Supplement Analysis
for the
Columbia River Tributary Habitat Restoration Environmental Assessment
(DOE/EA-2126/SA-75)

Benewah Creek Rivermile 10.5 Stream and Wetland Restoration Project
BPA project number 1990-044-00
BPA contract number 84053 REL 9

Bonneville Power Administration
Department of Energy

Introduction

In December 2020, Bonneville Power Administration (BPA) and the Bureau of Reclamation completed the *Columbia River Basin Tributary Habitat Restoration Programmatic Environmental Assessment* (DOE/EA-2126). The Programmatic EA (PEA) analyzed the potential impacts of implementing habitat restoration actions in the Columbia River Basin and its tributaries.

Consistent with the PEA, this Supplement Analysis (SA) analyzes the proposed Benewah Creek Rivermile 10.5 Restoration Project that would implement some of the specific restoration actions assessed in the PEA. The objectives are to increase in-stream habitat diversity; increase floodplain connectivity; and improve riparian and floodplain vegetative diversity to the benefit of fish and wildlife species. This SA evaluates the site-specific impacts of the *Benewah Creek Rivermile 10.5 Stream and Wetland Restoration Project* to determine if it is within the scope of the analysis considered in the PEA. This SA also evaluates whether the proposed project presents no substantial new circumstances or information about the significance of the adverse effects that bear on the analysis and that were not addressed by the EA. The findings of this SA determine whether additional National Environmental Policy Act (NEPA) analysis is needed under 10 C.F.R. § 1021 *et seq*.

Proposed Activities

BPA would fund the Couer d'Alene Tribe to restore a 2,300 linear-foot stretch of Benewah Creek in the eastern portion of the Cour d'Alene Reservation on land owned by the Coeur d'Alene Tribe that has a conservatation easement held by BPA. The project is part of the Tribe's multi-year effort to restore and promote a riverine riparian ecosystem throughout the upper Benewah Creek valley. BPA would fund the project to support conservation of ESA-listed species considered in the 2020 ESA consultation with the U.S. Fish and Wildlife Service on the operation and maintenance of the Columbia River System. This action also 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. § 839 et seq.).

The Coeur d'Alene Tribe seeks to implement the project to enhance aquatic and wetland habitats in the Benewah Creek floodplain. This would be accomplished through the conversion of about 1.4 acres of upland habitat to wetlands, addition of in-channel structures, selective floodplain fill, and native plant revegetation. The total project area is about 44 acres, within which the area of disturbance would be about 3 acres, and approximately 2,657 cubic yards of total fill material consisting of soil, gravel, rocks, and wood would be placed within the project area to enhance stream function and wetland areas.

Specific design elements for construction under the proposal include:

- Reconnection of Benewah Creek to existing floodplain swales at the one-year return interval flood by grading and recontouring.
- Lowering bank height along 190 linear feet to reduce erosion rates.
- Removal of road fill within the floodplain.
- Addition of large wood to graded areas, including 3-4 pieces of wood per location.
- Construction of nine in-channel large-wood riffle complexes using pieces of wood embedded in the stream and bank.
- Bank stabilization using rock and soil lifts with fill materials (approximately 1,216 cubic yards) derived from soil salvaged on site from floodplain grading mixed with imported gravel from a nearby quarry.
- Native plantings (containerized, cuttings, and seeding) such as native willow cuttings from the Coeur d'Alene Tribe's nursery.

A temporary crossing would be constructed using no more than 13 cubic yards of ¾ inch-size gravel fill placed into Gore Creek to improve access for construction vehicle and cross Benewah Creek. To maintain flows, the gravel fill would be placed into Gore Creek, an intermittent tributary, around a 24-inch diameter, 16-foot-long high-density polyethene pipe buried to a minimum depth of 2 feet. A staging area would be created for construction vehicles and materials. Access would utilize an existing two-track road connecting the project site to Benewah Creek Road that would require some improvements using rock-fill material. Construction equipment to implement the design elements described above would include two excavators, one bulldozer, one skidsteer, and one tracked dumptruck. In-stream activities would occur only within the in-water work window between August 1 and September 30 to protect aquatic species.

Environmental Effects

The implementation of this project requires the use of construction crews and equipment that would disturb and displace soil in and along the river; damage vegetation; produce noise and emissions from vehicles and equipment; and temporarily increase vehicle traffic and human activity in the project area. Chapter 3 of the Programmatic EA, as summarized in the relevant parts below, discusses typical environmental disturbances and impacts stemming from habitat restoration in the Columbia River basin. Below is a description of the potential site-specific impacts of the project and an assessment of consistency with those described in the Programmatic EA.

1. Fish and Aquatic Species

Short-term construction activities may impact fish due to fish handling, dewatering, and potential sedimentation or contamination entering water bodies from the placement of fill material and floodplain grading. Before in-water construction, areas would be isolated and dewatered, and to the extent practicable, fish found in those areas would be removed using electroshock methods and then relocated downstream, which could result in a short-term moderate impact to individual fish. However, employing BMPs, such as following appropriate fish-handling protcols and keeping contamination from fuel leaks contained, as well as installing sediment and erosion control, and scheduling work so inwater work only occurs during low-flow periods (i.e., during the in-water work window) during late summer months, minimizes these impacts to a low level. In the long term, temporary moderate adverse effects to fish occurring during construction would be offset by the installation of in-channel structures, floodplain reconnection, and enhanced habitat complexity that would lead to low to moderate beneficial effects to fish and the aquatic environment. These project impacts would be consistent with those evaluated for fish and aquatic species in Section 3.3.1.2 ("Environmental Consequences for Fish and Aquatic Species") of the PEA, which similarly describes overall low impacts to fish and aquatic species after considering moderate

short term effects consisting of turbidity and construction impacts that are offset by long-term habitat benefits.

Due to the timing of the project occurring during the in-water work window and the presence of degraded habitat conditions in the project area, bull trout would not be present. There is also no designated critical habitat for bull trout in the project area. In addition, because no bull trout spawning or juvenile rearing have been documented in the surrounding watersheds, the timing restrictions avoid any potential effect to bull trout. For these reasons, there would be no effect to bull trout.

Long term, the project's installation of large wood structures, combined with enhanced riparian vegetation, would benefit fish primarily due to the enhancement of in-stream habitat complexity over time by slowing the velocity of Benewah Creek flows. That installation would also create refugia and pools that provide fish habitat when the creek overtops the banks and enters the floodplain. Consistent with the analysis in section 3.3.1.2 of the PEA, these anticipated long-term beneficial effects from improvements to in-stream fish habitat would be low to moderate.

2. Water Resources

Bank lowering, channel grading, fill placement, and riffle construction using large pieces of wood may temporarily increase adverse water quality effects due to turbidity because these activities can loosen and rearrange soils, leading to sediment discharge into Benewah Creek. This moderate short-term impact would be mitigated by employing sediment-control best management practices (BMPs) during construction and scheduling the project during the driest late-summer months when high-rainfall events are less likely. Additionally, the Tribe obtained an individual Clean Water Act Section 401 water quality certification from the U.S. Environmental Protection Agency issued on June 9, 2025, issued without conditions, finding that the project would be implemented in compliance with the applicable water-quality requirements. To address fill discharges into Benewah Creek, the Coeur d'Alene Tribe received authorization under section 404 of the Clean Water Act in accordance with Nationwide Permit 27 for Aquatic Habitat Restoration, Establishment, and Enhancement Activities on July 14, 2025. Overall, by implementing sediment-control BMPs such as those outlined in the Tribe's Stormwater Pollution Prevention Plan (SWPP) and adhering to its Clean Water Act certificate and permit standards that protect water quality, the moderate adverse effects on water resources would be reduced to a low-level adverse effect.

There would be no change in water quantity from the project. In addition, groundwater would benefit from enhanced floodplain connectivity and increase the potential for groundwater recharge. Long term, the project would yield moderate-to-high benefits through improved sediment retention and floodplain reconnection that could improve groundwater recharge.

These anticipated effects would be consistent with those evaluated for water resources in Section 3.3.2.2 ("Environmental Consequences for Water Resources") that discuss effects on water quantity, quality such as sedimentation/turbidity, and groundwater. The effects analysis in the PEA anticipated temporary water quality effects from in-channel work mitigated by timing windows, sediment-control BMPs, with long-term conditions enhanced for water resources by implementing restoration projects resulting in beneficial effects. Overall, with the implementation of mitigation measures discussed in the PEA and applied in the project such as phased rewatering, existing vegetation protection, minimizing areas to be impacted, and replantings, the level of adverse effect would be low and consistent with the finding of effect in the PEA.

3. Vegetation

Fields largely dominated by a herbaceous meadow and riparian shrub habitat along Benewah Creek as well as introduced non-native upland vegetation such as reed canary grass would be removed and replaced with native species (e.g., willow cuttings grown locally at the Couer d'Alene tribal nursery) via seeding and plantings. Surveys conducted of the project area to support wetland delineations did not locate any ESA-

listed or special-status plant species. Restoring riparian, wetland, and upland functions as well as seeding and planting native species would involve ground-disturbing activity and result in short-term impacts from crushing and compacting on-site vegetation. In particular, floodplain and stream bank grading would crush and uproot project-area vegetation, resulting in a short-term moderate effect. This would result in about 3 acres of short-term vegetation impacts and the project would convert about 1.4 acres of upland introduced vegetation to wetlands and riparian vegetation communities. Long term, the project would have moderate beneficial effects from increasing the local riparian plant community because more frequent watering from the introduced flows would promote healthy riparian plant growth.

The anticipated effects of the project align with the analysis of vegetation impacts from tributary habitat projects as detailed in Section 3.3.3.2 ("Environmental Consequences for Vegetation") of the PEA. The PEA evaluated vegetation restoration efforts, including the removal of invasive species and the replanting of native vegetation, as beneficial in the long term. It also identified moderate short-term disturbances to vegetation due to construction activities. To mitigate these adverse effects, bare soil would be reseeded with a native seed mix and plantings, in accordance with the mitigation measures outlined in Section 2.4 of the PEA. Overall, by implementing these mitigation strategies to minimize the impact of vegetation removal and encourage long-term beneficial growth of riparian plants, the project's effects would be moderate and consistent with the PEA's analysis.

4. Wetlands and Floodplains

Wetland delineation surveys conducted in 2025 determined that 30 acres, or about 70%, of the 44-acre project area consists of wetlands. Approximately 1.7 acres of these existing wetlands would experience short-term adverse effects due to the placement of fill material, resulting in a temporary loss of wetland functions in the project area. To mitigate these short-term impacts, the Tribe obtained a Clean Water Act Section 401 water-quality certification from the U.S. Environmental Protection Agency and as noted above, a permit authorization under Section 404 of the Clean Water Act (Nationwide Permit 27). In addition, the Tribe prepared a SWPPP outlining BMPs to manage stormwater during construction to avoid and minimize sediment from entering wetlands. In the long term, the project is anticipated to create over 9 acres of emergent wetlands by reactivating the floodplain through excavation and grading to reconnect to the existing wetland complex, and by placing fill to slow water flows in Benewah Creek. On balance, a low adverse effect due to the loss of existing wetlands would become a moderate beneficial effect from the long-term addition of wetlands.

These project effects would be consistent with those evaluated for wetlands and floodplains in Section 3.3.4.2 ("Environmental Consequences for Wetlands and Floodplains") of the PEA. The PEA evaluated short-term construction impacts within floodplains/wetlands describing temporary damage or destruction transitioning to long-term net benefits from increased wetland and floodplain function. Specifically, section 3.3.4.3 of the PEA describes overall low adverse impacts to wetlands and floodplains after considering potential high short-term adverse effects from construction and beneficial long-term effects from improved floodplain connection.

5. Wildlife

During construction, local wildlife known to inhabit the project site, such as beavers, may experience minor temporary displacement due to noise, movement of construction vehicles, and vegetation removal. In the short term, construction activity could destroy the habitats of small animals and temporarily displace and deter larger wildlife from using the project area due to noise and physical and visual disturbance from equipment operation and human activity. Abundant wildlife habitat is present in nearby areas surrounding the project, and wildlife would likely re-occupy the site once construction is complete and vegetation in disturbed areas is re-established. No ESA-listed wildlife would be present because surveys of the project site did not find their presence, nor that of any other special-status species. Construction activities would

occur in mid-to late summer, avoiding disturbance during the primary nesting season for migratory birds (generally spring and early summer). The project aims to deliver long-term benefits by restoring habitat and native vegetation. By enhancing floodplain function and establishing riparian vegetation, the project would improve the quality of wildlife habitat and support a greater diversity of wildlife species in the area. Overall, the construction-related disturbances, characterized by low intensity and short duration, would have a minimal adverse impact on wildlife.

These anticipated effects would be consistent with those evaluated for wildlife in Section 3.3.5.3 ("Effects Conclusion for Proposed Action on Wildlife") of the PEA. The PEA anticipates short-term construction impacts offset by long-term habitat benefits from improved riparian habitat resulting from the floodplain reconnection and native plantings. These effects are consistent with those analyzed in the PEA, specifically in section 3.3.5.3, which describes these restoration activities that, after considering short-term adverse effects from construction in combination with their intended long-term beneficial effects, result in a low level of effect to wildlife.

6. Geology and Soils

Construction crews would utilize heavy machinery to excavate soils from floodplain areas and place large wood and salvaged soil throughout the 3-acre disturbance area. In addition, 2,657 cubic yards of project-area soils—classified by Natural Resources Conservation Service soil unit as Lovell-Porrett complex typically found in floodplains deriving from volcanic ash—would be used as fill. Construction activities would have adverse effects on soils from breaking apart and exposing soils, as well as compaction from heavy equipment. In addition, due to the wet nature of the project area, construction may result in soil puddling, the result of operating heavy machinery in soils with a high moisture content to produce uniformly soft structureless mud. Overall, the short-term adverse impact to project-area soils would be low to moderate due to the exposed and compacted soils; with the long-term impact expected to result in a low-to-moderate beneficial effect from improved structure after the area revegetates as soon as the next growing season.

Consistent with the analysis in Section 3.3.6.2 ("Environmental Consequences for Geology and Soils") of the PEA, soil disturbance would be temporary, localized, and mitigated with erosion controls and site-rehabilitation measures (e.g., native plant revegetation). Overall, after applying these mitigation measures, the degree of effect from the project would be low to moderate, which, based on the discussion above, would be consistent with and potentially less than the effects analyzed in the PEA, which found that potentially moderate to high short-term effects would reduce to a moderate level after implementing mitigation measures and realizing the long-term soil benefits (section 3.3.6.3).

7. Transportation

The project's transportation impacts are consistent with the analysis in Section 3.3.7.2 ("Environmental Consequences for Transportation") of the PEA, which describes low impacts given the temporary nature of any effects on the nearby road. The project area is accessible from Benewah Creek Road to the northwest of the project area, and construction vehicles and equipment would access work areas from this road and temporary access routes on the site that would be established for construction. No closure of this road is anticipated for construction, and any impacts to road traffic as construction equipment is entering or leaving the site would be minor and temporary. The overall effects of the project on transportation would be low and consistent with the effects described in the Programmatic EA.

8. Land Use and Recreation

Land use at the project site would remain largely unchanged because it is not currently utilized for agriculture and is currently dedicated to conservation. Previous on-sites efforts to enhance fish and wildlife

habitat have involved installing wood structures in Benewah Creek. The existing fishing and hunting activities at the site are already limited, so related land uses would not be affected.

This negligible level of effect would be consistent with Section 3.3.8.2 ("Environmental Consequences for Land Use and Recreation") of the PEA describing short-term disruptions from restration actions as low to moderate. The PEA explains that because the reversion of land use to natural riparian conditions underlying most tributary habitat project sites would not change the preexisting underlying land uses, they would therefore result in a overall negligible effect.

9. Visual Resources

The effects of the proposed project on visual resources are consistent with the analysis in Section 3.3.9.2 ("Environmental Consequences for Visual Resources") of the PEA, which describes the effects on scenic values to be low. Users of Benewah Creek Road to the northwest of the project area would be able to see construction vehicles, equipment, and human activity Benewah Creek and in its floodplain while construction work is occurring. The visual conditions of the project site after construction would also be temporarily altered, with exposed soils from grading visible after construction is complete. After vegetation is re-established following construction, the project site would have a natural riparian appearance that would be compatible with the existing site features and visual character of the area, and there would be no long-term adverse effects on visual resources. The overall effect of the project on visual resources would be low and consistent with the effects described in the Programmatic EA.

10. Air Quality, Noise, Public Health, and Safety

Operating the small number of construction vehicles and equipment to implement the project would lead to low levels of air emissions and dust. The project would not have any long-term emission sources. Implementing BMPs, such as dust abatement measures like watering dry areas prone to dust production and turning off engines when not in use, would help minimize this overall effect. Temporary construction noise would occur, but because the project is in a rural setting, neighbors would be unlikely to experience noise from construction vehicles. There would be no long-term source of noise or public safety concerns resulting from the project. Adequate signage and other routine safeguards would minimize risks to worker and public safety during construction, and the constructed project would not impact public health or safety over the long-term.

These anticipated effects are also consistent with those evaluated for noise, public health, and safety in Section 3.3.10.2 ("Environmental Consequences for Air Quality, Noise, and Public Health and Safety") of the PEA. The Benewah Creek Restoration Project generally involve localized and short-duration construction activities and a relatively small number of construction vehicles, which results in an overall low level of project-related air quality.

The project would have low potential to produce noise, affect public safety infrastructure (e.g., roads and telecommunications) or to burden emergency services (e.g., police, fire, or ambulance). Overall, this level of impact would be low, which is consistent with the effects conclusion in section 3.3.10.3 of the PEA describing low impacts to air quality, noise, and public health and safety.

11. Cultural Resources

The Coeur d'Alene Tribe Cultural Resources department conducted a field survey in May 2025. Based on that report, BPA made a determination of *no historic properties affected* on June 5, 2025. The Tribal Historic Preservation Officer (THPO) for the Coeur d'Alene Tribe concurred with that determination of effect on June 26, 2025. One historic property located during field surveys would be avoided during construction by enforcing 500-foot buffer within which no disturbance would occur. THPO staff would work with project staff and construction contractors to develop an appropriate inadvertent discovery protocol and training, including proper notification of the THPO of the project schedule to facilitate training and compliance.

Additionally, in the event that cultural material is inadvertently encountered during the implementation of the project, THPO would be contacted to assess the discovery in consultation with BPA.

This is consistent with the discussion of effects to cultural resources in the PEA in Section 3.3.11.2 ("Environmental Consequences for Cultural Resources"). The PEA accounts for compliance with Section 106 of the National Historic Preservation Act (NHPA) and outlines standard unanticipated discovery procedures. The above analysis that determined no effect to historic properties thus would be consistent with the PEA's effects anticipated for cultural resources in Section 3.3.11.3 ("Effects Conclusion for the Proposed Action on Cultural Resources"). This PEA section describes low impacts to cultural resources from tributary habitat projects on that basis that restoration projects would avoid such resources or any effect that they have would be appropriately resolved through the applicable NHPA section 106 protocols.

12. Socioeconomics

Minor short-term benefit from materials purchases and local contract employment from an estimate of around $381,000 in direct project spending and temporary employment for about 5 workers, contributing a low-level benefit the regional and tribal reservation economy. The project would not result in requirements for additional permanent employees or for individuals to leave the local area or relocate within it, nor would it affect housing availability for local populations, displace people, or eliminate residential suitability of any lands.

These anticipated effects would be consistent with those evaluated for socioeconomics in the PEA Section 3.3.13.2 ("Environmental Consequences for Socioeconomics"). This section describes generally low-level effects upon local populations, economies, and local populations from tributary habitat projects.

13. Climate Change

The effects of the project on climate change are consistent with the analysis in Section 3.3.14.2 ("Environmental Consequences for Climate Change") of the Programmatic EA, which describes overall low effects to climate change. Due to the short duration of construction activities and the relatively small number of vehicles and equipment involved, project-related greenhouse gas emissions are expected to be low. The minimal contribution to climate change from construction-related emissions would be offset to some degree by the improvements to floodplain function, including a raised groundwater table, potential increases in carbon sequestration from improved wetland habitat, and potentially decreased stream temperatures from improved riparian vegetation success and groundwater inputs. Considered together, the overall effects of the project on climate change would be low and consistent with the effects described in the Programmatic EA.

Findings

BPA finds that the types of actions and the potential impacts related to the proposed Benewah Creek Rivermile 10.5 Restoration Project are similar to those analyzed in the Columbia River Basin Tributary Habitat Restoration Project (DOE/EA-2126) and Finding of No Significant Impact. There are no substantial changes in the EA's Proposed Action and no substantial new circumstances or information about the significance of the adverse effects that bear on the analysis in the EA's Proposed Action or its impacts within the meaning of DOE National Environmental Policy Act (NEPA), Implementing Procedures (dated June 30, 2025) and 40 CFR § 1502.9.[1] Therefore, no further NEPA analysis or documentation is required.

[1] BPA is aware that the Council on Environmental Quality (CEQ), on February 25, 2025, issued an interim final rule to remove its NEPA implementing regulations at 40 C.F.R. Parts 1500–1508. Based on CEQ guidance, and to promote completion of its NEPA review in a timely manner and without delay, in this SA BPA is voluntarily relying on the CEQ regulations, in addition to the DOE NEPA Implementing Procedures (dated June 30, 2025), to meet its obligations under NEPA, 42 U.S.C. §§ 4321 et seq.

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