**Proposed Action:** ShoPai Solar Water Trough, Culvert, and Fence Maintenance

**Project No.:** 1997-011-00

**Project Manager:** Cecelia Brown, EWM-4

**Location:** Owyhee County, ID, and Elko County, Nevada

**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 Duck Valley Indian Reservation (ShoPai) to replace water troughs, install fencing, and replace culverts in various locations throughout the Duck Valley Indian Reservation. These actions would all be conducted by hand, with no use of heavy machinery that would disturb the ground surface.

Funding the proposed activities supports ongoing efforts to mitigate for effects of the 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.).

**Solar Water Trough Replacement**

Water troughs, at solar-powered water trough facilities would be replaced at sites where existing troughs have rusted through. The old troughs would be removed using a small, truck-mounted crane. The new trough would be placed on the existing pad that held the former trough. No excavation or site preparation would be conducted. Troughs would be replaced at the following locations:

<table>
<thead>
<tr>
<th>Trough Name</th>
<th>County, State</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Gate 1</td>
<td>Elko, NV</td>
<td>41.837150</td>
<td>-116.251830</td>
</tr>
<tr>
<td>Sheep Gate 1</td>
<td>Elko, NV</td>
<td>41.82370</td>
<td>-116.130270</td>
</tr>
<tr>
<td>Sheep Gate 2</td>
<td>Elko, NV</td>
<td>41.837860</td>
<td>-116.117580</td>
</tr>
<tr>
<td>Otter Springs</td>
<td>Owyhee, ID</td>
<td>42.137140</td>
<td>-116.021770</td>
</tr>
<tr>
<td>Crowes Nest 2</td>
<td>Elko, NV</td>
<td>41.838301</td>
<td>-116.182020</td>
</tr>
<tr>
<td>Sugar Loaf 1</td>
<td>Elko, NV</td>
<td>41.838171</td>
<td>-116.047052</td>
</tr>
<tr>
<td>Sugar Loaf 2</td>
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<td>-116.036409</td>
</tr>
<tr>
<td>SW BIA Tower 2</td>
<td>Elko, NV</td>
<td>41.850829</td>
<td>-116.119404</td>
</tr>
<tr>
<td>Summit Creek 1</td>
<td>Elko, NV</td>
<td>41.879923</td>
<td>-116.095210</td>
</tr>
</tbody>
</table>
Fence Maintenance

Approximately 53 miles of fencing would be maintained. This work would include wire replacement and wire tightening. Some metal posts may be replaced with hand-driven metal t-posts. No digging would be needed.

One exclosure, the “3-Bucks Exclosure,” would replace existing wire fencing with a new pipe fence. All posts (including corner posts) would be driven into the ground with no digging or post-setting in concrete required. This exclosure is located at Latitude 41.972050 and Longitude -116.025794 in Elko County, NV.

Culvert Maintenance

Culverts across the reservation would be maintained by hand. Woody debris and accumulated sediments and gravels would be removed by hand and shovel work from culvert openings and outfalls.

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/ Chad Hamel
Chad Hamel
Supervisory Environmental Protection Specialist
Concur:

/s/ Katey C. Grange               March 29, 2021
Katey C. Grange                  Date
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.

Proposed Action: ShoPai Solar Water Trough, Culvert, and Fence Maintenance

Project Site Description

All actions would be conducted on the Shoshone Paiute Tribes’ Duck Valley Indian Reservation in southern Idaho and northern Nevada. The fence, culvert, and solar trough maintenance would be widespread across the Duck Valley Indian Reservation.

The work would be conducted along and near tributaries in the upper Owyhee River basin in northern Nevada and southern Idaho. The work sites are located in riparian areas along these tributaries, which 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: None of the actions require heavy equipment operation or digging which could disturb native soils or cultural resources. All work would be by hand such as fence wire tightening, and debris removal from culverts. Shovels would be used to clear debris from culvert openings, but no stream banks or adjacent soils would be disturbed. Trough replacement would require the use of small truck-mounted cranes, but these are pickup trucks operating from established access roadways and wheel tracks.

The replacement of the wire fencing around the 3-Bucks Exclosure with a pipe fence would be accomplished by driving vertical; 2-inch to 4-inch diameter pipes into the ground to avoid digging and avoid any potential to disturb cultural resources.

As a result, BPA determined that the work would have no potential to effect cultural resources.

2. Geology and Soils

Potential for Significance: No

Explanation: The maintenance actions on existing culverts, fencing, and solar watering troughs require no new ground disturbance. No heavy equipment (excavators or bulldozers) would be used in any of the maintenance actions. The proposed equipment to be used would have light ground pressure, minimizing soil compaction.

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

Potential for Significance: No
Explanation: The maintenance actions on existing culverts, fencing, and solar watering troughs require no new ground disturbance and would not disturb plants. No Federal/state special-status species or habitats are 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 within the project sites. No habitats would be modified to any degree that might permanently displace resident wildlife. Vehicle 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 is unlikely.

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

Potential for Significance: No

Explanation: The maintenance actions on existing culverts, fencing, and solar troughs require no new ground disturbance and would not disturb water bodies, floodplains, or fish. No aquatic habitats would be adversely modified by maintenance of culverts or the replacement of watering troughs. Their purpose is to protect water quality and improve habitat conditions for fish and aquatic species. 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 maintenance actions on existing culverts, fencing, and solar watering troughs require no new ground disturbance and would not damage wetlands. Cleaning of culverts would be located in riparian habitats, but would not be located in wetlands.

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 motor vehicles used proposed culvert and water trough maintenance; but spills and drips with the volume necessary to contaminate groundwater is 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 changes would be made. The solar water troughs do not resemble natural features on the landscape, but their presence protects riparian habitat from overuse by livestock and allows vegetative recovery, improving the visual appearance.

   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 might be of greater concern.

10. **Air Quality**

   Potential for Significance: No

   **Explanation:** There would be some exhaust and greenhouse gas emissions since motor vehicles would be used to access the work sites. This action creates no long-term source of greenhouse emissions or exhaust. Vehicles used to transport workers, supplies, and equipment to the sites would be another potential source of short-term exhaust and greenhouse gasses.

11. **Noise**

   Potential for Significance: No

   **Explanation:** There would be some noise impacts for a few hours at each project site while the work is being done, but this type of noise is not 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 are of low intensity and short term.

12. **Human Health and Safety**

   Potential for Significance: No

   **Explanation:** Vehicle 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  March 29, 2021
Robert W Shull  Date
Contract Environmental Protection Specialist
CorSource Technology Group