

Priest Rapids Coordinating Committee’s Hatchery Subcommittee

Statement of Agreement

Basis of Design for the Carlton Summer Chinook Acclimation Facility

Submitted to PRCC Hatchery Subcommittee: January 17, 2012

Approved by PRCC Hatchery Subcommittee: January 18, 2012

Approved by PRCC: January 25, 2012

Statement

The HSC agrees that design of the Carlton Summer Chinook Acclimation Facility should follow the engineering criteria and assumptions described in Carlton Summer Chinook Acclimation Facility Basis of Design by HDR, contract No. CON0059597, Ephrata, Washington: Public Utility District No. 2 of Grant County, January 4, 2012, and summarized in the background section of this SOA, below. The project will leave all of the existing Chelan PUD components in place and will utilize the existing surface water intake, pump station and outfall/release pipe. A new groundwater well for control of intake icing and pond surface icing has already been drilled and will be provided with a pumping system. Additional improvements will include new circular fish rearing tanks, associated water supply, drain, and fish release piping, a building to protect the rearing tanks from exposure to harsh winter conditions and provide storage space, on-site environmental mitigation, and associated site work for access roads and security fencing. The Basis of Design assumes that some existing facility components owned and operated by Chelan PUD will be modified to meet the design objectives of the program. The site includes an access road off of the Twisp-Carlton Road, an acclimation pond, surface water intake, outfall, and two small feed/storage buildings. This SOA is contingent upon the conditions of feasibility outlined in SOA 2010-02 *Feasibility of modification of Chelan PUD’s Carlton Pond to provide overwinter acclimation facilities and/or expanded capacity*.

Background

The purpose of the facility is to mitigate for loss of summer Chinook due to mortalities through the Priest Rapids Hydroelectric Project. The acclimation facility is intended to be part of an “Integrated Harvest Program”, as defined in the Methow 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.

The HSC was provided the Carlton 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, *Methow Component of the Upper Columbia River Summer Chinook Program – Priest Rapids Project Mitigation Hatchery and Genetic Management Plan*. DRAFT – September 9, 2009.

Priest Rapids Coordinating Committee Hatchery Subcommittee SOA 2012-03
 Statement of Agreement on the Basis of Design for the Carlton Summer Chinook Acclimation Facility

<u>Design Criterion Title</u>	<u>Criterion Value</u>	<u>BoD Reference</u>
<u>Release</u>		
Number of Fish Released	200,000	2.1
Facility Design Capacity (+10%)	220,000	2.1
Fish Size at Release*	13 fish/lb	2.1
Assumed Fish Length at Release*	6.0 inches total length	2.1
Release Method	Volitional via exit 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 Units	Circular tanks	5.2
Surface Water Supply	Nov-May	4.3
Predation Control	Acclimation building	8.1
Design Density Index	0.10 lb/cf/in	2.3.1
Design Flow Index	1.00 lb/gpm/in	2.3.2
Transfer-to-Release Survival	95%	2.5