

Priest Rapids Coordinating Committee Hatchery Subcommittee
Statement of Agreement

Basis of Design for the Dryden Summer Chinook Acclimation Facility

Submitted to PRCC Hatchery Subcommittee: January 31, 2012; Revised February 22, 2012

Approved by PRCC Hatchery Subcommittee: February 27, 2012

Approved by PRCC:

Statement

The HSC agrees that design of the Dryden Summer Chinook Acclimation Facility should follow the engineering criteria and assumptions described in Grant PUD. *Dryden Summer Chinook Acclimation Facility Basis of Design* by HDR, Contract No. CON0059597, Ephrata, Washington: Public Utility District No. 2 of Grant County, January 9, 2012, and summarized in the background section of this SOA, below. The project includes, the construction of a surface water intake, pump station, and associated outbuildings and modifications to the existing facility. The Basis of Design assumes that an existing facility owned by Chelan PUD may be modified to meet the needs of the program. Modifications to the existing Chelan PUD facility include replacing the pond liner, and the addition of surface water intake screen and pump system to supply the pond with Wenatchee River water directly from the river adjacent to the site instead of/ or in addition to the irrigation canal above. GPUD will design the facility with the capability for volitional release and with the ability to monitor PIT detections as fish exit the pond. This SOA is contingent upon the conditions of feasibility outlined in SOA 2009-09 *Feasibility of modification of Chelan PUD's Dryden Pond to provide overwinter acclimation facilities and/or expanded capacity for Grant's fish*.

Background

The purpose of the facility is to mitigate for loss of summer Chinook due to hydro power mortalities through the Priest Rapids hydroelectric project. The acclimation facility is intended to be part of an "Integrated Harvest Program", as defined in the Wenatchee Component of the Upper Columbia River Summer Chinook Program – Priest Rapids Project Mitigation and Genetic Management Plan (HGMP)¹. Criteria for evaluating the efficacy of the acclimation program including performance standards and indicators are not addressed in this document. Metrics for evaluating performance, as well as the metrics defining the reasoning used for determination of the numbers of fish are established in the HGMP. This Basis of Design document establishes the engineering design criteria to be used for the development of bidding and construction documents for construction of the facility.

The HSC was provided the Dryden Summer Chinook Acclimation Facility Basis of Design for review in January, 2012. The final Basis of Design document agreed to in this SOA establishes the engineering design criteria to be used for the development of construction documents. The following is a synopsis of these criteria:

¹ Washington Dept. of Fish & Wildlife. *Wenatchee Component of the Upper Columbia River Summer Chinook Salmon Program – Priest Rapids Project Mitigation and Genetic Management Plan*. DRAFT – September 30, 2009.

Priest Rapids Coordinating Committee Hatchery Subcommittee SOA 2012- 04
Statement of Agreement on the Basis of Design for the Dryden Summer Chinook Acclimation Facility

<u>Design Criterion Title</u>	<u>Criterion Value</u>	<u>BoD Reference</u>
<u>Release</u>		
Grant PUD number of Fish	181,816	2.1
Facility Design Capacity (+10%)	199,998	2.1
Chelan PUD Number of Fish	318,185	2.4
Facility Design Capacity	518,183	2.1
Fish Size at Release*	13 fish/lb	2.1
Fish Length at Release*	6.0 inches total length	2.1
Release Method	Volitional via drain outlet to river or off-site transfer and release	

* Maximum release size for design is 13 fish/lb at 6.0 inches length. Operation target release size is 13 – 17 fish/lb.

<u>Acclimation</u>		
Acclimation Pond	Existing Pond	5.2
Surface Water Supply	Nov. - May	4.2
Predation Control	Existing chain link fence around site perimeter	8.1
Design Density Index	0.10 lb/cf/in	2.1
Design Flow Index	1.00 lb/gpm/in	2.1
Transfer-to-Release Survival	95%	2.6