

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Belshaw Creek Diversion Consolidation and Irrigation Efficiency Phase 1

Project No.: 2007-397-00

Project Manager: Chad Baumler, EWL-4

Location: Grant County, Oregon

Categorical Exclusion Applied (from 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 fund the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWS) to implement Phase 1 of a stream diversion consolidation and irrigation efficiency project in Grant County, Oregon. Grant Soil and Water Conservation District (Grant SWCD) is a project partner. The project is located on privately owned land along Belshaw Creek, which is a John Day River tributary that provides spawning and rearing habitat and is designated critical habitat for Endangered Species Act (ESA)-listed Middle Columbia River (MCR) steelhead trout (*Oncorhynchus mykiss*).

Belshaw Creek in the project area is currently disrupted by the operation of five separate push-up irrigation diversion structures, which create a seasonal barrier to fish passage under low-flow conditions. The proposed Phase 1 project would remove one of the push-up diversion structures and replace it with a fish-passable rock riffle diversion. Phase 1 would also convert approximately 7,000 feet of open irrigation ditch to buried irrigation pipe to improve irrigation efficiency and conserve in-stream water.

The engineered rock riffle proposed for Phase 1 would span an approximately 250-foot length of Belshaw Creek. The stream bed and banks would be excavated in this segment, and excavated native material would be used in the construction of the engineered riffle. Large boulder rock would be placed to facilitate interlocking of rock, and a mixture of native streambed material and 5-inch screened simulated material would be washed in to create a water-tight seal, with a riffle slope of about 4 percent. A low-flow channel would be incorporated into the riffle to concentrate water into a single course as flows diminish through the summer. The crest of the riffle would divert water into a new concrete inlet box with headgate to control flows into the irrigation system.

A new 12-inch diameter high-density polyethylene (HDPE) delivery pipe would route flows from the inlet box to an existing Oregon Department of Fish and Wildlife (ODFW) fish screen that prevents fish from entering the irrigation network. Beyond the fish screen, the project would convert approximately 7,000 linear feet of open irrigation ditch to twin buried pipelines (6-inch and 8-inch diameter) serving two different land ownerships. The buried irrigation pipes would have a minimum of 12 inches of earthen cover.

Existing roads would be used to access project work areas. The majority of the project would be constructed with the use of a mid-size excavator, with boulders and simulated streambed material for the riffle being transported by a dump truck.

The proposed action would support conservation of ESA-listed species considered in the 2020 ESA consultation with the National Marine Fisheries Service (NMFS) on the operation and maintenance of the Columbia River System. This project also supports BPA's ongoing efforts to mitigate for effects of the Federal Columbia River Power System 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 1021.102 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; 90 FR 29676, July 3, 2025 [Interim Final Rule]) and the current *DOE National Environmental Policy Act (NEPA), Implementing Procedures*, BPA has determined the following:

- 1) The proposed action fits within a class of actions listed in Appendix B of 10 CFR 1021;
- 2) The proposal has not been segmented to meet the definition of a categorical exclusion; and
- 3) There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal (see attached Environmental Evaluation).

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

John Vlastelicia
Environmental Protection Specialist

Concur:

Katey C. Grange
NEPA Compliance Officer

Attachment(s): Environmental Evaluation

Categorical Exclusion Environmental Evaluation

This evaluation 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

The project site is located approximately 10 miles west of Mount Vernon, Oregon. Belshaw Creek flows in a southerly direction through the project area and into the John Day River about 3/4 mile downstream of the project irrigation diversion. The irrigation ditch to be piped for this project extends southerly along the east side of Belshaw Creek and then easterly on the north side of the John Day River. The project area encompasses portions of large private properties with rural residences and outbuildings, agricultural land, and a rock quarry northwest of the creek diversion. Riparian vegetation along Belshaw Creek includes willow and cottonwood trees. The irrigated valley bottom includes livestock grazing fields, with surrounding hillsides transitioning to grasses, sagebrush, and juniper vegetation. U.S. Highway 26 runs in an east-west direction just south of the project area, and the project site is accessible from the highway via Belshaw Creek Lane and Grant County Road #s 44 and 45.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: BPA determined that the implementation of the project would result in no adverse effect on historic properties. BPA initiated consultation with CTWS, the Confederated Tribes of the Umatilla Indian Reservation, Burns-Paiute Tribe, and the Oregon State Historic Preservation Office (SHPO) on February 2, 2024 (BPA CR Project No. 2023 161). Oregon SHPO concurred with the proposed Area of Potential Effects (APE) on March 1, 2024 (SHPO Case No. 24-0312). On June 5, 2024, BPA submitted an inventory report and a determination of effects letter to the consulting parties. SHPO requested additional information on July 2, 2024, and BPA provided an amended letter with additional information on July 25, 2024, maintaining the no adverse effect determination. Oregon SHPO concurred with the determination on August 22, 2024. No additional comments were received from consulting parties.

Notes:

- No ground disturbing work would occur around identified sites in the southern extent of the APE.
- Protocols would be in place requiring that, if cultural material is inadvertently encountered during construction, work must be stopped until the findings can be assessed by BPA in coordination with the appropriate consulting parties.

2. Geology and Soils

Potential for Significance: No

Explanation: The project would disturb soil and sediment during construction due to the grading required to install the engineered rock riffle and diversion inlet box, and to prepare the ditch and adjacent areas for pipeline installation and backfill. The footprint of the stream work would be less than 0.1 acre, and the excavation/fill footprint for the irrigation pipe installation would be approximately 0.6 acre. Erosion and sediment control best management practices (BMPs) would be implemented to minimize the physical extent, severity, and duration of soil disturbance and to contain potential sediment runoff.

Temporary disturbance areas would be seeded after construction, and native trees and shrubs would be planted in the riparian area of Belshaw Creek along the engineered riffle, to help re-establish vegetation cover and provide soil stability.

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

Potential for Significance: No

Explanation: Construction of the engineered riffle and irrigation system improvements would involve some vegetation disturbance of grasses and shrubs. Tree removal is not proposed. Temporary disturbance areas associated with irrigation pipeline installation would be seeded after construction, and native riparian shrubs and trees would be planted along the Belshaw Creek engineered riffle. The site is not within the geographic range of any Federal ESA-listed plant species, and there are no documented occurrences of state-listed plant species in the project area.

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

Potential for Significance: No

Explanation: Construction activity could temporarily displace wildlife from the work area, due to noise, ground disturbance, and visual disturbance from equipment operation and human activity. Some small animals (e.g., mice and moles) could be killed by equipment operation. Seasonal (summer) flows in open irrigation ditches would be lost for those portions of ditch converted to buried irrigation pipeline, reducing the amount of wet ditch habitat that could be used by amphibians. The project would not substantially alter wildlife habitat conditions for medium to large wildlife in the long term.

The project area is within the geographic range of the Federal ESA-listed Endangered gray wolf (*Canis lupus*). The project is not within gray wolf designated critical habitat or areas of known wolf activity as identified by ODFW. The likelihood of wolves encountering project construction activity is expected to be low, and the project would not involve permanent elements that would negatively impact wolf habitat (e.g., increasing road/trail densities). BPA completed ESA Section 7 consultation with U.S. Fish and Wildlife Service on the effects of BPA Habitat Improvement Program (HIP) actions on wildlife species, finding that such actions may affect but would not likely adversely affect gray wolf. There are no documented occurrences of state-listed wildlife species in the project area.

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

Potential for Significance: No

Explanation: Belshaw Creek is a tributary of the John Day River that contains spawning and rearing habitat and is designated critical habitat for Federal ESA-listed steelhead trout. The stream also provides habitat for resident redband trout.

The project would remove an existing push-up diversion structure from the creek and install an engineered rock riffle diversion. Rock riffle construction would involve excavation and fill placement over an approximately 250-foot length of the creek, creating a streambed with a 4 percent grade and consisting of a mix of boulders and smaller streambed material. The riffle has been designed to provide passage for juvenile and adult migrating fish, which would be beneficial to fish in the long term.

A temporary bypass would be installed to route stream flows around the work area during construction, allowing instream work to be performed in a dewatered section of channel in isolation from active channel flows. There may be some temporary, elevated turbidity upon rewatering, but adherence to ESA consultation conservation measures and Clean Water Act (CWA) permitting and certification requirements would reduce these temporary effects. In-water work would be performed during the ODFW-recommended in-water work window for Belshaw Creek of July 15th to August 15th.

BPA reviewed project plans in coordination with NMFS engineering staff and determined the project to be consistent with activities authorized under the NMFS Biological Opinion issued for BPA's Habitat Improvement Program (HIP; BPA HIP No. 2026071). Work below the ordinary high water level of Belshaw Creek would be done under a CWA Section 404 permit issued by the U.S. Army Corps of Engineers (USACE), a 401 Water Quality Certification issued by the Oregon Department of Environmental Quality (DEQ), and Removal-Fill Permit issued by the Oregon Department of State Lands (DSL).

6. Wetlands

Potential for Significance: No

Explanation: The installation of the proposed irrigation pipeline would involve excavation, pipe installation, and backfilling of trench to match adjacent ground within a total area of about 0.6 acre. Most of the proposed pipeline would be within the existing ditch system. The alignment of the proposed pipeline is largely at the outer uphill margins of irrigated pastures where the predominant vegetation is perennial bunchgrasses. For purposes of compliance with Oregon's Removal-Fill Law and Section 404 of the federal CWA, the project conservatively considers all proposed disturbance areas outside of Belshaw Creek to potentially be wetland, and the 0.6 acres of temporary impacts for pipe installation would be rectified and permitted accordingly. Oregon DSL has authorized 0.6 acres of temporary wetland impact for the project under Removal-Fill Permit No. 64855-RF, with conditions requiring the top layer of excavated soil to be put back on top when the pipe trench is backfilled and disturbed areas seeded. The project would also be done under a CWA Section 404 permit issued by USACE for impacts to jurisdictional waterways and wetlands.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: Conversion of approximately 7,000 linear feet of open irrigation ditch to pipeline would reduce ditch water seepage to the ground during irrigation season. By reducing irrigation water loss through seepage and evaporation, the project overall would conserve water, leaving more in the stream, which would support baseflows and groundwater levels. The project is not located within a Groundwater Restricted Area designated by the Oregon Water Resources Department or within a U.S. Environmental Protection Agency-designated Sole Source Aquifer.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: The project would not change the existing land use of the site. The proposed rock riffle diversion and conversion of open irrigation ditch to pipeline would support controlled delivery of irrigation water to existing agricultural land in a more efficient manner than the current condition, while improving fish passage conditions in the creek. Short-term disruptions of normal irrigation schedules may occur while the proposed project elements are installed. Any such temporary disruptions would be coordinated with the water users ahead of construction to minimize impacts.

9. Visual Quality

Potential for Significance: No

Explanation: The proposed rock riffle diversion in Belshaw Creek would resemble a natural stream riffle and would not substantially change the visual character of the stream. The proposed concrete inlet box at the point of diversion would be visible from adjacent areas, while the proposed irrigation pipe would be buried and would not be visible after installation. The project is on private property and would not interfere with public views and would not substantially change the visual quality of the area.

10. Air Quality

Potential for Significance: No

Explanation: The diversion and irrigation efficiency improvements would not introduce new sources of air emissions to the project area or otherwise affect air quality in the long term. Minor temporary increases in site emissions from gasoline and diesel-powered construction equipment and vehicles would occur during construction. The project site is not located in an area designated by the Oregon Department of Environmental Quality as a Non-Attainment or Maintenance Area with current or historic issues meeting air quality standards.

11. Noise

Potential for Significance: No

Explanation: The project would not introduce new permanent sources of noise to the project area and would not otherwise change noise levels in the long term. Temporary increases in noise levels from equipment operation would be expected during construction. Noise-generating equipment could include an excavator, dump truck, haul truck and trailer, and personnel vehicles. Surrounding areas within ¼ mile of the project include three rural residences that may experience temporary construction-related noise. The duration of equipment operation near any one residence would be limited, as limited excavation/fill is needed for pipeline installation at any single location, and the work would be spread along approximately 7,000 linear feet (1.3 miles) of the existing ditch network. Temporary noise impacts to residences would be minimized by performing the work during daylight hours. Other noise-sensitive receptors such as schools, hospitals, or libraries are not present near the project.

12. Human Health and Safety

Potential for Significance: No

Explanation: No permanent public health or safety hazards would be created by the diversion and irrigation efficiency improvements. Temporary safety hazards typical of construction activities would be expected from the operation of heavy equipment.

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: The landowners of the project area are aware of the project and have been involved in pre-project coordination with Grant SWCD. Construction activities and schedules would be coordinated with the landowners prior to on-the-ground work or disruptions to irrigation schedules.

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

Signed:

John Vlastelicia
Environmental Protection Specialist