

Supplement Analysis
for the
Walla Walla Basin Spring Chinook Hatchery Program
Final Environmental Impact Statement
(DOE/ EIS-0495/SA-02)

Bonneville Power Administration
Department of Energy



Introduction

In May 2018, Bonneville Power Administration (Bonneville) completed the Walla Walla Basin Spring Chinook Hatchery Program Final Environmental Impact Statement (Final EIS) (DOE/EIS-0495) and then issued a Record of Decision (ROD) in August 2018 documenting Bonneville’s decision to fund construction and operation of a spring Chinook hatchery (hatchery) at the existing South Fork Walla Walla Adult Holding and Spawning Facility. The hatchery would be owned and operated by the Confederated Tribes of the Umatilla Indian Reservation (CTUIR).

This supplement analysis was prepared to determine whether a modification to the design of the hatchery water intake system is considered a significant new circumstance or if there is new information relevant to environmental concerns, such that either would warrant the need for a supplemental EIS.

Background

In February 2020, the South Fork Walla Walla River experienced a flood event larger than a 100-year flood. The flood event caused downcutting in the river and moved a boulder in the river channel that had acted as a diversion, which was supporting the water level at the intake to the hatchery. A second, smaller flood event in May 2020 further scoured out the deepest portion of the channel (i.e. the thalweg), causing the water surface elevation to drop further. As a result of these physical changes to the river, the water surface elevation at low flow conditions would not be sufficient for operation of the intake as originally planned. Therefore, hatchery water intake design changes from what was proposed in the Final EIS are needed to ensure sufficient water supply for hatchery operations.

The design for the intake, as described in the Final EIS, had three planned modifications that were to take place during the normal in-water work window from July 1-August 15. The planned construction included modifying the current cleanout structure to perform as the outfall for the hatchery, replacement of a stoplog structure with a slide gate at the end of the sluiceway to control water levels, and replacement of existing fish screens with horizontal traveling screens that met National Marine Fisheries Service (NMFS) fish screening criteria. A cofferdam was planned to be constructed from soil sacks that would be placed mid-way down the sluiceway channel and extend downstream approximately 30 feet. The horizontal screens and the placing of the concrete wall in the existing opening would be done within the structure confines and would not be considered in-water work. These items were to be completed after the adult salmon were spawned and the supply water was no longer required.

Proposed Action

The proposed redesign of the water intake system would include installation of three, 24-inch-diameter cylinder screens submerged at an elevation that would ensure full pipe flow to the pump bay. The cylinder screens would be raised and lowered on rails to the face of the intake pipe that would then deliver the water to the pump bay. The system would be fully functional with only two of the three screens in operation at any given time, allowing for maintenance and repairs on the third screen. The screens would comply with NMFS fish screening criteria and have electrical cleaning systems, reducing the need for ongoing maintenance. A new concrete wall would be built to provide isolation to the existing forebay and provide a mounting location for the screens. Upstream of the screens, a trash rack with 2-inch bar spacing would be placed at the inlet to the sluiceway, attached to an existing concrete foundation wall to protect the screen from large debris and rocks. The trash rack would be cleaned manually and oriented to take advantage of the river bypass flow. An additional trash rack with variable bar spacing would be mounted to the existing sluiceway wall providing juvenile fish that may enter the sluiceway a route back to the river channel. Extendable platforms of aluminum grating would be constructed over the trash rack and cylinder screens to provide maintenance access.

Work area isolation would occur in the same manner as described in the Final EIS. A cofferdam would first be constructed to isolate the work area, using a crane located on the riverbank to position the super sacks and ecoblocks. The cofferdam would extend from the upstream side of the sluiceway along the bank to the downstream end of the existing structure to accommodate the redesigned water intake, about twice the length as originally proposed, but half as wide therefore roughly the same size estimated work area. CTUIR would conduct fish salvage, as needed, behind the cofferdam as the work area is dewatered, consistent with the Final EIS. The construction of the screens, screen lifting system, concrete wall, and the trash rack would occur behind the cofferdam over the course of six weeks, the same duration of in-water work as proposed in the Final EIS. The remaining work consisting of piping, concrete modifications, pump intake modifications, and remaining removal of miscellaneous items would be done in the dry behind the new wall. Work did not happen during the in-water work window (July 1 – August 15) due to the time needed to develop the designs for the proposed work following the May flood event. The work on the water intake would need to be complete before May 2021 when hatchery fish are brought on site so there is adequate water supply for ongoing operations. Therefore, all in-water work would take place between October 5 and November 20, 2020.

Analysis

With redesign of the intake and modification of the in-water work window, the effects of the Walla Walla Basin Spring Chinook Program would be essentially the same as described in the Final EIS. The Final EIS analyzed impacts of hatchery construction including modifications to the existing river intake and related structures to increase year-round accessibility to river water, including a sluice/slide gate at the downstream end of the intake basin and replacement of the existing screens.

The work area and activities planned for the water intake redesign would be consistent with and similar to those listed in Section 2.2.1, *Hatchery Surface Water Intake*, and the associated construction effects described in Chapter 3 of the Final EIS. Only limited in-water work is proposed and work would take place on existing structures of the hatchery. As originally planned, a cofferdam would be constructed around the work area. Mitigation measures included in the Final EIS and adopted in the ROD include: “Install a temporary cofferdam, remove and relocate fish, and de-water the work area as necessary”; and “limit work within the stream channel to the in-water work period (July 1-August 15)”. While the

proposed intake work would not occur during that in-water work window, Bonneville consulted with the Oregon Department of Fish and Wildlife, National Marine Fisheries Service, and U.S. Fish and Wildlife Service (USFWS) to confirm that the proposed project activities conducted outside the normal in-water work window would be consistent with the original formal consultation and would not adversely affect fish species. The agencies reviewed the designs, provided input and suggested modifications to the designs in a series of meetings with the project engineer, construction contractor, CTUIR, and Bonneville. NMFS and USFWS provided their concurrence with the instream work and modified in-water work window on September 29, 2020.

The proposed changes to the water intake would not impact ESA-listed plant or wildlife species. There are no ESA-listed plants, mammals or birds in the project area. Resident bull trout would likely be present near the work area and bull trout that have spawned upstream may move past the work area. Steelhead would not be present in this portion of the South Fork Walla Walla until the spring. The Final EIS discusses that in-water construction activities that require fish removal and relocation can adversely affect fish through injury and stress. It also states that fish handling would follow NMFS electrofishing protocols and project-specific state and federal fish collection permit conditions to minimize impacts. The EIS describes that work would be performed within a cofferdam, temporarily affecting a total of 230 square feet of in-water habitat, approximately half of which is already impacted by the existing intake structure. The redesign of the water intake would eliminate the pump forebay and thereby keep juvenile fish in the river. The design would also eliminate the need for a juvenile bypass as there would be no opportunity for fish to make it into the hatchery and need to be flushed out.

As discussed in Section 3.4, Water Quality, construction activities would result in minor increases in turbidity that would be managed within the existing limits set by Oregon Administrative Rule (OAR) 340-041-0036 to protect fish and fish habitat. The Final EIS determines that given the small amount of area that would be affected and the short-term nature of these impacts, no substantial changes to the physical and biological features of designated critical habitat for steelhead and bull trout in the vicinity of the South Fork facility are likely (see Section 3.5.3 of the Final EIS for the list of those elements). These same mitigation measures would be followed in the work associated with the redesigned water intake and thus impacts on fish would remain low, consistent with those described and evaluated in the Final EIS. Oregon Department of State Lands determined that the bulk of the in-water work qualified for a Clean Water Act Section 401 Exemption for Maintenance or Reconstruction of Water Control Structures per OAR 141 085 0525. The installation of the trash rack would be considered new work that does not qualify for this maintenance exemption. To mount the trash rack on an existing concrete wall on the sluiceway, three 1-foot by 1-foot by 1.5-foot holes would be dug to install the anchoring hardware for the trash rack. This action would qualify for an exemption under OAR 141 085 0530 (non-motorized activities within designated essential indigenous anadromous salmonid habitat) as the holes would be hand-dug. The work associated with the water intake would be authorized as maintenance under the US Army Corps of Engineers Nationwide Permit 3 to meet requirements of Section 404 of the Clean Water Act.

The intake redesign would not impact known cultural or historic resources. All of the work would occur within the area analyzed in the Final EIS and the National Historic Preservation Act Section 106 consultation for the project and most of the work would take place either instream or within existing infrastructure. In addition, as a result of Section 106 consultation with the CTUIR for the project, a cultural resource monitor would be on site during all ground disturbing activities associated with construction of the hatchery facilities, including the intake system. Additional correspondence was

submitted to CTUIR Cultural Resources Protection Program on July 21, 2020 with the determination that the designs were within the scope of the existing analysis and consultation. Email concurrence with this determination was received from CTUIR on July 28, 2020.

In addition, the effects of the intake redesign would not differ from the impacts described in the Final EIS to wildlife, wetlands, surface or groundwater, recreation, visual resources, water quality, geology and soils, vegetation, noise, transportation, air quality and socioeconomic resources.

Because the intake work would occur in the same location and would be similar to effects analyzed in the Final EIS and impacts to resources would not substantially deviate from those described in the Final EIS, the modification associated with redesign of the intake does not represent a substantial change in the project relevant to environmental concerns.

Findings

This SA finds that the proposed actions and potential impacts related to the proposed redesign of the water intake are similar to those analyzed in the Walla Walla Basin Spring Chinook Hatchery Program Final Environmental Impact Statement (DOE/EIS-0495, May 2018). There are no substantial changes to the proposed action that are relevant to environmental concerns and no significant new circumstances or information relevant to environmental concerns bearing on the proposed action or its impacts within the meaning of 10 CFR § 1021.314(c)(1) and 40 CFR §1502.9(d). Therefore, no further NEPA analysis or documentation is required.

/s/ Carolyn Sharp

Carolyn Sharp
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Concur:

/s/ Katey C. Grange

Katey C. Grange
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Date: September 30, 2020