



*Your Northwest renewables utility*

June 29, 2017

**VIA ELECTRONIC FILING**

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission (FERC)  
888 First Street NE  
Washington, DC 20426

**Re: Jackson Hydroelectric Project, FERC No. 2157  
Fish Habitat Enhancement Plan 2016 Annual Report  
License Appendix G A-LA 12**

Dear Secretary Bose:

Enclosed is Public Utility District No. 1 of Snohomish County's Fish Habitat Enhancement Plan 2016 Annual Report pursuant to the Jackson Hydroelectric Project's License Appendix G A-LA12. The draft report was provided to the Aquatic Resource Committee for a 30-day review and comment period. Consultation documentation is included in the report's appendix; no comments were received.

If you have any questions on the Fish Habitat Enhancement Plan 2016 Annual Report, please contact Dawn Presler, Sr. Environmental Coordinator, at (425) 783-1709 or [DJPresler@snopud.com](mailto:DJPresler@snopud.com).

Sincerely,

*/s/ Tom DeBoer*

Tom DeBoer  
Assistant General Manager of Generation, Power, Rates and Transmission Management  
[TADeBoer@snopud.com](mailto:TADeBoer@snopud.com)  
(425) 783-1825

Enclosed: FHEP 2016 Annual Report

cc: ARC

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



## **Fish Habitat Enhancement Plan: 2016 Annual Report (A-LA 12)**



Everett, WA

June 2017

**Final** – This document has been prepared for the District. It has been peer-reviewed by the District for accuracy and formatting based on information known at the time of its preparation and with that understanding is considered complete by the District. The document may be cited as:

Public Utility District No. 1 of Snohomish County (District). 2017. Fish Habitat Enhancement Plan: 2016 Annual Report (A-LA 12) for the Henry M. Jackson Hydroelectric Project, FERC No. 2157. June 2017.

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## APPENDICES

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Appendix 1 Consultation Documentation Regarding Draft Report

## **1.0 INTRODUCTION**

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Public Utility District No. 1 of Snohomish County (the District) received a license on September 2, 2011 (License), from the Federal Energy Regulatory Commission (FERC) for the Henry M. Jackson Hydroelectric Project (Project). License Ordering Paragraphs D (Washington Department of Ecology 401 Water Quality Certification conditions) and E (U.S. Forest Service section 4(e) conditions) require the District to implement Aquatic License Article 12: Fish Habitat Enhancement Plan (A-LA 12) as detailed in License Appendix G. The District filed the Fish Habitat Enhancement Plan (FHE Plan) with the FERC on November 19, 2010.

As indicated in the FHE Plan, 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 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 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 performance of anadromous and resident fish populations in the lower Sultan River. Establishment of the ongoing FHE Plan and Habitat Enhancement Account (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.

Pursuant to Section 6.2 of the FHE Plan, the District is to prepare a report by June 30 of each year detailing activities that occurred the previous year and activities planned for the present year as they relate to implementation of FHE Plan-approved projects. This FHE Plan Annual Report, covering activities conducted in 2016 and planned for 2017, was provided to the Aquatic Resources Committee (ARC) for a 30-day review and comment period. The ARC consists of the City of Everett, City of Sultan, Snohomish County, Washington Department of Ecology, Washington Department of Fish and Wildlife (WDFW), Tulalip Tribes, U.S. Forest Service, National Marine Fisheries Service, U.S. Fish and Wildlife Service, and American Whitewater. Appendix 1 is documentation of consultation with the ARC; no comments were received.

## **2.0 ACTIVITIES FOR YEAR 2016**

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### **2.1 Project Selection**

Only one project was proposed for consideration at the fourth quarter 2015 ARC Meeting. The ARC approved a two-year extension on the previously approved “Lower Sultan River Riparian Restoration” project. A report of the initial effort is included as Appendix 1. The two-year extension will allow the District to continue control of seven species of invasive weeds (Knotweed, Himalayan and Evergreen blackberries, Scotch broom, Butterfly bush, holly, and ivy) along the lower 6 miles of Sultan River that have not been eliminated from two small but significant patches of land.

In Osprey Park, there has been great success at reducing large, contiguous patches of invasive plants down to just a few remaining shoots. This has made a noticeable difference within the park; however, small but significant patches of invasive plants remain, sporadically mixed with native plants. This makes treatment more difficult and time consuming. If left untreated, it is likely that a re-invasion of the park property will occur. During the two-year extension, sporadic shoots will be removed and previously treated areas will be maintained.

The Hambelton property has a large established patch of knotweed on a very steep and wet slope. This patch was not treated the first year of the contract because it is more than 150 feet from the river, as the original scope dictated. The first treatment of the patch occurred in 2014. Since the slope is potentially unstable, a cautious approach was taken to treatment to minimize potential for erosion. After the second year of spraying, approximately 2/3 of the knotweed has been treated. Two additional years of treatment will allow the District to control this substantial patch while not denuding the entire slope at once, which would increase the risk of a slide. Subsequent planting with deep rooted shrubs will occur after each fall treatment.

## **2.2 Project Implementation**

Two projects were previously approved for funding in 2013 and continued through 2016, with 2016 activities described below – these include the lower Skykomish River restoration and the lower Sultan River riparian restoration projects.

### ***2.2.1 Lower Skykomish River Restoration***

In 2016, monitoring and data analysis of temperature, channel topography, habitat, placed structures, and fish use were conducted by Snohomish County staff. The temperature monitoring looks at specific project locations compared to mainstem temperature and state fish life-use criteria. Channel topography collected is used to detect channel response to installed structures. The habitat data collected provides implementation monitoring (amount of change from the structures themselves) and a measure of natural process monitoring associated with the treatments. Fish presence monitoring is used to determine if fish are utilizing the habitat where the treatments were installed.

An Ecology Washington Conservation Corps crew installed 2,575 live stake willow and cotton wood stakes to the areas along the Groeneveld property side channel where knotweed had been treated for the past four seasons. Inter-planted conifers installations were inspected, repaired, and 25 were replaced. Willow live stakes (totaling 1,660) were installed at the BahnMiller property and Labish property bank treatment areas.

### ***2.2.2 Lower Sultan River Riparian Restoration***

In 2016, Adopt-a-Stream continued invasive species control primarily in Osprey Park and on the Hambelton property. Invasives in Osprey Park have been significantly reduced in number and spread such that control efforts now consist primarily of locating and treating isolated individual weeds. The large knotweed patch on the Hambelton property has also been largely eradicated, with revegetation efforts occurring for the past two years.

### ***2.2.3 Diversion Dam Fish Counts and Timing Sonar Device***

The ARIS 3000 Sonar instrumentation (ARIS) was acquired in 2016. An alcove for placement and deployment of the ARIS was designed and included in construction of the Diversion Dam Volitional Fish Passage project. Passage through the dam construction was completed in late October 2016 with full project completion in late December 2016.

## **2.3 Project Monitoring**

No additional monitoring of FHE Plan habitat projects was conducted since no FHE-funded habitat projects were completed in 2016 beyond that already described above.

## **3.0 ACTIVITIES FOR YEAR 2017**

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### **3.1 Project Selection**

The ARC approved the acquisition, installation, and monitoring of an ARIS system for application at the new Diversion Dam Volitional Passage area to monitor species, abundance, and timing of fish moving through the Diversion Dam into Reach 3 (between Culmback Dam [River Mile 16.1] and the Diversion Dam [River Mile 9.7]) of the Sultan River in the summer 2017.

No new projects for funding in 2017 were proposed at the October 2016 ARC meeting. As such, the planned activities as of the timing of this report include two projects as discussed below.

### **3.2 Project Implementation**

#### ***3.2.1 Lower Skykomish River Restoration Project***

Activities under this FHE-funded project were complete, with the exception of the final report, during 2016. Snohomish County will provide the final report to the District in 2017.

#### ***3.2.2 Lower Sultan River Riparian Restoration***

In 2017, Adopt-a-Stream will continue searching for and treating invasive weeds within Osprey Park and the Hamblton property as needed. A final report will be provided to the District.

#### ***3.2.3 Diversion Dam Fish Counts and Timing Sonar Device***

Deployment of the ARIS has been delayed due to the mobilization and transport of a significant volume of sediment through the Diversion Dam area. Deployment is tentatively scheduled for late summer 2017 but is contingent on the presence of a favorable environment for operation, maintenance, and protection of the sonar equipment.

## 4.0 FUND BALANCE

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As of December 31, 2016, the fund's account balance was \$2,057,636.52. However, this balance does not reflect amounts not yet spent towards approved projects and reserves for potential slides. The balance of unallocated funds for use on future projects is approximately \$1.28 million, as follows:

Fund Start	\$ 2,500,000.00
Interest to-date (12/31/16 <sup>1</sup> )	<u>+\$ 41,541.98</u>
Subtotal	\$ 2,541,541.98
Confluence property acquisition	- \$ 4,861.38 (closed)
Future slides reserve	- \$ 500,000.00 (allocated)
Hochfeld property acquisition	- \$ 173,300.00 (allocated)
Lower Skykomish River restoration	- \$ 175,000.00 (allocated)
Riparian restoration Sultan River	- \$ 230,000.00 (allocated)
Riparian restoration Sultan River (2-yr extension)	-\$ 25,000.00 (allocated)
ARIS system	<u>-\$ 150,000.00 (allocated)</u>
<b>Total</b>	<b>\$1,283,380.60</b>

Starting the tenth anniversary after issuance of the License (Year 11) and annually thereafter for the term of the License, the District will deposit \$200,000 (based on 2011 dollars) into the fund account per Section 5.1 of the FHE Plan.

## 5.0 FHE PLAN RECOMMENDATIONS

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No recommendations for changes to the FHE Plan are being made at this time.

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<sup>1</sup> The number reported in the 2015 Annual report of \$14,078.96 was incorrect; that was the interest to-date amount from 2014. 2015 interest to-date was \$25,629.73.



## **Appendix 1**

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### *Consultation Documentation Regarding Draft Report*

## Presler, Dawn

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**From:** Presler, Dawn  
**Sent:** Thursday, May 18, 2017 1:01 PM  
**To:** 'Wright, Lindsay'; 'Vacirca, Richard -FS'; 'Anne Savery'; 'brock.applegate@dfw.wa.gov' (brock.applegate@dfw.wa.gov); 'James (ECY) Pacheco' (JPAC461@ECY.WA.GOV); 'Ken Walker'; 'Jim Miller'; 'Thomas O'Keefe'; 'Rustay, Michael'  
**Cc:** Binkley, Keith  
**Subject:** JHP (FERC No. 2157) - draft Fish Habitat Enhancement Plan Annual Report for 30day review  
**Attachments:** 2016 FHEP Annual Report DRAFT.docx

Dear ARC,

Attached for your review is the Draft 2016 Annual Report for the Fish Habitat Enhancement (Fund) Plan. Please take the next 30 days to review and provide comments, if any, back to me with a cc: to Keith Binkley by June 17. An email stating you have no comments is appreciated too. This is a short one so won't take much time for review. Thanks.

*Dawn Presler*  
Sr. Environmental Coordinator  
(425) 783-1709

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