

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Tumalum Creek Culvert Fish Passage Improvement

Project No.: 2010-077-00

Project Manager: Jenny Lord, EWU-4

Location: Columbia County, WA

Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021): B1.20 Protection of Cultural Resources, Fish and Wildlife Habitat

Description of the Proposed Action: Bonneville Power Administration (BPA) proposes to provide funds to the Nez Perce Tribe (NPT) to replace an existing 65-foot-long, 10-foot-wide corrugated metal arch pipe with a 60-foot-long, 15-foot-wide four-sided concrete box culvert following Washington Department of Fish and Wildlife (WDFW) stream simulation design guidelines to ensure natural stream functions and fish passage through the structure. The new streambed under the culvert would be built using larger rocks and materials similar to those found upstream and downstream. These features would help mimic natural stream conditions, provide roughness and facilitate volitional fish passage during high flows. Instream work would be performed during the late summer low flow, before the fall rains and adult steelhead returns. Native riparian plantings would be installed along the streambank near the culvert in previously disturbed areas.

The contractor would be required to adhere to the conservation measures and terms and conditions from BPA's Habitat Improvement Program (HIP) 4 Endangered Species Act (ESA) Section 7 consultation biological opinion to protect the environment during construction activities, which include a detailed Site Access and Sequencing Plan, Work Area Isolation Plan, Erosion and Pollution Control Plan and Site Reclamation and Restoration Plan. Construction sequencing would begin with implementation of a traffic management plan which would restrict traffic to one lane over half of the upstream existing culvert. Excavation would occur on the downstream half of the road prism, removing the downstream half of the existing culvert. Further excavation would occur to the design depth, followed by installation of crushed rock base, and placement of downstream wing walls and culvert sections. Streambed materials would be placed followed by backfill. Traffic lane would then be switched to other half of the existing culvert and the process would repeat. Following installation of the culvert, the road bed would be restored to its original grade and surface conditions using compacted fill and asphalt consistent with Columbia County roadway standards.

Adaptive management would occur if monitoring indicates that upstream fish passage becomes limited due to streambed elevation changes, or that a risk to culvert or streambank integrity may develop. Modification may involve addition of more/larger boulders within the culvert, or installation of additional streambank plantings.

The Proposed Action fulfills commitments under the 2020 NMFS Columbia River System Biological Opinion and would support conservation of ESA-listed species considered in the 2020 ESA consultation with the U.S. Fish and Wildlife Service on the operation and maintenance of the Columbia River System. These actions also support ongoing efforts to mitigate for the effects of the FCRPS on fish and wildlife in the mainstem Columbia River and its tributaries pursuant to the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act) (16 U.S.C. (USC) 839 et seq.).

Findings: In accordance with Section 1021.410(b) of the Department of Energy's (DOE) National Environmental Policy Act (NEPA) Regulations (57 FR 15144, Apr. 24, 1992, as amended at 61 FR 36221-36243, Jul. 9, 1996; 61 FR 64608, Dec. 6, 1996; 76 FR 63764, Nov. 14, 2011; 89 FR 34074, April 30, 2024), BPA has determined that the proposed action:

- 1) fits within a class of actions listed in Appendix B of 10 CFR 1021, Subpart D (see attached Environmental Checklist);
- 2) does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal; and
- 3) has not been segmented to meet the definition of a categorical exclusion.

Based on these determinations, BPA finds that the proposed action is categorically excluded from further NEPA review.¹

Daniel Antonio Gambetta
Environmental Protection Specialist

Concur:

Katey C. Grange
NEPA Compliance Officer

Attachment(s): Environmental Checklist

¹ BPA is aware that the Council on Environmental Quality (CEQ), on February 25, 2025, issued an interim final rule to remove its NEPA implementing regulations at 40 C.F.R. Parts 1500–1508. Based on CEQ guidance, and to promote completion of its NEPA review in a timely manner and without delay, in this CX BPA is voluntarily relying on the CEQ regulations, in addition to DOE's own regulations implementing NEPA at 10 C.F.R. Part 1021, to meet its obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

Categorical Exclusion Environmental Checklist

This checklist documents environmental considerations for the proposed project and explains why the project would not have the potential to cause significant impacts on environmentally sensitive resources and would meet other integral elements of the applied categorical exclusion.

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Project Site Description

Tumalum Creek is a major tributary to the Tucannon River and supports Endangered Species Act (ESA)-listed Snake River summer steelhead (*Oncorhynchus mykiss*), Snake River spring Chinook (*Oncorhynchus tshawytscha*), bull trout (*Salvelinus confluentus*), and other native aquatic species. The culvert conveying Tumalum Creek under Tucannon Road has a narrow upstream passage flow window that is depth-limited at low flows and velocity-limited at high flows, impeding fish passage for both juvenile and adult salmonids. The culvert outlet is perched at low flow and its bottom lacks any substrate. The culvert also limits extreme flood conveyance, which is a concern for adjacent landowners and Columbia County (which maintains the bridge and proximate road prism). The riparian zone is narrow and consists of hardwood tree species on both banks upstream and downstream of the road crossing. Current land use in the project reach is primarily rural residential, recreational, and a transportation corridor. The Tucannon River Road serves as the primary access route for residents, recreational users and emergency services in the area. It also provides access to a nearby RV resort and private land holdings. The RV resort with store, cabins, and play areas are adjacent to the site on the upstream side of road with rural residential and pasture on the downstream side.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: Pursuant to its responsibilities under Section 106 of the National Historic Preservation Act, BPA initiated consultation with Department of Archaeology and Historic Preservation (DAHP), the Confederated Tribes of the Umatilla Indian Reservation, and the NPT on April 7, 2021 (BPA CR Project No.: WA 2021 108). BPA was provided with an inventory report prepared by the NPT Cultural Resources Program that did not identify any historic properties within the Area of Potential Effect. Therefore, on January 2, 2022, as per §36 CFR 800.4(d)(1), BPA determined that the implementation of the proposed undertaking would result in no historic properties affected. DAHP concurred with BPA's determination that the implementation of the proposed undertaking would result in no adverse effect to historic properties (DAHP Log No.: 2021-04-02035-BPA). BPA did not receive any other responses from consulting parties.

2. Geology and Soils

Potential for Significance: No

Explanation: There would be temporary displacement and compaction impacts to soil from the operation of heavy equipment needed for this action, and an increased erosion potential during construction activities. An Erosion and Pollution Control Plan would be implemented to minimize potential for in-stream turbidity or excessive runoff during construction. A Site Reclamation and Restoration Plan would require all disturbed surfaces in backfill near the culvert inlet and outlet to be restored by scraping compacted soils and seeding using native grass seed mix and/or live stakes to facilitate soil and vegetative recovery.

3. Plants (including Federal/state special-status species and habitats)

Potential for Significance: No

Explanation: There are no ESA-listed or special status plant species known to exist on the site. Areas disturbed because of the excavation and access would be seeded with a locally derived and adapted native seed mixture. Any temporary impacts to on-site vegetation that may result from the implementation of this project would be restored to diverse, native vegetative communities.

4. Wildlife (including Federal/state special-status species and habitats)

Potential for Significance: No

Explanation: There are no ESA-listed or special-status wildlife species, including sensitive wildlife species, documented in or adjacent to the project area and no designated critical habitat is present. Non-listed resident wildlife species would be temporarily disturbed by noise and human presence during construction; however, this disturbance would be limited and would not permanently displace wildlife. These effects would be mild, temporary, and localized to the project area. Site revegetation efforts would improve wildlife habitat in the long term, although the riparian zone and channel are likely too narrow to be a properly functioning habitat in either case.

5. Water Bodies, Floodplains, and Fish (including Federal/state special-status species, ESUs, and habitats)

Potential for Significance: No

Explanation: The Project area supports ESA-listed Snake River summer steelhead (*Oncorhynchus mykiss*), Snake River spring and fall Chinook salmon (*O. tshawytscha*), Columbia River bull trout (*Salvelinus confluentus*), resident redband rainbow trout (*O. mykiss*), and western brook lamprey (*Lampetra richardsoni*). However, Tumalum Creek is not noted by WDFW to support Chinook Salmon (likely on account of its size), and it is likely this reach serves as a transport reach for adult steelhead migrating upstream to spawning areas and for juveniles migrating downstream to the ocean.

Consultation on the effects of this action on these species was completed under programmatic Fish and Wildlife Habitat Improvement Program (HIP) ESA consultation (NMFS# WCRO-2020-00102 and USFWS# 01E0FW00-19Y-F-0710), with the conclusion that the project would likely adversely affect these species and their designated critical habitat but would not likely result in jeopardy to the species or result in destruction or adverse modification of their designated critical habitat. Plans were reviewed by BPA engineering technical services, and a series of design changes and conservation measures were proposed and accepted to ensure that the project would benefit ESA-listed fish species through the HIP review process.

The short-term adverse effects of this Project would be from excavation of materials, placement of culvert structure, and then placement of stream simulation materials. This would likely create conditions where sediment would be released for a short period of time following construction activities. Project actions would be subject to the conservation measures required by HIP, including that work would occur within the approved work window for this waterbody and during the dry season. The majority of excavation would occur in the road prism and would be completed outside of the river channel or above any water present. Therefore effects would be short term and localized, with full recovery after seasonal flows. Long term benefits would include restored volitional fish passage, improved upstream connectivity, and enhanced channel stability.

6. Wetlands

Potential for Significance: No

Explanation: No wetlands are present in the project area.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: There would be no impact to groundwater or aquifers. Potential impacts to groundwater and aquifers would be minimized by application in accordance with HIP Erosion and Pollution Control Plan. Fuel or fluid drips or spills from equipment and vehicles have the potential to occur during project activities but are unlikely to do so in the volume necessary to contaminate groundwater.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: Current land use in the project reach is primarily rural residential and recreational. The project would not change the capability of the land to be used as it was prior to project actions. No visually-prominent vegetative, landform, or structural change would be made.

Construction of the culvert would cause brief delays to traffic on Tucannon River Road. However because the culvert would be installed in sections, there would be enough room to construct one half of the replacement length while metering one-lane of traffic across the other half, with minimal delay.

9. Visual Quality

Potential for Significance: No

Explanation: No visually prominent vegetative, landform, or structural change would be made. The culvert replacement would not change the visual character of the landscape along, or as seen from, the county roadway.

10. Air Quality

Potential for Significance: No

Explanation: Minor and temporary emissions from construction equipment, vehicles and powered hand tools are expected but would be short-lived. No long-term air quality impacts would occur.

11. Noise

Potential for Significance: No

Explanation: There would be some short term noise generated from vehicles accessing the site, the heavy equipment used for excavation, and powered hand tools, but this type of noise is not inconsistent with that of common ranching and farming operations in the local area.

12. Human Health and Safety

Potential for Significance: No

Explanation: Traffic would be reduced to one lane during culvert installation, with flaggers and signalization to maintain safe and orderly flow. Construction phasing would allow uninterrupted flow of traffic through the project site. Vehicle and excavator operation and working with hand and power tools have their attendant risks to equipment operators, but there would be no condition created from this action that would introduce new human health or safety hazards or risk into the environment. There are no known hazardous materials in the project area and no condition created by this action would increase the burden on the local health, safety, and emergency-response infrastructure.

Evaluation of Other Integral Elements

The proposed project would also meet conditions that are integral elements of the categorical exclusion. The project would not:

Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders.

Explanation: N/A

Require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators) that are not otherwise categorically excluded.

Explanation: N/A

Disturb hazardous substances, pollutants, contaminants, or CERCLA excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases.

Explanation: N/A

Involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those of the Department of Agriculture, the Environmental Protection Agency, and the National Institutes of Health.

Explanation: N/A

Landowner Notification, Involvement, or Coordination

Description: Landowner outreach was conducted in annual virtual and in -person public meetings in Dayton WA, to showcase and discuss draft restoration actions for the Tucannon River Watershed. Local landowners were notified and they approve of the proposed project.

Based on the foregoing, this proposed project does not have the potential to cause significant impacts to any environmentally sensitive resource.

Signed:

Daniel Antonio Gambetta
Environmental Protection Specialist