Proposed Action: Little Big Springs Fish Screen Construction

Project No.: 2007-399-00

Project Manager: Cecilia Brown

Location: Lemhi 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 Idaho Department of Fish and Game to construct a fish screen on private lands along Little Big Springs Creek in the upper Lemhi River basin in Lemhi County (latitude 44.711949; longitude -113.411608). Fish screens prevent fish entrapment in irrigation ditches or irrigated fields, and BPA’s funding purpose for these is to prevent entrapment and mortality of Endangered Species Act (ESA)-listed Chinook salmon, steelhead, and bull trout. This structure has been designed according to criteria in the National Marine Fisheries Service’s “Anadromous Salmonid Passage Facility Design” (NMFS, Northwest Region, Portland, Oregon, 2011), and would be installed according to relevant criteria in the Habitat Improvement Program (HIP) Biological Opinion (NMFS 2020). The footprint for its construction would be less than ¼ acre.


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/ Sarah T. Biegel September 30, 2020  
Sarah T. Biegel 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:** Little Big Springs Fish Screen Construction

**Project Site Description**

This fish screen is located on an existing irrigation ditch in conjunction with irrigation water diversion infrastructure in a previously-disturbed riparian grazing area along Little Big Springs, a tributary of the Lemhi River in east-central Idaho. The LBSC-05 site is in a broad riparian floodplain within a sagebrush steppe ecosystem, at a location where much of the floodplain and surrounding productive sagebrush steppe lands have been converted to agricultural and grazing uses supported by irrigation diversions from the Lemhi River and its tributaries.

The construction site is in a riparian meadow that supports cattle grazing. The site has been previously disturbed, and supports an aging fish screen that is being replaced with a new design. The footprint of construction activity for this screen action is occupied by low-growing grasses and forbs. No trees or shrubs are present.

**Evaluation of Potential Impacts to Environmental Resources**

1. **Historic and Cultural Resources**

   **Potential for Significance:** No

   **Explanation:** Fish Screen construction requires the use of heavy equipment which would have the potential to disturb cultural resources. The site has had a completed cultural survey and consultation under Section 106 of the National Historic Preservation Act with the Idaho State Historic Preservation Office (SHPO) and the Shoshone Bannock Tribes-Fort Hall Indian Reservation. The survey identified one disassociated irrigation feature (not eligible for the National Register of Historic Places); and one irrigation ditch (determined to be eligible for the Register). The consultation concluded with a concurrence letter from the SHPO on September 9, 2020, that the action would have no adverse effect on cultural or historic resources.

   During construction, protocols would be in place to stop construction and notify BPA for applicable consultation if new cultural resources are discovered.

2. **Geology and Soils**

   **Potential for Significance:** No

   **Explanation:** Soils would be displaced, compacted, and mixed by the actions of construction equipment, but these impacts would occur on a site that has previously been disturbed by heavy construction equipment when the original fish screen was constructed, and by grazing activities. There would be little previously-unaltered soils impacted. The site would impact less than ¼ acre, and impacts from construction actions would be minimized by the application of Conservation Measures (erosion control, spill prevention, etc.) from BPA's Habitat Improvement Program (HiP) Endangered Species Act (ESA) consultation.
3. **Plants (including Federal/state special-status species and habitats)**

   Potential for Significance: No

   **Explanation:** This fish screen would be in a riparian area, but it is in a location previously disturbed by prior construction and grazing activities; no native shrub or woodland riparian plant community would be impacted. In addition, conservation measures from BPA’s HIP ESA consultation would be applied which would provide for long term recovery of the site and adjacent riparian vegetation. No ESA-listed or “special-status” plant species are present in this location.

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

   Potential for Significance: No

   **Explanation:** Construction would commence in the fall, thus no disturbance of nesting birds would occur. There would be some home range destruction and displacement of small terrestrial and avian wildlife within the expanded footprints of the new fish screen, but this habitat loss would only be a few hundred square feet at most and would be of minimal effect to animal populations in the project area. Larger wildlife using riparian habitats nearby may be disturbed and temporarily displaced by noise and human presence during construction. These larger species would likely not be displaced from their home ranges, though they may temporarily relocate as long as active construction is occurring. No ESA-listed or “special-status” wildlife species are present in locations close enough to these construction sites to be disturbed.

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

   Potential for Significance: No

   **Explanation:** The fish screen would be installed in an irrigation ditch outside of the irrigation season or with the ditch flow turned off; thus, no construction activities would occur in flowing water, and there would be no impacts to fish or aquatic habitats. ESA-listed spring Chinook, steelhead, and bull trout occupy Little Big Springs Creek and in the nearby Lemhi River, but they would not be affected.

6. **Wetlands**

   Potential for Significance: No

   **Explanation:** No wetlands are present at the project site. There would be no effect.

7. **Groundwater and Aquifers**

   Potential for Significance: No

   **Explanation:** Fish screens have no potential to impact groundwater or aquifers. They do not withdraw water from either surface or ground sources. The operation of construction equipment activities may have short-term potential to impact water quality slightly from possible fuel or other fluid drips or spills, but conservation measures from BPA’s HIP ESA consultation would be applied that would prevent or minimize this potential.
8. **Land Use and Specially-Designated Areas**
   Potential for Significance: No
   
   **Explanation:** There would be no change to land uses. This fish screen would be constructed on private grazing and agricultural land with the intention to continue support of agricultural activities by protecting ESA-listed fish during delivery of irrigation water.

9. **Visual Quality**
   Potential for Significance: No
   
   **Explanation:** This new fish screen would be replacing an existing screen, so there would be no long-term change to visual quality. There would be short-term impacts from the presence of construction equipment and vegetation removal (until revegetation measures succeed in green-up).

10. **Air Quality**
    Potential for Significance: No
    
    **Explanation:** Driving of trucks and operation of construction equipment would produce emissions, but the amount would be minimal and short-term, and consistent with that produced by local agricultural activities.

11. **Noise**
    Potential for Significance: No
    
    **Explanation:** Noise sources would be from trucks and operation of construction equipment. Noise would be consistent with that produced by local agricultural activities and would be short term. These impacts would occur during daylight hours during the fall.

12. **Human Health and Safety**
    Potential for Significance: No
    
    **Explanation:** No long-term public safety hazards would be created with this project. Routine, short-term, safety hazards would be expected from the incremental addition of truck traffic on local roads, and the operation of construction equipment.

**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 land owners and water users associated with the irrigation diversion affected by this screen replacement have already been informed by IDFG of this action. Construction would proceed following notification of the affected land owner and irrigation water users.

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 September 30, 2020
Robert W. Shull Date
Contract Environmental Protection Specialist
CorSource Technology Group