



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
441 G STREET, NW
WASHINGTON, DC 20314-1000

JUL 11 2019

CECW-NWD

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

SUBJECT: Albeni Falls Dam (AFD) Fish Passage Project, Bonner County, Idaho, Final Post-Authorization Decision Document/Environmental Assessment (PADD/EA)

1. Purpose. To secure clearance to budget for the subject project based on the enclosed PADD and EA. The purpose of the proposed Federal action, as documented in the PADD and EA, is to reestablish upstream habitat connectivity to provide bull trout populations access to critical habitat above and below AFD (which includes 239 miles of Pend Oreille mainstem and tributary habitat below the dam to the Canadian Border, and 218 miles of mainstem, lake shore and tributary habitat above AFD to the Clark Fork River) that is essential to their life history and survival. Of all the native salmonids in the Pacific Northwest, bull trout generally have the most specific habitat requirements, which are often referred to as "the four Cs" (Cold, Clean, Complex, and Connected habitat). Passage at AFD would not only provide access to river and stream habitats in the Pend Oreille Basin, but would provide access to 125 square miles of cold water habitat and abundant prey resources in Lake Pend Oreille. Further, fish passage is completed at Cabinet Gorge Dam, just above Lake Pend Oreille, which provides access to an additional 291 miles of habitat in the lower Clark Fork Basin. This basin-wide fish passage restoration follows the U.S. Fish and Wildlife Service (USFWS) recovery approach for bull trout that habitat connectivity supports the conservation of genetic diversity, life history features and broad geographic representation of remaining bull trout populations. The study was approved by the Northwestern Division (NWD) Commander on 23 June 2018 and is consistent with Engineer Regulation (ER) 1165-2-502 and ER 1105-2-100. Bull trout were listed as threatened under the Endangered Species Act (ESA) in 1998.

2. Authorization. Congress authorized construction of the AFD on the Pend Oreille River in Section 204 of the Flood Control Act of 1950 (Public Law 81-516) as part of a comprehensive plan for the development of the Columbia River System. The congressionally authorized purposes of the AFD are flood control, power generation, navigation, recreation, and fish and wildlife conservation. The authorized plan includes the study of fish passage feasibility at the AFD and, if determined feasible and necessary, construction of fish passage facilities in accordance with Senate Document No. 9, 81st Congress, 1st Session, 1949.

3. Project Background and Discussion. The USFWS issued a Biological Opinion (BiOp) in 2000 on the effects of operating the Federal Columbia River Power System (FCRPS), on bull trout. The 2000 BiOp addresses the actions the U.S. Army Corps of

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Engineers (Corps) identified for operating and maintaining its FCRPS projects and included an incidental take statement. This BiOp did not result in a Jeopardy Opinion for bull trout. An Incidental Take Statement was issued with a non-discretionary Term and Condition to implement the Reasonable and Prudent Measure to evaluate the feasibility of bull trout passage at AFD, and to seek appropriations for design and construction if feasible. The fish passage barrier at AFD will be the last remaining barrier in the Pend Oreille and Clark Fork system after the Federal Energy Regulatory Commission relicensing has required fish passage at all projects. Permanent passage is now provided at dams below AFD in the Pend Oreille River and above Lake Pend Oreille in the Clark Fork River. With the addition of fish passage at AFD, bull trout habitat would be reconnected from the Canadian Border upstream to major tributaries in Montana. In 2017 the Corps consulted with the USFWS on the construction and operation of a fish passage facility at AFD and received a BiOp in early 2018 that issued an Incidental Take Statement for bull trout.

a. Specific to the AFD, reasonable and prudent measure 10.A.1.3 of the 2000 BiOp incidental take statement requires the Action Agencies (the Corps and Bonneville Power Administration (BPA) to evaluate the feasibility of reestablishing fish passage for bull trout at the AFD. Further, it states that if the information from these studies warrant modifications to AFD, then the Service will work with the action agencies to implement these measures. This report addresses this evaluation.

b. In addition, in 2012, the Corps and BPA entered into a Memorandum of Agreement (MOA) with the Kalispel Tribe of Indians (Kalispel Tribe) under which the agencies agreed, among other things, to collaborate with the tribe on the evaluation of fish passage feasibility at the AFD.

c. The Corps evaluated a range of measures and alternatives for fish passage at the AFD to identify a technically feasible, environmentally acceptable, efficient plan that, if approved, funded, and constructed, would meet the study objectives and avoid the study constraints documented in this report.

4. Recommended Plan. The recommended plan is a trap and haul facility that consists of a fishway (i.e., a short fish ladder with a fish lift) ending in a holding pool and sorting facility, where fish can be loaded onto a truck for transport. The fishway entrance would be located on the west side of the AFD powerhouse (left side looking downstream), with the fish ladder ascending the downstream side of the rock island between the powerhouse and spillway and ending at the right side of the spillway. The fish ladder ends at the base of the fish lift which raises the fish to the holding pool and sorting facility. A dedicated water supply tunnel from the forebay would provide a gravity-supplied source of water to operate the fishway. Adult and sub-adult bull trout that enter the trap would be

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captured, sorted, and loaded on a truck for transport to a primary release location at the Bonner Park West public boat launch, approximately five miles upstream of the dam. The Trestle Creek Recreation Area boat launch is approximately 44 miles upriver and provides an alternate fish release point in the summer season when river temperatures surpass 18°C (65 °F). Non-target native species (cutthroat) would be released directly into the forebay above the AFD and non-native species would be returned below the AFD. The construction schedule assumes a two year construction period centered on two low flow periods required for installation and removal of the cofferdam systems.

5. Environmental Considerations. An EA evaluated the environmental and cultural resources effects for implementation of upstream fish passage at the AFD. The Finding of No Significant Impact was signed on 13 August 2018.

a. For each resource analyzed that could be adversely affected by the proposed action, appropriate best management practices or other environmental considerations were identified. Because this project provides fish passage, there is a net benefit to biological resources, and environmental mitigation is not required for the recommended plan.

b. Cultural mitigation measures have been agreed to by the Idaho State Historic Preservation Officer and the Corps for the adverse effect on cultural resources (i.e., alteration of the log chute and introduction of modern elements to the AFD historic district). Mitigation includes processing construction photographs, making that collection available to the public, and making educational materials at the AFD visitor center for the public. The MOA was executed on 1 May 2018. The total estimate for mitigation is \$100,000.

6. Project Costs. Based on October 2018 price levels, the estimated project first cost is \$68,100,000. Project first cost includes the cost of construction, pre-construction engineering and design, and construction management. It also includes a risk-based contingency of approximately \$16,766,000, 24% of the base cost estimate. The Kalispel Tribe is prepared to enter into a MOA with the Corps to include their intent to contribute funding for design and construction of the fish passage project. The Kalispel Tribe has submitted a letter of intent to the Corps of Engineers to contribute up to \$16,000,000 towards the construction of the fish passage at AFD. The estimated annual OMRR&R costs will be \$700k, of which BPA will pay 97.5% and the Corps will pay 2.5%.

7. Recommendation. I have reviewed the AFD PADD and EA. Based on this review, I find the proposed plan is technically and environmentally sound, justified based on the monetary and non-monetary benefits it provides, and is socially acceptable. The

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proposed project complies with applicable Corps planning procedures and regulations. Also, the views of interested parties, including federal, state, and local agencies, have been considered. Accordingly, I recommend the plan to implement fish passage at the AFD in accordance with the approved recommended plan at an estimated cost of \$68,100,000. The recommendation contained herein reflects the information available at this time and current departmental policies governing post-authorization projects.



JAMES C. DALTON, PE
Director of Civil Works

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