

SOA-2010-08

**Priest Rapids Coordinating Committee Hatchery Subcommittee
Statement of Agreement on the Basis of Design for the
Nason Creek Acclimation Facility**

Submitted to PRCC Hatchery Subcommittee: November 4, 2010
Approved by PRCC Hatchery Subcommittee: November 18, 2010
Approved by PRCC:

Statement

The HSC agrees that design of the Nason Creek Acclimation Facility should follow the engineering criteria and assumptions described in Nason Creek Acclimation Facility Basis of Design by Jacobs, Contract No. 430-1286, Document No. NC-PA-0101.2 Ephrata, Washington: Public Utility District No. 2 of Grant County, August 12, 2010 and summarized in the background section of this SOA, below. The project includes the construction of a surface water intake and outfall, ground water wells, pump station, and acclimation vessels, predation and weather covers, associated outbuildings, pollution abatement pond, on-site environmental mitigation and site grading. The Nason Creek Acclimation Facility operational goal is to raise and acclimate 250,000 spring Chinook smolts for release each year at an average release size of 15 fish per pound. Smolts will be volitionally released directly via exit into Nason Creek or transferred off site for release.

Background

The purpose of the Nason Creek Acclimation Facility is to increase the number of natural spawners in Nason Creek and reduce short-term extinction risk for the Wenatchee River spring Chinook salmon. The acclimation facility is intended to be part of an “Integrated Recovery Program”, as defined in the *Upper Columbia River Spring-run Chinook Salmon – Nason Creek Supplementation Hatchery and Genetic Management Plan (HGMP)*.

The *Upper Columbia River Spring-run Chinook Salmon – Nason Creek Supplementation Program Hatchery and Genetic Management Plan (HGMP)* and relevant SOAs provides the final definition of the spring Chinook program for the Nason Creek Acclimation Facility.

The HSC was provided the Nason Creek Basis of Design for review in August, 2010. HSC member organizations provided comments in August and September 2010. Grant County PUD responded to the comments and made revisions to the Basis of Design. The HSC reviewed the comment responses and confirmed that they had no additional comments on the Basis of Design in October 2010.

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:

<u>Design Criterion Title</u>	<u>Criterion Value</u>	<u>BoD Reference</u>
<u>Release</u> Number of Fish Released	250,000	2.1

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Design Criterion Title	Criterion Value	BoD Reference
Facility Design Capacity (+10%)	275,000	2.1
Fish Size at Release	15 fish/ lb	2.1
Assumed Fish Length at Release	6 inches	2.1
Release Method	Volitional via exit or off-site transfer and release	
<u>Acclimation</u>		
Acclimation Units	Circular Tanks	5.2
Surface Water Supply	Oct-May	4.3
Predation Control	Enclosed Building	8.1
Surface Water Treatment Method	None	4.3
Ground Water Treatment Method	None	4.2
Design Density Index (High BKD)	0.06 lbs/cf-in	2.2.1
Design Density Index (Low BKD)	0.125 lbs/cf-in	2.2.1
Design Flow Index (High BKD)	0.60 lbs/gpm-in	2.2.2
Design Flow Index (Low BKD)	0.75 lbs/gpm-in	2.2.2
Transfer-to-Release Survival	95%	2.3

This SOA only addresses criteria for facility design. It does not address site impacts, permitting, or other requirements that would need to be mitigated or met prior to construction.