

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Duck Valley Culverts and Beaver Dam Analogs 2025

Project No.: 1997-011-00

Project Manager: Jennifer Plemons, EWM-4

Location: Elko County, Nevada and Owyhee County, Idaho

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 Shoshone-Paiute Tribes of the Duck Valley Indian Reservation (Tribes) to install 24-inch diameter culverts at multiple existing unimproved vehicle fords. The sites of the proposed culvert installations include Crow's Nest Crossing (unnamed tributary of Sheep Creek), Reed Creek Crossing, Fawn Creek Crossing, and Red Cabin Crossing (Mary's Creek) (Table 1). 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 area of impacts would be less than 1/4 acre at each site.

BPA also proposes to fund the Tribes to install several beaver dam analogs (BDAs) in Fawn Creek, Billy Shaw Slough, and Papoose Creek (Table 1). The BDAs would be up to approximately 25 feet across and 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 heavy machinery (not to exceed 15,000 pounds operating weight) may 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 would include future extensions, adjustments, and repairs as needed.

Table 1. Location of Proposed Actions.

Site Name	Action Description	Water Body	County, State	Latitude	Longitude
Crow's Nest Crossing	Install one culvert in each of two roads	Unnamed Tributary to Sheep Creek	Elko, NV	41.861179	-116.160593
Reed Creek Crossing 2	Install one culvert in each of two roads	Reed Creek	Elko, NV	41.905540	-116.004030
Fawn Creek Crossing 2	Install one culvert in each of two roads	Fawn Creek	Elko, NV	41.841249	-116.069689
Fawn Creek BDAs	Install approximately four BDAs	Fawn Creek	Elko, NV	41.841249	-116.069689
Billy Shaw Slough BDAs	Install approximately four BDAs	Billy Shaw Slough	Owyhee, ID	42.032592	-116.231146
Papoose BDAs	Install approximately four BDAs	Papoose Creek	Owyhee, ID	42.068290	-116.076790
Red Cabin Crossing	Install one culvert in each of two roads	Mary's Creek	Owyhee, ID	42.049905	-116.042519

This action would support 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 *DOE National Environmental Policy Act (NEPA), Implementing Procedures* (dated June 30, 2025), 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.¹

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 the interim final rule to revise DOE NEPA regulations implementing NEPA at 10 C.F.R. Part 1021 and NEPA Implementing Procedures (dated June 30, 2025), to meet its obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

John Vlastelicia
Environmental Protection Specialist

Concur:

Katey C. Grange
NEPA Compliance Officer

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.

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Project Site Description

The project sites are located on the Shoshone-Paiute Tribes' Duck Valley Indian Reservation near the Idaho/Nevada border. The projects are on or near small streams within the Owyhee River subbasin, with the exception of the Red Cabin Crossing site, which is within the Bruneau River subbasin. The Owyhee and Bruneau rivers are tributaries of the Snake River.

The proposed culverts are located along unimproved backcountry roads that are prone to erosion from runoff from the hillsides above, contributing sediment to nearby streams. The proposed culverts and BDAs are located in areas characterized by shrub-steppe, riparian, and wetland habitats. Vegetation across the project sites includes grasses/forbs, willow shrubs, and cottonwood trees, with surrounding hillsides that include sagebrush, native bunch grasses, and invasive cheatgrass in places.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: BPA determined that the implementation of the proposed projects would result in no historic properties affected, based on background research and site surveys completed in 2024 (BPA CR Project No. ID 2024 018). BPA consulted with the Tribes, the Nevada State Historic Preservation Office (NVSHPO), and the Idaho State Historic Preservation Office (IDSHPO) on the project (NVSHPO # 2024-8287; IDSHPO # 2024-886). The IDSHPO concurred with the determination of effects on December 9, 2024. BPA provided additional requested information to NVSHPO and the Tribes on February 10, 2025, and the 30-day comment period ended on March 12, 2025, with no additional comments received.

Notes:

- 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: Culvert installation would involve soil disturbance from excavation and backfilling of the native-surface roads at each culvert site. A small backhoe would be used to install the culverts, limiting the area subject to heavy equipment movement and soil compaction. BDA installation would not involve soil disturbance from excavation or fill placement, but if heavy equipment is used to drive posts then a small area of localized soil disturbance and compaction for equipment access to the stream at each BDA could be expected. The area of soil disturbance at each culvert and BDA site is expected to be a quarter of an acre or less. Areas of vegetation disturbance would be seeded for erosion control and vegetative recovery upon project completion.

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

Potential for Significance: No

Explanation: The culvert installations would involve excavation and backfilling primarily within the footprint of the existing roadways, but equipment operation could disturb small areas of roadside vegetation (grasses and shrubs) adjacent to the road at each of the culvert sites. Small areas of riparian vegetation could also be disturbed from equipment access at each of the BDA sites, particularly if machinery is used to drive the vertical BDA posts. Tree removal is not proposed. Willow branches may be cut at the BDA sites for weaving into the BDAs, but no individual plant would be cut back so severely as to risk its full recovery. Areas where soils are exposed by vegetation disturbance from construction would be seeded with native species.

No federal ESA-listed or state special status plant species or habitats are present within the project areas.

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

Potential for Significance: No

Explanation: Construction activity could temporarily displace wildlife from the work areas, due to noise, soil and vegetation disturbance, and visual disturbance from equipment operation and human activity. The BDAs, by raising water levels and improving the stream/floodplain connection, would be expected to widen the riparian corridor and support a higher number and diversity of species than the existing condition. No habitat would be modified to a 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 equipment operations.

No federal ESA-listed wildlife species or critical habitats are present within or near the project sites, nor are there documented state special-status species or habitats present.

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

Potential for Significance: No

Explanation: The culverts and BDAs would involve low-level temporary disturbance in streams during installation, but long-term effects to streams, floodplains, and fish would be beneficial. By conveying water through a pipe under the road surface, each culvert would prevent vehicles from fording the stream in these locations and reduce continued erosion of the road from unmanaged flows crossing the road surface. This would reduce streambank degradation at the crossings and sedimentation of the streams downstream of the crossings. By slowing the flow of water, providing in-stream structure, and improving the stream/floodplain connection, the BDAs would expand and improve habitat for fish and other aquatic species.

No ESA-listed species or special-status fish or aquatic species are present in the project areas. Native resident fish could be temporarily displaced during construction at some sites. Aquatic invertebrates or amphibians may also be displaced or killed by aquatic construction activities, but rapid re-occupation of these sites by the same classes of animals following construction is expected.

6. Wetlands

Potential for Significance: No

Explanation: Culvert installation would necessarily occur in riparian wetlands and involve a small amount of ground disturbance to excavate native-surface road material, place the 24-inch diameter pipes, and backfill material over the pipes to reconstruct the road. By creating

culverted conveyance beneath the road surface at the existing vehicle fords, the projects would protect wetland areas from the impacts of repeated vehicle crossings in the future.

Similarly, the installation of the BDAs would involve temporary riparian wetland disturbance but would enhance and potentially expand riparian wetland area over time by improving the stream/floodplain connection.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: Construction of the projects would not involve groundwater withdrawals or discharges to groundwater. The BDAs are intended to improve the stream/floodplain connection and thus could result in improvements to groundwater recharge in the floodplain. No long-term adverse effects to groundwater or aquifers would result from the culverts or BDAs once they are in place.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: All of the projects are located on the Duck Valley Indian Reservation. There would be no land use changes or impacts to specially designated areas resulting from the projects. The proposed culvert installations are on very low-traffic roads. Vehicles needing to pass the road work areas during construction would be able to drive around the work on either side of the road, and the projects would not prevent access to any lands. No project action would change the capability of the land to be used as it was prior to the project actions.

9. Visual Quality

Potential for Significance: No

Explanation: No visually prominent structural, landform, or vegetative changes would be made by the proposed projects. Culvert installations may narrow the stream crossings from their current conditions, minimizing the undesirable visual effects of the muddy, tire-tracked vehicle fords currently present at those locations. The BDAs would mimic natural beaver activity in streams and increase floodplain activation, potentially adding some diversity of vegetation color and texture to the landscape. All project locations are on reservation land, far from publicly traveled roads and public viewpoints.

10. Air Quality

Potential for Significance: No

Explanation: The culverts and BDAs would not introduce new operational sources of air emissions or otherwise affect air quality in the long term. Minor temporary increases in site emissions from gasoline and/or diesel-powered construction equipment and vehicles would occur during installation. Dust emissions from construction activities would be minor based on the small areas of ground disturbance at each site.

11. Noise

Potential for Significance: No

Explanation: The projects would not introduce new permanent sources of noise to the project sites and would not otherwise change noise levels in the long term. Culvert and BDA installation would temporarily elevate noise above background levels during daylight hours while work is occurring. The noise-generating activities, including equipment/vehicle operation and human activity, are relatively common for land management activities in rural areas and are in line with other land management activities on the reservation, including farming and ranching. The proposed culvert and BDA installations are not adjacent to sensitive noise receptors such as residential neighborhoods, schools, or hospitals.

12. Human Health and Safety

Potential for Significance: No

Explanation: No permanent public health or safety hazards would be created by the installation of the culverts or BDAs. Temporary safety hazards typical of construction activities would be expected from the operation of equipment and hand tools on the project sites.

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 proposed action would be performed by the Shoshone-Paiute Tribes on land owned and managed by the Shoshone-Paiute Tribes as part of their Duck Valley Indian Reservation.

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