

**Title:**

Summary of Fish Health Data for BY 2000 - 2001 for Cle Elum and Acclimation Sites; and Additional Data from Out Migration at Roza Dam - Wild vs. Hatchery

**Authors:**

Ray Brunson\*, J. Chris Patterson, Joy Evered, Sonia Mumford

U.S. Fish and Wildlife Service, Olympia Fish Health Center, 3704 Griffin Lane, #101, Olympia Washington, 98501-2192

Phone: 360-753-9046

e-mail: ray\_brunson@rl.fws.gov

**Summary of Presentation:**

A review of diagnostic and monitoring activities performed by the Olympia Fish Health Center (OFHC) will be presented. During juvenile rearing at the Cle Elum Enhancement and Research Facility (CERF) in calendar year 2001 and 2002, no significant differences were noted in diagnostic exams between ponds. Commonly found external parasites were noted, and one case of probable degraded fish food due to manufacture/delivery problems and handling was identified and corrected.

The investigators have consistently tested spawning adults for reportable pathogens and especially focused on *Renibacterium salmoninarum* levels of the various populations using Enzyme-linked Immunoassay (ELISA) and a risk assessment developed by OFHC. This qualitative risk assessment is used to determine relative risk of adult females transferring the pathogen (and Bacterial Kidney Disease) to resultant progeny. Further testing is done on yearlings prior to release of smolts at the acclimation sites. Results from BY 2000 indicate that there are differences in pathogen levels between OCT and SNIT treatments indicated by ELISA-BKD data. Cause of such correlation may be speculative, but empirical data does show differences between ponds.

In addition, an opportunity arose to sample and test out migrants at Roza Dam in April of 2002 (BY 2000). The 2 samples of wild smolts and one sample of hatchery smolts were examined utilizing protocols and funding for the National Wild Fish Health Survey which are almost identical to those used at the CERSF. Wild and hatchery results are compared and contrasted from these exams. OFHC has committed with the consent of the Yakama Nation staff to continue this collaborative effort and include this data into the research efforts in the Yakima Basin to further understanding of pathogenesis, survival, and

ecological interactions of selected populations of fish and their respective pathogens.

\* Presenter