**ODFW Proposal to Work in the Bonneville Adult Fish Facility (AFF)**

As one of the Columbia River Harvest Reform projects, ODFW is in the second year of a regionally important study to assess the post-release mortality rate of unmarked adult coho salmon captured in and subsequently released from tangle nets. A critical part of the study design is establishment of a control group that can account for mortality not related to handling in tangle-nets (e.g. natural mortality, tagging mortality, predation, etc.). Capturing salmon at the AFF is the only viable option for marking a control group because we can collect sufficient numbers of fish in a short time and there is very little or no mortality associated with capture in the AFF. This eliminates a potential confounding factor associated with the control group.

We are proposing to trap, tag and transport approximately 600 adult coho salmon in the AFF with passive integrated transponder (PIT) tags during the course of 2-3 weeks in late September and early October (35-40 coho/day). ODFW trapping and tagging activities are planned for Monday – Friday and will follow those methods outlined in the 2014 Fish Passage Plan, Appendix G, “Adult Trap Protocols” and the 2014 ODFW Sampling Protocol for Bonneville AFF. Tagged coho salmon will be transported downriver approximately 5 miles using USACE transport tanks specially modified for use in the AFF. They will be released back into the Columbia River in a location similar to where treatment fish are being released from test fishing vessels. Transportation and tagging activities will be conducted jointly and closely coordinated with University of Idaho researchers who are also working in the AFF. We will compare PIT tag detection rates for both groups subsequently captured at Bonneville Dam and Bonneville Fish Hatchery to estimate survival for the treatment group. All ODFW research activities occurring at the Bonneville AFF will be closely coordinated with Bonneville Dam project biologists and the other researchers using the AFF (i.e., University of Idaho and Columbia River Inter-Tribal Fish Commission) to ensure safety for biologists and fish and successful research deliverables for all AFF users.

The table below compares our proposed work in the AFF to the work WDFW conducted there during the past three years for a similar mortality study.

