SOA 2009-08

Priest Rapids Coordinating Committee Hatchery Subcommittee
Statement of Agreement on Hatchery Design and Water Supply at Nason Creek

Submitted to PRCC Hatchery Subcommittee: 8/7/09, revised draft 8/14/09
Approved by PRCC Hatchery Subcommittee: 8/20/09
Approved by PRCC: The PRCC was consulted and determined that they do not need to approve this SOA

Statement

The HSC agrees that the Nason Creek facility will be designed and built based on the following water usage strategy:

- Adult holding will occur on a combination of untreated groundwater and untreated surface water with a small amount (15% or less) of re-circulated water during short periods of time.
- Egg-to-fry incubation will occur on untreated pathogen free groundwater.
- Fry-to-presmolt rearing will be done with surface water treated to remove pathogens using ultraviolet light or ozone during approximately May through October, and tempered with groundwater as needed for temperature control.
- Acclimation will occur on untreated surface water, with ground water used as needed to reduce frazil ice buildup on the surface water intake screen.

In addition to the above general facility design, the Nason Creek facility will be designed to support experimental evaluation of hatchery performance to allow adaptive management of the facility.

Background

Grant County PUD has prepared a discussion paper describing their assessment of Nason Creek sites, source water alternatives, and implications for hatchery design. That report is attached to this SOA as further background.

The HSC acknowledges that it will need to discuss and provide additional guidance on the nature and scope of experimentation. With respect to experimentation on early rearing the HSC has discussed that in particular, the design should support evaluation of different early rearing water sources and strategies on small groups of fish to examine the effects of upstream spawning and decay on disease in a hatchery setting. Specifically, the experiment might consider early rearing on (a) untreated surface water tempered with ground water for temperature control; (b) re-circulated raw groundwater (recirculation estimated at 80%); (c) surface water with ground water tempering as needed to adjust water temperatures with shorter window of pathogen treatment. These treatments will be compared to each other and to fish reared in the overall facility water usage strategy described above.