusted annually according to the U.S. Department of Labor, Bureau of Labor Statistics Consumer Price Index, All Urban Consumers, for Seattle-Tacoma-Bremerton (CPI-U). The Licensee shall use this account to fund projects developed pursuant to this License Article. The Licensee shall develop a proposed budget for each project. The Licensee shall use the funds provided within this section to implement only those projects specified and provided for in the budget. The Licensee shall not use the funds provided within this section for its administration or oversight of these projects.

2. **Habitat Enhancement Projects:** Throughout the term of the License, the Licensee shall, in consultation with the ARC, develop and implement, specific HEA-funded aquatic habitat enhancement and restoration projects within and adjacent to the Sultan River. Such projects shall include annual funding (up to $3,000 (2011 dollars)) for the National Resources Conservation Service hydrologic monitoring equipment (SNOTEL or other equipment), unless the ARC determines that such funding is no longer necessary. Such projects may include, but not be limited to: (a) instream structure enhancements; (b) side-channel habitat development; (c) removal, maintenance or construction of large woody debris; (d) removal of barriers to upstream migration; (e) gravel augmentation; (f) land purchases related to aquatic habitat enhancement; (g) purchase of additional water (on a willing-buyer, willing-seller basis) for process or special purpose flows; and (h) other projects that provide for adaptive management in the Sultan basin. However, such projects shall not include projects which the Licensee would otherwise be required to implement pursuant to any other License Article.

3. **Use of Funds:** The Licensee, in consultation with the ARC, shall use funds from the HEA established in Paragraph (1) to implement the types of projects identified in this section. In addition, throughout the term of the License, if available funds remain within the Account, the Licensee shall implement other appropriate aquatic habitat enhancement and restoration projects developed by the ARC within the Snohomish River Basin; however, any measures identified in the FHE Plan for implementation in a location that is both (a) outside the Sultan River basin and (b) outside of the then-
existing Project boundary, shall be limited to actions that do not result in an expansion of the Project boundary. In the event that a future landslide causes a barrier to upstream migration and the Licensee determines in consultation with the ARC that there is a Project nexus with the barrier, the Licensee will prioritize the use of funds from the HEA to study and, if necessary, modify such landslide to remove the barrier to upstream migration. However, the Licensee need not prioritize the use of the fund if the ARC determines that such prioritization of funds is not biologically warranted in light of the potential alternative uses of the fund and such alternative uses would mitigate for Project impacts. The availability of funds in this account shall not prevent the exercise of reserved authority by Ecology.

4. **Threatened Species Take Minimization Measures**: The Licensee shall implement measures to minimize the take of Puget Sound Chinook salmon, Puget Sound Steelhead, and bull trout associated with in-water work during development of any physical structures and facilities pursuant to other PM&Es, consistent with the agencies’ incidental take statements [attached as Appendices __ and __ to this order]. The Licensee shall not use funds from the HEA to implement such measures.

5. **FHE Plan Implementation Schedule**: The Licensee shall include a schedule for implementing the FHE Plan, evaluating the success of the enhancement and restoration projects, and modifying the plan, if needed.

6. **FHE Report**: The Licensee shall file with the Commission, by June 30 of each year, an annual report fully describing its implementation of the FHE Plan during the previous calendar year and a list of planned projects for the current calendar year. The ARC shall have at least thirty (30) days to review and comment on the draft report prior to filing with the Commission. The Licensee shall provide copies of the annual report to the ARC.

**Below is an excerpt from the Settlement Agreement’s Joint Explanatory Statement discussing the proposed license article for the Fish Habitat Enhancement Plan.**

A Fish Habitat Enhancement Plan ("FHE Plan") was not included in the License Application. Proposed A-LA 12 requires the District to consult with the ARC to develop and implement a comprehensive FHE Plan to enhance fish habitat in the Sultan River basin. The purpose of the FHE Plan is to guide the implementation of projects designed to provide additional Project-related enhancements to aquatic resources and hydrologic processes in the Sultan River basin.

To fund the FHE Plan, the District will deposit $2.5 million ($2,500,000) into a District-managed, interest-bearing account ("Habitat Enhancement Account," or "HEA") within 30 days after issuance of the License. In addition, starting the tenth anniversary after issuance of the License and annually for the term of the License, the District will deposit $200,000 into this account. Based upon a forty-five year License, this will result in the District contributing $9.5 million to the HEA. The Settlement Parties recognize that the District may, at its discretion, frontload payments into the Account by making payments ahead of the schedule described within the License Article. The District will use this account to fund projects developed pursuant to this License Article and will not use the funds for its administration or oversight of these projects.

Throughout the term of the License and any subsequent annual Licenses, the District will consult with the ARC to develop and implement specific HEA-funded aquatic habitat enhancement and restoration
projects within and adjacent to the Sultan River. Such projects may include, but not be limited to: (1) instream structure enhancements; (2) side-channel habitat development; (3) removal, maintenance or construction of large woody debris; (4) removal of barriers to upstream migration such as future slides; (5) gravel augmentation; (6) land purchases related to aquatic habitat enhancement; (7) purchase of additional water for process or special purpose flows; and (8) other projects such as maintaining a Snotel site in the basin, that provide for adaptive management in the Sultan basin. In addition, throughout the term of the License, if available funds remain within the account, the District will implement other appropriate aquatic habitat enhancement and restoration projects developed by the ARC within the Snohomish River Basin.

The District will employ measures to minimize the take of Chinook salmon, steelhead, and bull trout associated with in-water work during development of any physical structures and facilities pursuant to other PM&Es, consistent with the agencies’ incidental take statements.

A-LA 12 requires the District to undertake projects that will provide considerable aquatic habitat benefits within the Sultan River basin throughout the License term. These additional habitat enhancement projects, working in conjunction with other Settlement measures such as improved side channel connectivity, increased instream flows, and the anticipated fish passage at the Diversion Dam will likely substantially increase the quantity and quality of aquatic habitat available to anadromous and resident fish in the lower Sultan River. Establishment of the ongoing FHE Plan and HEA will also allow for adaptive management as conditions change in the basin and guide in the implementation of the most effective resource protection measures throughout the life of the License. The mitigation provided through the fund will best address habitat enhancement and restoration needs throughout the License term by allowing flexibility to ensure that these other habitat enhancement and restoration projects are developed and implemented during the License term.
Appendix 2
Consultation Documentation
Appendix 3
Fish Habitat Enhancement Project Proposal Form
# Jackson Hydroelectric Project  
**(FERC No. 2157)**

## Fish Habitat Enhancement Project Proposal

### Applicant Contact Information

<table>
<thead>
<tr>
<th>ARC Applicant Name</th>
<th>Date</th>
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<table>
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<tr>
<th>Organization</th>
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<th>Address</th>
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<tr>
<th>City, State and Zip</th>
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<table>
<thead>
<tr>
<th>Contact Info</th>
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<tbody>
<tr>
<td>Phone</td>
<td>Email</td>
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### Project Type

#### Project Type
- [ ] Enhancement/Restoration Project
- [ ] Land/Water Right Acquisition
- [ ] Grant Matching/Leveraging
- [ ] Extra Water

#### Funding Amount
- [x] $25,000 and under
- [x] $25,001 to $200,000
- [x] $200,001 and over

#### Location
- [x] Lower Sultan River basin
- [x] Upper Sultan River (including Spada and its trib)
- [x] Sultan/Skykomish Rivers Confluence
- [ ] Skykomish River
- [ ] Snohomish River
- [ ] Estuary

### Project Information

#### Name


#### Location

Please attach a map and photos of the project area. List GPS coordinates, if possible.

#### Objective
## Project Information

**Description**

**Benefits**

**Methods**

**Monitoring/Land Management**

## Project Schedule

**Time Frame**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Quarter, Year</th>
<th>Quarter, Year</th>
<th>Quarter, Year</th>
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## Proposed Budget

**Detail of Amount Requested from District**

<table>
<thead>
<tr>
<th></th>
<th>Staff Time (with benefits)</th>
<th>Travel</th>
<th>Supplies</th>
<th>Permits</th>
<th>Contractor/Consultant</th>
<th>Monitoring/Land Mgmt (10% min.)</th>
<th>Misc.</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount</td>
<td>$</td>
<td>$</td>
<td>$</td>
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<td>Explain Misc. Costs</td>
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Amount Requested from District $
<table>
<thead>
<tr>
<th>Fund Matching/Leveraging, if applicable</th>
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<tbody>
<tr>
<td><strong>Name of Match Organization, if any</strong></td>
</tr>
<tr>
<td><strong>Match type</strong></td>
</tr>
<tr>
<td><strong>Is this project contingent on receiving matching/leveraged funds?</strong></td>
</tr>
<tr>
<td><strong>Amount of Match</strong></td>
</tr>
</tbody>
</table>
Instructions

Please provide the following information for the Project Proposal Form:

- **Applicant Contact Information** - add content for the primary ARC member responsible for introducing and coordinating the project proposal. If there is an ARC co-sponsor, please indicate his/her name in the ARC Applicant Name field as a “co-sponsor” after the primary sponsor.

- **Project Type** - you may make multiple selections if needed for each field.

- **Name** - name of the project. If this is a fund matching/leveraging request, use the same name as the primary grant application.

- **Objective (max ¼ page)** - identify overall objective of the proposed FHE project.

- **Description (max 1-5 pages)** - amount of information should be commensurate with the amount of funds being requested (1 page max. for $25,000 and under; 3 page max for $25,001 to $200,000; 5 pages max for $200,001 and over). Provide a description of the problem, impacts to resources, what is anticipated to be done, scope of work, work products, reporting, ongoing monitoring, etc. If this project is identified in a Recovery Plan or similar, state which one.

Please provide the additional information for the project type for which you are applying:

- **For Grant Matching/ Leveraging (non-District project):**
  - **Description:** Clearly state for what project this is a grant match, requesting organization and from what funding board/council, percent match requested compared to full project cost. Attach grant information. Additionally, state how the project will benefit the fishery of the Sultan River.
  - **Time frame:** State the timeframe to complete the project and also the timeframe on when the funds would be allocated.

- **For Land Acquisition:**
  - **Description:** Clearly state the details of the land/easement, by what mechanism (fee simple, easement, agreement, etc.) would it be owned, what the land will be used for, and length of commitment.

- **For Enhancement Project:**
  - **Description:** Clearly state if the project is to be completed with oversight by the District in whole, in conjunction with another party or exclusively by another party.

- **Benefits (max 1/2 page)** - what aquatic benefits are anticipated by the action; articulate multiple resource benefits if appropriate.

- **Methods (max 1 page)** - description of proposed method. Use this method for budgeting.

- **Monitoring/ Land Management (max. 1 page)** - The short-term and long-term monitoring, maintenance, and management requirements and costs of each proposal will be considered. Most projects should have a monitoring component, but that should be specifically targeted and concise. Monitoring should answer one of two questions: 1) does the project function as designed and/or 2) does this project produce benefits that we would want to duplicate by funding similar projects? Ongoing land management must also be taken into account and indicated in the proposal.

- **Proposed Schedule Time Frame and Detail** - identify the month and year for when the project is anticipated to begin and when the project would be completed. Identify the major tasks and relative timeframe to accomplish each task. Schedule must identify time needed for permitting and monitoring of the proposed FHE project.
Appendix 4
Evaluation Criteria Form
### EVALUATION CRITERIA FORM

**SCORECARD**

<table>
<thead>
<tr>
<th>Proposed FHE Project Name: __________________________</th>
<th>Scored By: __________________________</th>
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</thead>
<tbody>
<tr>
<td>5= Lower Sultan River (downstream of Culmback Dam)</td>
<td>5= Significantly protects or improves access to or quantity of high quality habitat</td>
<td>5= Has clear project nexus and addresses objectives of increased resilience and recovery of anadromous or resident salmonid populations</td>
<td>5= Low cost / significant benefit in terms of habitat and/or projected population response</td>
<td>5= Well thought out plan, scope, budget, timeframe, method, benefit. Fully meets the requirements of proposal submission.</td>
<td></td>
</tr>
<tr>
<td>4= Upper Sultan River basin upstream of Culmback Dam including Spada Lake Reservoir or its tributaries</td>
<td>4= Significantly protects or enhances existing habitat</td>
<td>4= addresses objectives of increased resilience and recovery of anadromous or resident salmonid populations</td>
<td>4= Moderate cost / significant benefit in terms of habitat and/or projected population response</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3= Skykomish River (below River Mile 13.9), Snohomish River or Estuary</td>
<td>3= Moderately protects or enhances existing habitat</td>
<td>3= addresses specific critical habitat need identified in a species or ecosystem recovery plan</td>
<td>3= High cost/significant benefit in terms of habitat and/or projected population response</td>
<td>3= Appropriate level of plan, scope, budget, timeframe, method, benefit</td>
<td>3= District-owned asset</td>
</tr>
<tr>
<td></td>
<td>2= Acquires land / forestalls or averts development</td>
<td>2= Low cost/marginal benefit in terms of habitat and/or projected population response</td>
<td></td>
<td>2= Leveraging other grant moneys for District project (at least 25%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1= Improves access to marginal habitat</td>
<td>1= Non-identified/formalized objective</td>
<td>1= High cost/low benefit in terms of habitat and/or projected population response</td>
<td>1= Inappropriate level of plan, scope, budget, timeframe, method, benefit</td>
<td>1= Leveraging other grant moneys for District project (less than 25%)</td>
</tr>
<tr>
<td>0= Upstream of Sultan River (Skykomish River River Mile 13.9 or above)</td>
<td>0= None of the above</td>
<td>0= No project nexus</td>
<td>0= No benefit</td>
<td>0= Does not meet intent of FHE Fund</td>
<td></td>
</tr>
</tbody>
</table>

Maximum points=25  Maximum points=20  Maximum points=15  Maximum points=10  Maximum points=5  Maximum points=5

Points Scored:  Points Scored:  Points Scored:  Points Scored:  Points Scored:  Points Scored:

**TOTAL POINTS SCORED:**

[^1] If multiple criteria apply to the category (such as “Acquires land” and “Significantly improves access”), the highest valued points will be awarded.

[^2] If another criteria applies along with “Does not meet intent of FHE Fund”, then the 0 points value will be awarded.

Note: If multiple criteria apply to the category, the highest valued points will be awarded. Total maximum points = 80.