**United States Government** 

# memorandum

DATE: May 3, 2010

REPLY TO ATTN OF: KEP-4

SUBJECT: Environmental Clearance Memorandum

TO: Darin Bowman Project Manager – TELF-TPP-3

Proposed Action: Rocky Reach-Maple Valley No. 1 mile 47 bridge replacement project

Budget Information: Work Order # 219783

PP&A Project No.: 955

Proposed by: Bonneville Power Administration (BPA)

## Categorical Exclusion Applied (from Subpart D, 10 C.F.R. Part 1021):

B1.3, Routine maintenance activities for structures, rights-of-way, and infrastructures such as roads that are required to maintain infrastructures in a condition suitable for a facility to be used for its designed purpose.

**Location**: BPA, in coordination with the Cle Elum Ranger District of the Okanogan-Wenatchee National Forest, is proposing to construct a bridge across Cold Creek. The proposed project is located in Kittitas County, Washington, in BPA's Wenatchee District, North Region. Township, Range, and Section crossed by the proposed project are shown below.

Township	Range	Section
19N	17E	2

**Description of the Proposed Action:** BPA has a need to construct a bridge across Cold Creek. Although a bridge once stood at this location, currently the only access to mile 47 of BPA's Rocky Reach-Maple Valley No. 1 transmission line is through an existing ford. Cold Creek provides habitat for Middle Columbia River Basin bull trout, a listed threatened species. As a result future access to mile 47 of the Rocky Reach-Maple Valley transmission line may be greatly restricted or eliminated. Abandoning the ford and constructing a bridge is necessary to ensure ongoing access to the line. Proposed project work includes: vegetation removal, removal of old timber abutments, installation of new abutments, building of approaches, and placing of decking. All work would be in accordance with National Electrical Safety Code and BPA standards. Proposed project activities were included in the Roaring Thin Restoration Environmental Assessment (EA), Cle Elum Ranger District, Okanogan-Wenatchee National Forest, December 2007. The Roaring Thin Restoration Project is a variety of projects designed to improve ecological conditions in the Upper Yakima watershed and includes forest thinning within plantations, changes in road system, shoreline restoration, and invasive plant treatments. A Decision Notice and Finding of No Significant Impact were prepared in December, 2009.

Cle Elum Ranger District, Okanogan-Wenatchee National Forest, initiated Section 106 consultation for the Roaring Thin Restoration Project, which includes the Cold Creek Bridge Project, with the Washington State Historic Preservation Office (SHPO), the Confederated Tribes of the Colville Reservation, and the Yakama Nation in September 2006. The SHPO concurred with the determination of Historic Properties Present-No Effect in March 2007.

Cle Elum Ranger District, Okanogan-Wenatchee National Forest, initiated formal consultation pursuant to Section 7(a)(2) of the Endangered Species Act for Roaring Thin Restoration Project, which includes the Cold Creek Bridge Project. A Biological Assessment was submitted October, 2007. United States Fish and Wildlife Service returned a Biological Opinion on January 29, 2008, concurring with the determination of:

- Marbled murrelet and Canada lynx: "No effect"
- Gray wolf, grizzly bear, and bald eagle: "May affect, not likely to adversely affect"
- Northern spotted owl and Northern spotted owl critical habitat: "May affect, likely to adversely affect"
- California wolverine or Pacific fisher: "May impact, not likely to adversely impact"
- Bull trout: "May affect, likely to adversely affect"

BPA's proposed project would follow all stipulations found in Biological Opinion.

**Findings:** BPA has determined that the proposed action complies with Section 1021.410 and Appendix B of Subpart D of the Department of Energy (DOE) National Environmental Policy Act (NEPA) Regulations (57 Fed. Reg. 1512.2, April 24, 1992). The proposed action does not present any extraordinary circumstances that may affect the significance of the environmental effects of the proposal. The proposal is not connected [40 C.F.R. 1508.25 (a)(1)] to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts [40 C.F.R. 1508.25 (a)(2)], and is not precluded by 40 C.F.R. 1506.1 or 10 C.F.R. 1021.211. Moreover, the proposed action would not (i) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health; (ii) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; (iii) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation and Liability Act-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; or (iv) adversely affect environmentally sensitive resources.

With the actions identified on the attachment, this proposed action meets the requirements for the Categorical Exclusion referenced above. We therefore determine that the proposed action may be categorically excluded from further NEPA review and documentation.

<u>/s/ Laura Roberts</u> Laura Roberts Biological Scientist

Concur: <u>/s/ Katherine S. Pierce</u> Katherine S. Pierce NEPA Compliance Officer Date: May 3, 2010

Attachments: Environmental Checklist

## Environmental Checklist for Categorical Exclusions

Name of Proposed Project: Rocky Reach-Maple Valley No. 1 Mile 47 Bridge Replacement Project							
<b>Work Order #:</b> 219783	_ PP&A Project No.:	PP&A-955					
Prepared by: Laura Roberts	Routing: KEP-4	<b>Date:</b> _04/19/10					
This project has been found to <u>not</u> adversely affect the following environmentally sensitive resources, laws, and regulations:							
<b>Environmental Resources</b>	No Adverse Effect	No Adverse Effect with conditions					
1. Cultural Resources Project was included in SHPO consultation by the	X Okanogan-Wenatchee National	Forest.					
2. T & E Species, or their habitat(s)		X					

Project was included in formal consultation by the Okanogan-Wenatchee National Forest. BO occurred with determination of "May affect, likely to not adversely affect" bull trout.

Permanent bridge construction would follow the design parameters and conservation measures described in the "Biological Assessment for USDA Forest Service Fish Passage Restoration Activities Affecting ESA listed Animal and Plant Species found in eastern Oregon and the whole of Washington" (USDA, 2003) and the Memorandum of Understanding between Washington State Department of Fish and Wildlife and USDA Forest Service, Pacific Northwest Region Regarding Hydraulic Projects Conducted by USDA Forest Service, Pacific Northwest Region (January 2005). In accord with these documents, the minimum distance between the bridge footings will be equal to or greater than 1.2 times the bankfull channel width plus 2 feet.

## **Fish and Aquatic Species Management**

*The following BMPs, mitigation and conservation measures would be implemented to minimize impacts to fish and fish habitat.* 

## Bridge Construction—Required Conservation Measures

### Adapted from:

USDA Forest Service. 2003. Biological Assessment for USDA Forest Service Fish Passage Restoration Activities Affecting ESA-listed Animal and Plant Species found in eastern Oregon and the whole of Washington. *Available from*: Cle Elum Ranger District, 803 West 2<sup>nd</sup> Street, Cle Elum, WA, 98922.

## 1. In-Water Work Window

<u>In-stream work would take place July 15 – September 15</u>. If this work window is not feasible, the Cle Elum RD would work with USFWS and WDFW to determine the appropriate time for project activity.

- 2. Fish Handling and Transfer Protocols (Currently bull trout do not occupy the proposed project area) If capture, removal, and relocation of bull trout are required, follow these steps:
  - **a. Isolate Work Area** Install block nets at up and downstream locations and leave in a secured position to exclude fish from entering the project area. Leave nets secured to the stream channel bed and banks until fish capture and transport activities are complete. If block nets remain in place more than one day, monitor the nets every four hours to ensure they are secured to the banks and free of organic accumulation.
  - b. Fish Capture Alternatives

- i. Collect fish by hand or dip nets, as the area is slowly dewatered.
- i. Seining Use seine with mesh of such a size to ensure entrapment of the residing bull trout.
- ii. Minnow traps Traps would be left in place overnight and in conjunction with seining.
- **iii.** Electrofishing Prior to dewatering, use electrofishing only where other means of fish capture may not be feasible or effective. The protocol for electrofishing includes the following:
  - **a.** If fish are observed spawning during the in-water work period, electrofishing shall not contact spawning adult fish or active redds.
  - **b.** Only Direct Current (DC) or Pulsed Direct Current (PDC) shall be used.
  - **c.** Conductivity <100 use voltage ranges from 900 to 1100. Conductivity from 100 to 300 then use voltage ranges from 500 to 800. Conductivity greater than 300 then use voltage to 400.
  - **d.** Begin electrofishing with minimum pulse width then gradually increase to the point where fish are immobilized and captured.
  - e. Do not allow fish to come into contact with anode. Do not electrofish an area for an extended period of time. Remove fish immediately from water.
  - f. Dark bands on the fish indicate injury, suggesting a reduction in voltage and longer recovery time.
- c. Storage and Release Bull trout must be handled with extreme care and kept in water the maximum extent possible during transfer procedures. A healthy environment for the stressed fish shall be provided—large buckets (five-gallon minimum to prevent overcrowding) and minimal handling of fish. Place large fish in buckets separate from smaller prey-sized fish. Monitor water temperature in buckets and well-being of captured fish. After fish have recovered, release fish upstream of the isolated reach in a pool or area that provides cover and flow refuge. Document all fish injuries or mortalities and include in annual report.

#### 3. Pollution and Erosion Control Plan (PECP) and Supporting Measures

Develop a PECP for the project, one that includes methods and measures to minimize erosion and sedimentation associated with the project. The PECP elements shall be in place prior to and at all times during the appropriate construction phases. The following conservation measures would assist in the creation of a PECP.

- **a.** Follow State Water Quality Guidelines All project actions would follow all provisions of the Clean Water Act and provisions for maintenance of water quality standards as described by the Washington Department of Ecology.
- **b.** Spill Prevention Control and Containment Plan (SPCCP) The contractor would be required to have a written SPCCP, which describes measures to prevent or reduce impacts from potential spills (fuel, hydraulic fluid, etc.). The SPCCP shall contain a description of the hazardous materials that would be used, including inventory, storage, handling, and monitoring.
- c. Minimize Site Preparation Related Impacts Site preparation would be completed in the following manner:
  - **i.** Flag boundaries of clearing limits associated with site access, riparian crossings, stream crossings, staging and stockpile areas to minimize overall disturbance and disturbance to critical vegetation.
  - **ii.** Establish staging areas (used for construction equipment storage, vehicle storage, fueling, servicing, etc) along existing roadways or turnouts beyond the 100-year flood prone area in a location and manner that would preclude erosion into or contamination of the stream or floodplain.
  - **iii.** Minimize clearing and grubbing activities, if required for preparation of staging or stockpile areas. Stockpile large wood, trees, riparian vegetation, other vegetation, sand, and topsoil removed for establishment of staging area for site restoration.
  - **iv.** Place sediment barriers around disturbed sites where potential erosion may enter the stream directly or through road ditches, which are connected to the stream.
- **d. Minimize Heavy Equipment Fuel/Oil leakage** Methods to minimize fuel/oil leakage from construction equipment into the stream channel and floodplain include the following:
  - ii. <u>All equipment used for in-stream work shall be cleaned and leaks repaired prior to arriving at the project. Remove external oil and grease, along with dirt and mud. Inspect all equipment before unloading at site. Thereafter, inspect equipment daily for leaks or accumulations of grease, and fix any identified problems before entering streams or areas that drain directly to streams or wetlands.</u>
  - iii. Equipment used for in-stream or riparian work shall be fueled and serviced in an established staging area. When not in use, vehicles would be stored in the staging area.

- **iv.** <u>Two oil absorbing floating booms appropriate for the size of the stream shall be available on-site</u> during all phases of construction whenever surface water is present. Place booms in a location that facilitates an immediate response to potential petroleum leakage.
- e. Minimize Earthmoving Related Erosion Methods to minimize sedimentation resulting from earthmoving construction activities include the following:
  - i. Minimize amounts of construction debris and soil falling into stream by installing appropriate erosion control barriers prior to construction. Such barriers should be maintained throughout the related construction and removed only when construction is complete. When possible, remove debris or large earth spills that have fallen into the channel.
  - **ii.** In-stream blasting is not covered by the programmatic BA; however in-stream rock splitting by chemical expansion rock splitting or shot-shell powered rock splitting is permitted.
  - **iii.** Delineate construction impact areas on project plans and confine work to the noted area. Confine construction impacts to the minimum area necessary to complete the project.
  - **iv.** Keep a supply of erosion control materials (e.g., silt fence and straw bales) on hand to respond to sediment emergencies. Use sterile straw or "weed free" certified straw bales to prevent introduction of noxious weeds.
  - v. Cease all project operations, except efforts to minimize storm or high flow erosion, under high flow conditions that result in inundation of the project area.
  - vi. Stockpile native streambed materials above the bankfull elevation for later use in project restoration. To prevent contamination from fine soils, these materials shall be kept separate from other stockpiled material, which is not native to the streambed.
- **f.** Minimize Stream Crossing Sedimentation Methods to minimize turbidity and sedimentation resulting from use of stream crossings and access roads include the following:
  - **i.** No equipment is permitted in the flowing water portion of the stream channel except at designated stream crossings.
  - **ii.** Where temporary stream crossings are essential, crossings shall be identified on project plans, designated at the project site, shall not increase risks of channel re-routing due to high water conditions, and avoid potential spawning areas when possible.
  - iii. Stream and riparian crossings shall be minimized and conducted at right angles to the main channel where possible.
  - iv. Existing roadways or travel paths would be used whenever reasonable.
- **g.** Minimize Sedimentation through Dewatering To minimize project related sediment introduced into the stream and to help meet state turbidity standards, methods to isolate the in-channel project include the following:
  - **a.** Divert flow with pumps or structures such as cofferdams constructed with non-erosive devices, such as sandbags, bladder bags, or other means that divert water. Diversion dams constructed with material mined from the stream or floodplain are not permitted.
  - **b.** <u>The temporary bypass system may consist of non-erosive techniques, such as a pipe or a plastic-lined</u> channel, both of which must be sized large enough to accommodate the predicted peak flow rate during construction. In cases of channel rerouting, water can be diverted to one side of the existing channel.
  - c. <u>Dissipate flow at the outfall of the bypass system to diffuse erosive energy of the flow. Place the</u> outflow in an area that minimizes or prevents damage to riparian vegetation. If the diversion inlet is not screened to allow for downstream passage of fish, place diversion outlet in a location that facilitates safe reentry of fish into the stream channel.
  - **d.** When necessary, pump water from the de-watered work area to a temporary storage and treatment site or into upland areas and filter through vegetation prior to reentering the stream channel.
  - e. <u>Any water intake structure (pump) authorized under the Programmatic BA must have a fish screen installed, operated and maintained in accordance to NMFS' fish screen criteria (NMFS,1995) (http://www.nwr.noaa.gov/1hydrop/hydroweb/ferc.htm</u>

## h.Flow Reintroduction

- i. Slowly re-water the construction site to prevent loss of surface water downstream as the construction site streambed absorbs water and to prevent a sudden increase in stream turbidity. Look downstream during re-watering to prevent stranding of aquatic organisms below the construction site.
- j. Site Restoration Methods to minimize sedimentation through site restoration include the following:
  - i. Upon project completion, remove project related waste. Initiate rehabilitation of all disturbed areas in

a manner that results in similar or better than pre-work conditions through spreading of stockpiled materials, seeding, and/or planting with native seed mixes or plants. If native stock is not available, use soil-stabilizing vegetation (seed or plants) that does not lead to propagation of exotic species.

- **ii.** Reconstruct the stream channel cross-section and gradient within the area formerly occupied by the ford in a manner that reflects more natural conditions found up and downstream. Large wood and/or boulders may be placed in the reconstructed stream channel and floodplain.
- **iii.** No herbicide application would occur as part of the permitted action (but see discussion of noxious weed treatment elsewhere in EA). Mechanical removal of undesired vegetation and root nodes is permitted.
- iv. When necessary, loosen compacted access roads, stream crossings, stream channel within the dewatered work area, staging, and stockpile areas.
- v. In-stream or floodplain restoration materials—such as large wood and boulders—shall mimic as much as possible those found in the project vicinity. Such materials may be salvaged from the project site or hauled in from offsite but cannot be taken from streams, wetlands, or other sensitive areas. Use cable in project design sparingly and only when conditions do not exist to anchor large wood naturally between riparian trees or to protect downstream structures.
- vi. Do not fell conifers in the riparian area for restoration purposes unless conifers are fully stocked or if necessary for safety. If necessary for safety, fell trees toward the stream and leave in place or place them in the stream channel or floodplain. This does not apply to conifer removal in areas necessary for project completion—staging and stockpile areas, road fill around culverts, and access roads.
- vii. When necessary, use steep-slope terracing.
- viii. Complete necessary site restoration activities within five days of the last construction phase.

3. Floodplains or wetlands	X	
4. Areas of special designation	x	
5. Health & safety	X	
6. Prime agricultural lands	X	
7. Special sources of water	X	
8. Consistency with state and local laws and regulations	X	
9. Pollution control at Federal facilities	x	
10. Other	X	