

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Shoshone-Paiute Beaver Dam Analog and Culvert Installation

Project No.: 1997-011-00

Project Manager: Elizabeth Santana, EWM-4

Location: Owyhee County, ID

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: BPA proposes to fund the Shoshone-Paiute Tribe to install two 24-inch diameter culverts at existing unimproved vehicle fords in Warm Springs Creek and Papoose Creek. The culverts would be installed in native-surface, single-lane roads to cross waterways approximately 3 to 5 feet wide. A backhoe would be used for the installation. Staging of equipment and supplies would be within the roadway and immediate construction site. The total area of impacts would be less than ¼ of an acre at each site.

BPA also proposes to fund the Shoshone Paiute Tribe to install a single beaver dam analogue (BDA) in Billy Shaw Slough about 0.75 miles south of the Owyhee River in Idaho. The BDA would be approximately 25 feet across and be constructed of untreated wooden spikes driven vertically into the creek with cut willows and sage branches woven between them to simulate a beaver dam. Hand tools or mechanized equipment (not to exceed 15,000 lbs. operating weight) would be used to drive vertical posts (non-treated wood) a minimum of 1.5 feet apart from one another. Slash material would be woven between vertical posts. Work includes future extensions, adjustments, and repairs as needed. The combined area of impacts for all actions would be approximately 2.5 acres.

Table 1 - Location of Proposed Actions

Action	Latitude*	Longitude*
Beaver Dam Analog	42.019122	-116.237459
Warm Springs Creek Culvert	42.077098	-116.093706
Papoose Creek Culvert	42.063908	-116.075184

This action supports 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 1021.410(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/ Robert W. Shull

Robert W. Shull
Contract Environmental Protection Specialist
CorSource Technology Group

Reviewed by:

/s/ Carolyn Sharp

Carolyn Sharp
Acting Supervisory Environmental Protection Specialist

Concur:

/s/ Sarah T. Biegel

Sarah T. Biegel
NEPA Compliance Officer

Attachment(s): Environmental Checklist, List of Fish Screen O&M Sites

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: Installation of two 24-inch diameter culverts at existing unimproved vehicle fords in Warm Springs Creek and Papoose Creek, and install a single beaver dam analogue (BDA) in Sheep Creek.

Project Site Description

All actions would be conducted in southern Idaho on the Shoshone Paiute Tribes' Duck Valley Indian Reservation. The BDA would be installed in Billy Shaw Slough about 0.75 miles south of the Owyhee River near the town of Owyhee, Idaho. The riparian vegetation there is typical of riparian areas in the northern Great Basin, dominated by willow shrub thickets and scattered cottonwood trees.

The culvert installation sites are characterized by grass/forb meadows and riparian wetlands, with scattered thickets of willows. The surrounding slopes are broad and open, covered mostly by sagebrush and native bunch grasses (or invasive cheatgrass in places), with the draws and higher elevations supporting dense thickets of mountain mahogany and aspen.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: The areas of potential effect were surveyed for cultural resources in July 2023, but none were found. BPA determined that the actions would therefore have no effect on cultural resources. BPA consulted with the Idaho State Historic Preservation Office (SHPO) and the Shoshone-Paiute Tribes of the Duck Valley Indian Reservation (Sho-Pai) on the survey findings and the determination of "no effect" on August 15, 2023. SHPO concurred with the determination of "no effect" to cultural resources on August 29, 2023, but no response was received from the Sho-Pai by September 15, 2023, over 30 days from their receipt of BPA's determination.

2. Geology and Soils

Potential for Significance: No

Explanation: The installation of the BDA would likely have no ground disturbance since this BDA would be installed by hand or with a small track hoe. If small equipment were to be used to drive the BDA's vertical stakes, then a small area of localized soil displacement and compaction could occur (approximately 500 linear feet of access and 500 square feet at the BDA site). Localized flooding of soils (estimate ¼ to ½ acre) would be produced as a result of the completed BDA, but this would be as intended and would sub-irrigate surrounding former floodplain, increase wetland and riparian plant communities, and thereby produce more fertile topsoil and richer soil horizons than are there currently.

Only a backhoe would be used to install the two culverts, rather than large excavators or bulldozers, so the area of ground disturbance (estimate less than 500 square feet of area each) and impacts to soils (such as compaction and displacement) would be minimized and limited to the immediate area of the culvert installation.

Work areas would be recontoured and seeded for erosion control and vegetative recovery following culvert installation.

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

Potential for Significance: No

Explanation: The BDA installation would cut back many willows in the immediate area to acquire the material necessary to weave into the BDA, but no individual plant would be cut back so severely as to risk its full recovery.

The machine operations necessary for placement of the culverts, and potentially the BDA, would mechanically impact and destroy some native plant species on the small sites where they would be operated. The sites would be reseeded to native species.

No Federal/state special-status species or habitats are present within the project sites.

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

Potential for Significance: No, with conditions

Explanation: No Federal/state special-status species or habitats are present within or near the project sites.

The habitat immediately around the BDA would be flooded and thereby changed from a narrow riparian corridor surrounded by sagebrush flats to a pond and wetland habitat type, which would support a higher diversity and number of species than the existing condition.

No habitats would be modified to any degree that might permanently displace medium to large resident wildlife; though some small reptiles, amphibians, or mammals (*e.g.*, frogs, mice, and gophers) may be displaced or even killed by the operations of the backhoe to install the culverts.

The machine operations would occur in mid/late summer, which would be after migratory birds have completed nesting and fledging.

All human presence and activity associated with these actions would temporarily disturb and displace nearby wildlife, but long-term displacement resulting in competition for nearby habitats would be unlikely.

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

Potential for Significance: No

Explanation: The installation of the BDA would expand the amount of surface water and aquatic habitats, though its installation would temporarily disturb nearby fish and other aquatic organisms. Habitat for these species would be increased by the new BDA.

No aquatic habitats would be adversely modified for the long term by installation of the culverts, and their installation would prevent vehicles from fording the streams in these locations (as they had in the past) thereby reducing sedimentation and stream bank destruction.

Some aquatic invertebrates or amphibians may be displaced or killed by the culvert installations, but rapid re-occupation of these sites by the same or other members of the same classes of animals following construction could be anticipated.

No ESA-listed species, or special-status fish or aquatic species are present in the project areas, but native fish species may be temporarily displaced during project actions.

6. Wetlands

Potential for Significance: No

Explanation: The installation of the BDA would occur in riparian wetlands, which would damage those wetlands, though they would ultimately be enhanced and expanded by the completed BDA.

Installation of the culverts would occur by necessity in riparian wetlands, but their installation would protect wetlands up and downstream of the crossing, which previously had been subject to vehicle fording and continual damage.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: There would be no groundwater withdrawal. There would be some miniscule potential for contamination of groundwater from fuel or fluid drips or spills from the small equipment proposed for culvert and BDA installations; but spills and drips with the volume necessary to contaminate groundwater would be unlikely.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: There would be no land use changes, and no impact to specially-designated areas. No project action would change the capability of the land to be used as it was prior to project actions.

9. Visual Quality

Potential for Significance: No

Explanation: No visually-prominent vegetative, landform, or structural change would be made. The locations of these actions are far from publicly traveled roadways.

Culvert installations may narrow up the stream crossings from their current conditions, minimizing undesirable visual effects of the muddy, tire-tracked fords currently there.

The BDA would change a seasonally dry watercourse amid sagebrush flats to a seasonal, or perhaps perennial, pond and wetland. This visual change would be an improvement, adding diversity of color and texture to the landscape.

All of the actions are on tribal lands, within an Indian reservation, and far from publicly traveled highways where viewpoints and foreground/middle-ground visual conditions would be of greater concern.

10. Air Quality

Potential for Significance: No

Explanation: There would be some exhaust and greenhouse gas emissions since a backhoe or other small machine would be used, though only for a few weeks for all proposed actions. This action creates no long-term source of emissions or exhaust.

Vehicles used to transport workers, supplies, and equipment to the sites would be another potential source of exhaust and greenhouse gasses, but this also would be short term.

11. Noise

Potential for Significance: No

Explanation: There would be some noise impacts for a few hours or days at each project site while the backhoe or other equipment might be working, but this type of noise would not be inconsistent with that of common ranching, mining, or farming operations throughout the upper Owyhee River basin and on the reservation.

Other noise sources would be from humans working on the site, and the use of vehicles to transport workers, supplies, and equipment to the project sites. All noise sources would be of low intensity and short term.

12. Human Health and Safety

Potential for Significance: No

Explanation: Vehicle and backhoe operation and working with hand and power tools have their attendant risk to users, but there would be no condition created from these actions that would introduce new human health or safety hazards or risk into the environment. No condition created by these actions would increase the burden on the local health, safety, and emergency-response infrastructure.

Neither project actions nor operation of project-associated vehicles on public roads would hinder traffic or access by emergency vehicles.

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: NA

Landowner Notification, Involvement, or Coordination

Description: The project actions are proposed by the Shoshone-Paiute Tribe to be implemented by tribal members on properties owned and managed by the Shoshone-Paiute Tribe.

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

Signed: /s/ Robert W. Shull

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CorSource Technology Group

September 18, 2023

Date