



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

### Idaho Fish and Wildlife Office

#### Northern Idaho Field Office

11103 East Montgomery Drive  
Spokane Valley, Washington 99206



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Ted Gresh  
Environmental Protection Specialist  
Bonneville Power Administration  
P.O. Box 3621, Portland, OR 97208-3621

Subject: U.S. Fish and Wildlife Service Comments on Environmental Review of the Kootenai Tribe of Idaho Native Fish Aquaculture Program (FWS Reference: 01EIFW00-2012-CPA-0014 /File: 501.1000)

Dear Mr. Gresh:

Thank you for providing the U.S. Fish and Wildlife Service (Service) the opportunity to comment on the Bonneville Power Administration's (BPA) environmental review of the Kootenai Tribe of Idaho's (KTOI) Native Fish Aquaculture Program (Program). The Service has reviewed the Master Plan, the Recovery Implementation Plan, and other pertinent documents, reports, and literature, and has the following comments (Note: The following comments should not be construed as Service opposition of the proposed facility at the Twin Rivers site. Due to the potential roles of juvenile imprinting and hatchery effluent in Kootenai sturgeon recovery efforts, as well as the need for burbot production, an additional aquaculture facility upstream of Bonners Ferry may be warranted).

The primary objectives of the program, as described in the Master Plan, include releasing enough hatchery-reared juvenile Kootenai sturgeon to produce 2,500-10,000 adults, and ensure preservation of existing genetic diversity in the wild population. In order to achieve these objectives, the Master Plan states that the Program will spawn up to 40 females per year, producing 40,000 age-1 juveniles (representing 40 family groups) for annual release, an increase of 25-28 females currently spawned, and 30,000-23,000 age-1 juveniles produced per year over existing conditions. However, it is the Service's opinion that the Master Plan does not adequately explain why the existing program and hatchery releases cannot result in 2,500-10,000 adults, or preserve the existing wild genetic diversity. A 2009 study by Justice et al. (page 812) (frequently cited in the Master Plan) showed that hatchery-origin Kootenai sturgeon released at >25 cm (roughly age-1+) survive, on average, at 84% in their second year and 100% in subsequent years. Combining these survival rates with current annual hatchery releases (approximately 10,000-17,000) of sturgeon >25 cm indicates that the existing program is more than sufficient to achieve the stated adult abundance goals. Further, the Master Plan states (page 76) that over 95% of wild population alleles have been incorporated into the existing program during its 20 years of operation. Thus it is unclear why the Master Plan calls for taking additional broodstock to preserve the existing wild genetic diversity. Further, the broodstock

numbers and release targets called for in the Master Plan have not been thoroughly discussed with the Kootenai River White Sturgeon Recovery Team (KRWS RT).

The Master Plan also indicates (page 140) that one of the purposes of the Program would be to “experimentally identify habitat capacity” in the Kootenai River via larger releases of hatchery-origin juvenile sturgeon. Intentionally releasing large numbers of hatchery-origin Kootenai sturgeon into the ecosystem in order to test its carrying capacity may have detrimental effects to Kootenai sturgeon (e.g. density-dependent effects such as lower survival rates for hatchery releases, swamping of any naturally-produced Kootenai sturgeon, increased disease), other ESA-listed species (i.e. bull trout), and the ecosystem as a whole (e.g. burbot, kokanee, the trophic system). The Service feels a more prudent approach to testing or identifying the carrying capacity of the Kootenai River would involve interagency coordination and planning via the KRWS RT. Additionally, the existing Section 10(a)(1)(A) permit (TE-798744-6) issued to the KTOI by the Service under the Endangered Species Act (ESA) does not permit the use of endangered Kootenai sturgeon to test the habitat capacity of the Kootenai River. It is also unlikely the Service will permit such a use in the future.

In Section 4.1.3, the Master Plan also describes changes to the existing facilities in order to improve broodstock holding and spawning activities. One of the stated justifications for the upstream facility is to alleviate the potential effect hatchery effluent from the existing facility has on migration and spawning behaviors of Kootenai sturgeon in the Kootenai River. If broodstock would continue to be held and spawned at the existing facility, the potential effluent effect (e.g. pheromones from spawning adults) would remain. These effects would seem to undermine one of the stated objectives of the new facility and thus should be more fully evaluated by BPA and the KTOI.

This concludes the Service’s comments on BPA’s environmental review process for the proposed expansion of the KTOI Native Fish Aquaculture Program. We appreciate the opportunity to provide input. If you have any questions, please contact Jason Flory of my staff at (509)-893-8003 or by e-mail at [Jason\\_flory@fws.gov](mailto:Jason_flory@fws.gov).

Sincerely,



Ben Conard  
Field Supervisor

cc: KTOI, Bonners Ferry (Ireland)