

Categorical Exclusion Determination

Bonneville Power Administration
Department of Energy



Proposed Action: Culvert Replacements in the South Fork Salmon River and Big Creek Watersheds

Project No.: 2007-127-00

Project Manager: Matthew Schwartz, EWM-4

Location: Idaho and Valley counties, 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 Nez Perce Tribe (NPT) to replace two undersized culverts that limit fish passage in the Boise and Payette National Forests (BNF and PNF, respectively) in conjunction with the U.S. Forest Service (FS). The recovery and long-term viability of Endangered Species Act (ESA)-listed Chinook salmon, steelhead, and bull trout populations within the South Fork Salmon River and Big Creek watersheds are at risk due to the presence of fish passage barriers (such as those culverts proposed for removal), increased water temperatures, and degraded water quality. NPT has worked with FS staff to survey culverts in the BNF and PNF to assess whether they block passage of ESA-listed fish and prioritize future replacement based on species presence and quality and quantity of suitable habitat. They have identified culverts on Jeanette Creek (PNF) and Six-Bit Creek (BNF) as high priorities for replacement. NPT has worked with the FS to design appropriate culvert replacements, remove the undersized culverts, and construct replacements.

The proposed replacement for the Jeanette Creek culvert is a 32-foot-long by 12-foot-wide pre-cast, open bottom cement box culvert with pre-cast footings. The proposed replacement for the Six-Bit Creek culvert is an 85-foot-long by 26-foot-wide span created with a structural plate arch set on pre-cast concrete footings. Both structures would have natural substrate bottoms. Erosion controls would be implemented and in-stream workspace would be isolated per approved plans prior to start of work. Streams would be diverted, and the original channel dewatered, prior to excavation. Stranded aquatic organisms would be captured and moved out of the construction zone.

Culvert removal and construction would entail the use of heavy equipment such as an excavator and dump truck. Staging and removal/replacement of the culvert would take place within existing FS road prisms. Native materials (e.g. substrate, riparian vegetation, rock, woody debris) excavated onsite, would be conserved and stockpiled for later use in channel reconstruction, filling of culverts, or other site rehabilitation and would be kept separate from other stockpiled material which is not native to the site. Up to 100 feet of stream channel upstream and downstream of the culvert would be reconstructed to better match the existing stream. Drain rock would be added and leveled to place the footings for the replacement structures. Channels would be filled with streambed simulation materials and graded to match the existing slope and stream bank and

placed in such a manner as to create a sequence of riffles, steps, and pools. Rock weirs may be added to form low flow channels. If needed, material for streambed simulation would be obtained from existing borrow sites on FS land and excess material from construction would also go to existing borrow sites. After culvert replacements have been installed, the roadbed would be reconstructed to match the material and grade of the existing road. The slopes outside of the structures would be topped with topsoil. A native vegetation seed mix or native plants would be planted in disturbed areas.

Funding the proposed activities fulfills commitments under the 2020 National Marine Fisheries Service Columbia River System Biological Opinion (2020 NMFS CRS BiOp) and the 2020 U.S. Fish and Wildlife Service Columbia River System BiOp (2020 FWS CRS BiOp). These actions also support 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.).

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.

Jacquelyn Schei
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 area consists of Nez Perce Tribal Ceded Territory within the BNF and PNF in Idaho and Valley counties, Idaho. Project actions would take place in the South Fork Salmon River and Big Creek watersheds in riparian and wetland habitats where there are culverts in existing FS roadways creating fish passage barriers. These areas are surrounded by lands currently used for agriculture and grazing, forested hillslopes, and mountains previously mined and harvested for timber which have led to impacts to ESA-listed species and habitat degradation. The BNF and PNF offer several recreational opportunities and have visitors year-round. The proposed culvert replacement in the BNF is along Forest Road #493, which is not near any established campgrounds and is not the main route to access campgrounds or trails in the area. The proposed culvert replacement in the PNF is along Burgdorf-French Creek Road, which is a main access road and more heavily used by forest visitors. The project site is less than a mile from Jeanette Campground, trailheads, and Burgdorf Hot Springs.

Evaluation of Potential Impacts to Environmental Resources

1. Historic and Cultural Resources

Potential for Significance: No with Conditions

Explanation: The FS assumed Lead Agency responsibilities for Section 106 review. BNF and PNF staff conducted historic and cultural resource surveys and consultation for culvert replacements within their respective forests. The Idaho State Historic Preservation Office has reviewed the documentation provided by the FS and concurred with the determinations. BPA concurred with the PNF determination of No Historic Properties for the Jeanette Creek culvert and with the BNF determination of No Adverse Effect for the Six-Bit Creek culvert.

Notes:

- NPT, PNF, and BNF to ensure a forest archaeologist is present to monitor all ground-disturbing activities in the forest if requested by any consulting parties.
- In the event of an inadvertent discovery, stop work in the vicinity and immediately notify BPA and PNF or BNF staff.

2. Geology and Soils

Potential for Significance: No

Explanation: Heavy equipment such as an excavator and dump truck would be utilized during construction activities. Replacement culverts would be contained entirely within the non-native aggregate roadbed material and would be located within the footprint of the existing structure. There would be minor, temporary impacts to soil from increased erosion potential

during construction activities. Sediment control best management practices would be put in place prior to project implementation to minimize potential for in-stream turbidity or excessive runoff during construction. Work areas would be isolated by rerouting water around the work area to minimize erosion and turbidity. Overall, short- to long-term sediment delivery would be reduced because the potential for culvert blockage/failure and the associated sedimentation would be reduced by replacing the culverts.

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

Potential for Significance: No with Conditions

Explanation:

The whitebark pine (*Pinus albicaulis*), which is ESA-listed as Threatened, has the potential to be in the project area and there is documented presence of the species and suitable habitat in the BNF and PNF. There is also suitable habitat in the project area for a few state special-status and Forest Watch species, but there are no known populations of these species in the project area. The proposed actions will have no effect to whitebark pine with adherence to avoidance and minimization measures listed in the BNF/PNF Forest Plan standards and guidelines and associated programmatic biological opinions designed to mitigate impacts to listed species. The equipment operations necessary for replacement of the culverts would crush or destroy existing unlisted species of vegetation along the roadside and stream banks. These areas would be revegetated with native seed mixes and native plant material in coordination with or approved by the FS botanist. Increased native vegetation would support improved habitat and help prevent streambank erosion in the long term.

Notes:

- Because whitebark pine and suitable habitat may be present in project areas, the FS would conduct surveys prior to implementing stream crossing activities. If project areas are occupied by a listed or special-status species then ground-disturbing activities would not occur within a yet to be determined buffer distance, based on species, such that the actions would have no adverse impacts to individual plants.

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

Potential for Significance: No

Explanation: The FS has assumed Lead Agency responsibilities for ESA and would exercise full ESA oversight of the actions within their authority. For the Jeanette Creek proposed action, the FS would adhere to the USFWS Idaho Fish & Wildlife Office-Stream Crossing Replacement and Removal 2012 Programmatic (01EIFW00-2012-F-0015). For the Six-Bit Creek proposed action, the FS would adhere to the USFWS Upper South Fork Salmon River Resource Management Project – Valley County, Idaho - Biological Opinion (14420-2011-F-0198).

The Canada lynx (*Lynx canadensis*) and North American wolverine (*Gulo gulo luscus*), ESA-listed as Threatened, have the potential to be in the project area or there is suitable habitat for the species in the project area. There are no known recent occurrences of these two species in the project area. The monarch butterfly (*Danaus Plexippus*), an ESA Candidate species, also has the potential to be present in the project area. The Columbia spotted frog, a FS Intermountain Region Sensitive Species, has the potential to be in the project area. No other state special-status species are known to be present in the project areas. The proposed actions would not be likely to adversely affect ESA-listed species with adherence to mitigation measures listed in the biological opinions and following BNF and PNF Forest Plan standards and guidelines designed to mitigate impacts to listed and non-listed wildlife species.

Very little wildlife habitat will be impacted by the proposed actions. No habitats would be modified to any degree that might permanently displace resident wildlife, though some may be temporarily displaced by disturbance from construction activities and human presence. However, the actions will have long-term benefits to habitats.

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

Potential for Significance: No

Explanation: The FS has assumed Lead Agency responsibilities for ESA and would exercise full ESA oversight of the actions within their authority. For the Jeanette Creek proposed action, the FS would adhere to the USFWS Idaho Fish & Wildlife Office-Stream Crossing Replacement and Removal 2012 Programmatic (01EIFW00-2012-F-0015) and the NMFS Idaho Stream Crossing Restoration Programmatic (2011/05875). For the Six-Bit Creek proposed action, the FS would adhere to the USFWS and NMFS Upper South Fork Salmon River Resource Management Project – Valley County, Idaho - Biological Opinions (USFWS #: 14420-2011-F-0198; NMFS #: 2011/02382).

Federally-listed steelhead (*Oncorhynchus mykiss*), Chinook salmon (*Oncorhynchus tshawytscha*), and bull trout (*Salvelinus confluentus*) are present in the project area, as is their designated critical habitat. There are no other state special-status species known to be in the project areas. The conclusion from the ESA consultations was that proposed actions may adversely affect ESA-listed species but would not be likely to jeopardize the species or destroy or adversely modify critical habitats. Impacts would be minimized with adherence to mitigation measures listed in the biological opinions and following BNF and PNF Forest Plan standards and guidelines designed to mitigate impacts to listed and non-listed species.

Replacing the stream crossings would result in temporary negative impacts to fish and fish habitat, specifically sediment transport and delivery and displacement of individuals. Ground-disturbing activities would increase the risk of erosion and sedimentation during and immediately after culvert replacements. This increase would be limited to the time of construction, primarily during the removal of the existing structures and the construction of the new structures and would not be expected to last more than two days. Stream habitat (100 feet or less) would be disturbed, but much of this had already been compromised by the existing road and culvert. The disturbed areas would be reconstructed to provide more and better habitat than was there previously.

Overall, the proposed actions would improve long-term conditions for fish because the potential for culvert blockage/failure and the associated sedimentation would be reduced by replacing the culverts and fish passage barriers would be removed.

6. Wetlands

Potential for Significance: No

Explanation: The project would not change the hydrology within the project area. No fill, excavation, or destruction of wetlands would occur.

7. Groundwater and Aquifers

Potential for Significance: No

Explanation: No new wells or use of groundwater are proposed. There could be a potential for fuel or fluid drips or spills from the equipment used, but spills and drips with the volume necessary to contaminate groundwater is unlikely. The project would require the contractor to have a Spill Containment Plan before starting work.

8. Land Use and Specially-Designated Areas

Potential for Significance: No

Explanation: The underlying land use would not change. The project on Six-Bit Creek would require a road closure, but it is in a more remote area of the forest and is unlikely to impact visitors. The FS would reduce closures to the extent possible to allow for through access by recreational users, particularly on Friday, Saturday, and Sunday. There are also alternate routes to get to popular destinations. The project on Jeanette Creek is in a higher traffic area and the road is the only access to some destinations. The project would be constructed in phases so that one lane would be open for vehicle traffic. If full road closures are needed, the FS would reduce them to the extent possible to allow for through access by recreational users, particularly on Friday, Saturday, and Sunday.

9. Visual Quality

Potential for Significance: No

Explanation: The proposed work would have little effect on visual quality. The structural changes would be made within the footprint of existing culverts and would not change the overall visual character of the landscape as seen from the roadways.

10. Air Quality

Potential for Significance: No

Explanation: There would be minor, temporary effects to the air quality of the environment from exhaust from equipment and vehicles used for the project. Normal conditions would return upon project completion. Effects would therefore be minor.

11. Noise

Potential for Significance: No

Explanation: There would be some short-term noise impacts from the heavy equipment used for the project. Noise emitted from equipment would be short-term and temporary during daylight hours and would cease following project completion.

12. Human Health and Safety

Potential for Significance: No

Explanation: The proposed work is not considered hazardous, nor does it result in any new health or safety hazards or risks to the public. All personnel would use best management practices to protect workers' health and safety during construction activities.

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: All activities would occur in coordination with the BNF and PNF and on lands managed by the US Forest Service. The BNF and PNF publish a Schedule of Proposed Actions (available to the public) that have included the proposed actions. The FS has also discussed and sent details of proposed actions to Tribes, county commissions, agencies, and interested parties as part of the environmental assessment efforts.

Signed:

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Environmental Protection Specialist