Proposed Action: Beaver Creek Habitat Enhancement

Project No.: 1994-042-00, 1998-028-00

Project Manager: Jesse Wilson, EWL-4

Location: Jefferson County, Oregon

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 fund the Oregon Department of Fish and Wildlife and the Jefferson Soil and Water Conservation District (hereafter “the Sponsor”) to enhance habitat for Endangered Species Act (ESA)-listed Middle Columbia River steelhead trout (Oncorhynchus mykiss) in Jefferson County, Oregon. These actions would support conservation of ESA-listed species considered in the 2020 ESA consultation with the National Marine Fisheries Service on the operations and maintenance of the Columbia River System while also supporting ongoing efforts to mitigate for effects of the Federal Columbia River Power System (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.).

Beaver Creek is a small seasonal tributary of Trout Creek located in eastern Jefferson County. Beaver Creek runs underneath Northeast Trout Creek Road roughly 600 feet upstream from its confluence with Trout Creek. The culvert that runs under the road is being replaced with a new, open arch culvert, which would open up the area of Beaver Creek upstream of the road crossing to fish.

To enhance fish habitat in this area, the Sponsor would alter roughly 350 feet of the channel of Beaver Creek upstream of the road crossing and culvert. The new channel would be meandered to a greater degree than the current laterally-confined channel to reduce flow velocity and improve interaction with the floodplain. Wood habitat-forming structures consisting of individual logs with rootwads would be placed throughout this new channel to increase aquatic complexity and provide habitat for fish. Up to eight of these individual habitat-forming logs would be placed in the project area. The logs would be ballasted into the banks using soil and rock excavated during the channel construction to prevent them from becoming dislodged and carried downstream. Following construction, the banks of the stream and other disturbed areas would be planted with native vegetation and seeded with a native grass mix. This vegetation would be monitored in future years to ensure the growth of productive species and the establishment of a sustainable riparian ecosystem.
All project activities would be completed during the autumn of 2022. During this period, Beaver Creek is a dry channel. No activities would occur in areas with water, and construction activities would be complete before winter flows begin.

**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), 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.

/s/ Thomas DeLorenzo  
Thomas DeLorenzo  
Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel  
Sarah T. Biegel  
NEPA Compliance Officer  
September 20, 2022

Attachment(s): Environmental Checklist
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.

**Proposed Action:** Beaver Creek Habitat Enhancements

**Project Site Description**

Beaver Creek is a small seasonal stream located in eastern Jefferson County, Oregon, roughly 21 miles east of Madras. Beaver Creek is a minor tributary to Trout Creek, the dominant waterway in the valley. Beaver Creek is dry during summer and autumn and is fed by snowmelt during spring and early summer. The area of Beaver Creek where project activities would occur is located roughly 600 feet upstream of the confluence of Beaver Creek and Trout Creek on the eastern side of Northeast Trout Creek Road, a small county highway. The region is very rural, with the nearest residence more than half a mile from the project site. The surrounding area has been heavily affected by historical agriculture and livestock grazing, with much of the land dominated by grass and shrubland. The banks of Beaver Creek host a narrow riparian corridor of native trees and shrubs, but channel incision caused by lateral confinement of the stream has largely disconnected the floodplain and reduced the complexity of this vegetative corridor.

**Evaluation of Potential Impacts to Environmental Resources**

1. **Historic and Cultural Resources**

   Potential for Significance: No

   **Explanation:** BPA identified an area of potential effect (APE) and conducted background research into recorded cultural resources and archaeological surveys near the APE (BPA CR Project No. OR 2020 120). A BPA archaeologist also conducted a site survey and shovel probe of the work area in July 2022. BPA determined that the activities would have no effect on historic properties on August 15, 2022, and initiated consultation with the Confederated Tribes of the Warm Springs Reservation and the Oregon State Historic Preservation Office. The consultation period ended on September 15, 2022. No responses were received.

   **Notes:**
   - In the event of an inadvertent discovery of cultural resources during project activities, all work would cease, the area would be secured, and BPA archaeological staff would be notified.

2. **Geology and Soils**

   Potential for Significance: No

   **Explanation:** Project activities would require earthmoving, but the long-term effects would be positive and outweigh any short-term negative effects. Activities that would affect geology and soils would include excavation of the Beaver Creek channel, re-contouring the floodplain, and ballasting large woody debris structures. However, the long-term effects of establishing a complex riparian vegetative corridor would be to improve sediment retention and reduce erosion.
3. **Plants (including Federal/state special-status species and habitats)**

Potential for Significance: No

**Explanation:** There are no ESA-listed plant species present at the project site (U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) tool). Additionally, there are no Oregon state-listed plant species present in Jefferson County (Oregon Department of Agriculture). As a result, there would be no effect on listed plant species.

Effects on non-listed plants would be minor. The area around the Beaver Creek channel does not currently support extensive riparian vegetation. Any vegetation present would be adversely affected by construction activities, as plants would be removed during construction. However, the new channel would increase floodplain interaction and improve conditions for vegetation in the project area. Additionally, the Sponsor would replant and reseed the area with native riparian vegetation following construction to restore and enhance vegetation in the area.

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

Potential for Significance: No

**Explanation:** There are no ESA-listed species present at the project site (IPaC). Additionally, there are no Oregon-state listed animal species present in Jefferson County (ODFW). As a result, there would be no effect on listed species.

Effects on non-listed animal species would be minor. Wildlife may be disrupted by human presence and construction activities (noise, exhaust, shadows, etc.). However, these effects would be temporary and cause no lasting impact to wildlife in the area.

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

Potential for Significance: No

**Explanation:** Beaver Creek is a seasonal stream that usually only flows from late winter to early summer. There would be no water in the creek during the project activities. As a result, there would be no effects on fish or water bodies. The long-term effects of the project would be to improve potential rearing habitat for ESA-listed steelhead trout and other resident fish species, which would benefit those species, as well as improve the floodplain interaction of Beaver Creek in the project area.

6. **Wetlands**

Potential for Significance: No

**Explanation:** There are no wetlands located at the project site (USFWS National Wetlands Inventory). As a result, there would be no effects on wetlands.

7. **Groundwater and Aquifers**

Potential for Significance: No
Explanation: No new wells or uses of groundwater are proposed. Project activities would potentially cause minor effects to groundwater, as increased floodplain interaction may result in the floodplain retaining more groundwater than it currently does. This effect would have minor positive long-term effects on the environment in the project area.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: Existing land use would not change as a result of these activities.

9. Visual Quality

Potential for Significance: No

Explanation: There would be no long-term adverse effects to the visual quality of the area as a result of these activities. Disturbed areas would be replanted and seeded with native vegetation following construction to restore the traditional visual quality of the area.

10. Air Quality

Potential for Significance: No

Explanation: There would be exhaust produced by machinery used during project activities. This exhaust would be temporary and cause no long-term changes to local air quality.

11. Noise

Potential for Significance: No

Explanation: There would be noise caused by construction activities and machinery used during project activities. This noise would be temporary and cause no long-term impacts.

12. Human Health and Safety

Potential for Significance: No

Explanation: All personnel would use best management practices to protect worker health and safety. All heavy machinery would be operated solely by licensed and trained personnel.

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

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.

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.

Landowner Notification, Involvement, or Coordination

Description: Beaver Creek flows through private property. The Sponsor has obtained written permission from the landowner to access the site and implement habitat restoration actions upon it. All access would be along public roadways. No other external coordination is required.

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

Signed: /s/ Thomas DeLorenzo  September 20, 2022
Thomas DeLorenzo, ECF-4  Date
Environmental Protection Specialist