

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Duck Valley Culverts and Beaver Dam Analogs 2026

Project No.: 1997-011-00

Project Manager: Jennifer Plemons, EWM-4

Location: Elko County, Nevada

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 Shoshone-Paiute Tribes of the Duck Valley Indian Reservation (Sho-Pai Tribes) to install two small culverts at a road crossing of a North Fork Skull Creek tributary; relocate a nearby section of road that crosses a spring feeding that stream; and install beaver dam analogs (BDAs) on Jones Creek and Cow Creek (Table 1). All sites are located on the Sho-Pai Tribes' Duck Valley Indian Reservation in Elko County, Nevada.

The proposed culverts would be 18 to 24 inches in diameter and 20 feet long, installed side-by-side where a native-surface two-track road crosses the stream, which is approximately 10 to 15 feet wide at the proposed culvert location. A small backhoe would be used to install the culverts. Equipment and materials for the work would be staged on the side of the road. North of the culvert crossing where the road crosses a spring, an approximately 250-foot-long segment of the road would be rerouted to avoid the spring. This would require using a small backhoe and/or a grader to cut a new approximately 8-foot-wide track into a gently sloped hillside on the uphill side of the spring. Depending on soil conditions, gravel may be added to the new track for stability as needed. Boulders would be placed to prevent vehicle access to the abandoned segment of road.

Up to 12 BDAs would be installed in both Jones Creek and Cow Creek, in approximately 0.5-mile-long segments of those streams. The BDAs would 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 heavy machinery (not to exceed 15,000 pounds operating weight) may be used to drive the vertical posts a minimum of 1.5 feet apart from one another. The project includes future BDA adjustments and repairs as needed.

Table 1. Location of Proposed Actions

Site Name	Action Description	Water Body	County, State	Latitude	Longitude
North Fork Skull Creek Crossing #3	Install two culverts at a road/stream crossing	North Fork Skull Creek	Elko, NV	41.939380	-116.056590
North Fork Skull Creek Road Relocation	Relocate a section of road around a spring	North Fork Skull	Elko, NV	41.940400	-116.061330

Site Name	Action Description	Water Body	County, State	Latitude	Longitude
Jones Creek BDAs	Install up to 12 BDAs	Jones Creek	Elko, NV	41.879405	-116.013484
Cow Creek BDAs	Install up to 12 BDAs	Cow Creek	Elko, NV	41.906290	-115.986800

Funding the proposed activities 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 1021.102 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.

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 sites are located on the Sho-Pai Tribes' Duck Valley Indian Reservation in northern Elko County, Nevada. The projects are along small streams and backcountry roads within the Owyhee River basin. The Owyhee River is a tributary of the Snake River.

The land around each of the project sites has been used for livestock grazing. The roads at each site are unpaved two-track access routes generally suitable for 4-wheel drive vehicles. Cow Creek, Jones Creek, and the tributary of North Fork Skull Creek are all non-perennial streams in the project reaches, with channel widths of about 4 to 8 feet at the Cow Creek site, 8 to 15 feet at the Jones Creek site, and 10 to 15 feet at the North Fork Skull Creek tributary site. Adjacent vegetation at all sites generally includes willow, sagebrush, bitterbrush, and grasses, with aspen also present at the North Fork Skull Creek tributary site.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No

Explanation: BPA initiated consultation with the Sho-Pai Tribes and the Nevada State Historic Preservation Office (SHPO) on October 27, 2025 (BPA Project # NV 2025 002; NV SHPO # UT 2024-8287; 36813). On December 22, 2025, Nevada SHPO concurred with BPA's delineated Area of Potential Effects, efforts to identify historic properties, and finding of no historic properties affected. No additional responses were received.

Notes:

- In the event that cultural material is inadvertently encountered during project implementation, BPA would require that work be halted in the vicinity of the finds until they can be inspected and assessed by BPA in consultation with the appropriate consulting parties.

2. Geology and Soils

Potential for Significance: No

Explanation: The culvert installation would involve soil disturbance from excavation and backfilling of the native-surface road, which would be done with the use of a small backhoe. The road relocation would also involve soil disturbance from the excavation where it is required to cut an approximately 250-foot length of vehicle track into the gently sloping hillside above the spring. Excavation depths are expected to be no more than 2 to 3 feet for the culvert installation and up to 1 to 2 feet for the road relocation. Depending on soil conditions, gravel may be added to the new track for stability as needed.

BDA installation would involve small areas of soil/sediment disturbance from driving the spike poles into the stream bed and packing stream sediment on the upstream side of the weaving materials. If heavy equipment is used to drive the posts, then small areas of surface soil disturbance and compaction for equipment access to the stream could be

expected. The close proximity of the roads to both the Jones Creek and Cow Creek BDA sites would limit the extent of off-road access disturbance needed.

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

Potential for Significance: No

Explanation: The culvert installation would involve excavation and backfilling primarily within the footprint of the existing road, but equipment movement could disturb small areas of vegetation (grasses and shrubs) adjacent to the road. Grading for the relocated section of road would disturb vegetation (mostly sagebrush) across an approximately 250-foot-long, 8-foot-wide path. 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. The BDAs, by raising water levels and improving the stream/floodplain connection, would be expected to widen the riparian corridor and potentially support a higher number and diversity of plant species over time.

No federal or state ESA-listed plant species, or other special status plant species or habitats, are known to be present within 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 areas, due to soil and vegetation disturbance, and noise and visual disturbance from equipment operation and human activity. The BDAs, by improving the stream/floodplain connection and widening the riparian corridor, may support a higher number and diversity of species than the existing condition. Habitat would not be modified to a degree that would permanently displace medium to large resident wildlife, though some small reptiles, amphibians, or mammals (e.g., frogs, mice, gophers) could be displaced or even killed by equipment operation.

No federal ESA-listed wildlife species or critical habitats are present within or near the project site, nor are there documented state-listed or other 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. The footprint of the road/culverts within the North Fork Skull Creek tributary stream would be less than 400 square feet, while adding the culverts at the existing vehicle ford would convey streamflow under the road surface, allowing vehicles to cross the stream without entering the water and reducing continued erosion from unmanaged flows crossing the road surface. This would reduce streambank degradation at the crossing and sedimentation of the stream downstream of the crossing. Rerouting a section of road that currently crosses a spring to a path that avoids the spring would have similar benefits. 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 or other special-status fish or aquatic species are present in the project area. Resident fish may avoid in-stream work areas while work is occurring. Aquatic invertebrates or amphibians may also be displaced or killed by aquatic construction activities, but rapid recolonization of these sites by the same classes of animals following construction is expected.

6. Wetlands

Potential for Significance: No

Explanation: Culvert and BDA installation would not involve work in wetlands outside of the streams where those features are proposed, and National Wetland Inventory mapping does not identify wetlands in the vicinity of the projects. The installation of the BDAs would increase the potential for development of a wetland fringe along the stream banks over time, as the BDAs would function to raise water levels on the upstream side and improve 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 in the project area. 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: 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 installation and road relocation are on a low-traffic backcountry road. Vehicles needing to pass the work areas would be able to drive around the work during construction, with no road closures that would block access to any lands. The projects would not change the capability of any 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. By keeping vehicles out of water and wet soils, the proposed culverts and road relocation should reduce the undesirable visual effects of muddy, tire-tracked vehicle paths 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 floodplain landscape. The projects are on reservation land, away from publicly traveled roads and public viewpoints.

10. Air Quality

Potential for Significance: No

Explanation: The culverts, relocated road, and BDAs would not introduce new operational sources of air emissions and would not increase vehicle traffic 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. The operation of machinery and human activity during construction would temporarily elevate noise above background

levels. The projects are located in fairly remote areas of the reservation and are not adjacent to sensitive noise receptors such as residences, 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 culverts, road relocation, or BDAs. Temporary safety hazards typical of construction activities would be expected from the operation of equipment and hand tools to install the project elements.

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 Sho-Pai Tribes on land owned and managed by the Sho-Pai Tribes as part of their Duck Valley Indian Reservation. No outside landowner coordination is needed.

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