## **Department of Energy**



Bonneville Power Administration P.O. Box 3621 Portland, Oregon 97208-3621

ENVIRONMENT, FISH AND WILDLIFE

January 19, 2010

In reply refer to: KEC-4

Mayor Steve Jenkins City of Bridgeport Washington PO Box 640 Bridgeport WA 98813

Mr. Charles D. Zimmerman Odgen Murphy Wallace, P.L.L.C. Riverfront Center 1 Fifth Street, Suite 200 Wenatchee WA 98807

Dear Sirs:

Thank you for your December 11, 2009 letter regarding the Chief Joseph Hatchery Program Final Environmental Impact Statement. The purpose of this reply is to start a dialogue to address your concerns. Bonneville Power Administration (BPA), the Confederated Tribes of the Colville Reservation, and Tetra-Tech (the project design engineering firm) would really like to meet and discuss these matters with all concerned after you've had a chance to review the following information and the enclosed chapter of the Basis of Design report to see if we can resolve your concerns.

The concerns expressed by the City of Bridgeport in your letter are specific to Columbia River water quality with respect to both domestic wastewater and hatchery effluent generated from the proposed hatchery.

With regard to domestic water and wastewater, the hatchery will be self-sufficient and will not need to be connected to either City water or sewer. The hatchery water supply will be provided from a new private well. Domestic wastewater will be disposed of in an approved on-site wastewater treatment system, with a properly designed septic tank and drain field. The construction of these facilities will comply with applicable Department of Health criteria and setback requirements and do not pose a threat to the water quality in the Columbia River.

The fish rearing facilities at the hatchery will generate water borne wastes consisting primarily of uneaten fish feed and fish feces. Hatchery discharges to the Columbia River are regulated under

a blanket NPDES permit administered by the State of Washington. Attached is a chapter from the Chief Joseph Hatchery Basis of Design report that describes the anticipated hatchery effluent.

The great majority of pollutants generated by the hatchery operations will be in the form of solids, much of which will settle to the bottom of the raceway and will be extensively removed from the discharge. The hatchery will use a vacuum cleaning system to collect the solid wastes from the rearing raceways and ponds and route them to a settling basin where 85% of suspended solids and 90% of the settle-able solids are removed from the effluent stream. The clarified supernatant is decanted from the top of the settling basin and is combined with the hatchery process flow-through water that discharges to the river.

The combined discharge is high quality water suitable for rearing young fish in the hatchery. It will have very low concentrations of pollutants such as nitrogen, ammonia, phosphorous and BOD5, as discussed in the attached Basis of Design report. For example, the total nitrogen concentration in the combined discharge is projected to be less than 1% of the federal drinking water standard for nitrate nitrogen.

Table 10-1 in the attached chapter 10 of the Basis of Design shows the volume and concentrations of pollutants that would be in the hatchery effluent if it was not treated. When these values are reduced by 90% as they will be by the cleaning waste treatment system, the pollutant load is shown to be very low even at the point of discharge to the river. The additional dilution factor provided by mixing 20 to 50 cfs of hatchery discharge with the 70,000 to 130,000 cfs average flow rates in the Columbia River is at least 3500 to 1. Though complete mixing is not expected to occur upstream of the Bridgeport city limits, it should be noted that the hatchery outfall on the north bank is on the opposite side of the river from the City of Bridgeport's domestic wells. It is unlikely that it will be possible to detect any changes in river water quality adjacent to City well sites as a result of hatchery operations.

We will be happy to provide additional design information if you would like. Please reach me at 503-230-5885 or email me at <a href="mailto:macarter@bpa.gov">macarter@bpa.gov</a> to discuss information needs and/or set up a time and place to meet on these matters. We appreciate your willingness to help us expedite the resolution of these issues. Thank you very much.

Sincerely,

/s/ Mickey A. Carter

Mickey A. Carter Environmental Protection Specialist-KEC-4

Enclosure