Supplement Analysis
for the
Columbia River Tributary Habitat Restoration
(DOE/EA-2126/SA-79)

Yakama Nation's Pom Pom Road Toppenish Creek Restoration
BPA project number 1996-035-01
BPA contract number 96709

Bonneville Power Administration
Department of Energy

Introduction

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

Consistent with the Programmatic EA, this supplement analysis (SA) analyzes the proposed Pom Pom Habitat Restoration Project (Project), which would implement many of the specific restoration actions assessed in the Programmatic EA in the Yakima River Basin in Yakima County, Washington. Project objectives include enhancing spawning and rearing habitat for steelhead (*Oncorhynchus mykiss*) by increasing channel length and wetted area, providing increased channel habitat complexity and passage, adding shade and cover via riparian zone restoration, and improving floodplain function and connectivity to support long-term habitat complexity.

The SA also evaluates whether the proposed Project presents substantial new circumstances or information relevant to environmental impacts that were not addressed in the Programmatic EA. The findings of this SA determine whether additional analysis is needed under National Environmental Policy Act (NEPA), as amended and DOE's Implementing Procedures (dated June 30, 2025).

Proposed Activities

BPA proposes to fund the Confederated Tribes and Bands of the Yakama Nation (YN) to complete the Project along a 1.5-mile-long segment of Toppenish Creek between river miles (RM) 39 and 40.5. The limiting factors for the aquatic species of concern at this site are identified as poor aquatic habitat condition, active incision, disconnected floodplain, a fish passage barrier at the existing center culvert, and seasonally dry channel bed conditions in the existing mainstem that pose aquatic habitat impacts and passage issues. The Project would help to address the identified limiting factors.

The Project would support conservation of Endangered Species Act (ESA)-listed species considered in the 2020 ESA consultation between National Marine Fisheries Service (NMFS) and BPA, among other federal action agencies, on the operation, maintenance, and configuration of dam and reservoir projects comprising the Columbia River System. It would also support 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, 16 U.S.C. 839 *et seq*.

The Project is located along Toppenish Creek and its historical floodplain, approximately three miles southwest of the town of White Swan at the toe of Toppenish Creek's broad alluvial fan. Toppenish Creek is a primary tributary to the Yakima River basin. The existing Pom Pom Road prism and bridge run north to south, creating a perpendicular bisection of the Toppenish Creek mainchannel and its floodplain at RM 39.5. The existing mainstem passes through an entrenched flow route (South Canal) that was constructed through a terrace south of its historical floodplain to direct and contain flow under the Pom Pom Road bridge.

The Project would include bridge and culvert replacement; improvement of secondary channel and floodplain connectivity; increasing floodplain roughness; installation of habitat-forming natural material instream structures; riparian vegetation planting; channel plugging and enhancement; and headcut and grade stabilization.

YN would perform all in-water construction work between July 1 and October 31, during the approved in-water work window. This in-water work window was approved by both NMFS and Washington Department of Fish and Wildlife (WDFW) in order to have the least amount of impact to ESA-listed or state special status fish species. YN would develop temporary access routes and staging areas for use of heavy equipment, staging areas above the 100-year floodplain or 150 feet from waterbodies for all materials and equipment, and to minimize work area disturbance to existing riparian vegetation and soils.

Channel Enhancement

The South Canal was constructed originally to direct and contain Toppenish Creek under the existing Pom Pom Road bridge. Incision of the South Canal, exaggerated by bridge and road confinement, has perpetuated channel entrenchment. The South Canal would be plugged upstream of the existing Pom Pom Road bridge crossing in order to re-route the creek back into the historic mainstem channel.

A center channel also conveys creek flow and is directed under Pom Pom Road through a culvert. The center channel high flow rate created an incised channel. As part of this Project, the center channel would be plugged, approximately 700 feet upstream of the culvert. The channel would be re-routed towards the historic mainstem channel.

Both plugs would be constructed from compacted fill. The upstream sides of the plug would be reinforced with adequately sized substrate and armored with large wood. The fill for the South Canal plug would be sourced from stockpiled material generated via other restoration efforts undertaken by YN upstream on Toppenish Creek. The fill for the center channel plug would be sourced from material excavated for other Project components. The large wood structures at the upstream end of the plugs would provide aquatic habitat enhancement. The South Canal plug would have a sloping apron on the downstream end of the plug to facilitate seasonal cattle access to groundwater-sourced ponds.

Along the center channel section of the newly reactivated mainstem channel, the channel bed would have appropriately sized gravels and cobbles sourced from the Project area. Salvaged slash would be integrated into the sediment, as well as post assisted structures along the channel.

Post assisted structures would include vertical wooden posts (4 inches diameter x 8 feet length) and slash combined to form small log jams similar to beaver dams. Post would be installed 2.5 feet apart and at least 2 feet deep across the flow path to facilitate upstream capture of sediment and debris.

Improve Secondary Channel

The historic mainstem channel would be reactivated via three connector channels that link relic floodplain channels to the historic mainstem channel. Selective excavation along the connector channels would establish grade, define or reconnect flow routing, and provide fish-passage. All constructed connector channels would meet fish passage requirements. All excavated materials generated by excavating the connector channels would be utilized on-site as fill.

Groundwater supported off-channel habitat would be created by removing a natural sediment plug at the downstream end of the center channel which is partially wetted by groundwater. Currently, this channel is disconnected from the mainstem at the downstream end. Removal of the downstream sediment plug would reconnect the groundwater-fed portion of the center channel to the restored historic mainstem channel.

Bridge and Culvert Installation

A new 150-foot-long, single-span bridge would be installed to reactivate the historic channel and floodplain on the north side of the valley. The channel and a portion of the floodplain would be constructed under the new bridge to connect to the historic mainstem channel. An existing water main would be rebuilt between the new bridge girders to keep the water main out of the stream and floodplain. The road would be raised to provide roadway transitions to the bridge and to create space for a 500-year estimated flood to pass under the bridge with spare clearance (freeboard). The channel under the bridge would consist of an extended rock riffle to connect the upstream and downstream ends of the reconstructed main channel, while also providing fish passage and grade control.

Three, 21-foot-diameter, four-sided reinforced concrete culverts would be installed into the Pom Pom Road prism to reactivate the historic floodplain. Minor floodplain grading to facilitate flow routing to desired locations would occur on the downstream side of the culverts and would be included in the culvert installation. The constructed flow routes and culvert bottoms would be lined with gravel to limit deformation and support unexpected and potential fish passage during high flood events. An existing water main would be buried beneath the three culverts' bottom. Culverts would be designed to provide six inches of freeboard for a modeled 500-year estimated discharge.

Two existing culverts ("North Culvert" and "Center Culvert"), in the vicinity of the three new culverts, would be removed and the road prism would be reconstructed in that location.

Floodplain Roughness

Floodplain roughness treatments would occur in selected locations across the historic floodplain that is currently lacking adequate roughness due to vegetation loss from the 2024 Slide Ranch wildfire burning through the Project area. Adding roughness features to burned areas that would be inundated would reduce soil erosion potential, promote localized sedimentation, and support native revegetation objectives. Floodplain roughness treatments would use weed-free straw bales. The bales would be placed in off-set rows generally perpendicular to surface flow routing. The bales would be secured with stakes at the downstream end. Upstream of the bridge, rows of straw bales would alternate with trenches of live stakes (willow and cottonwood). Downstream of the bridge, locally generated slash would be placed between the rows of straw bales.

Install Habitat-Forming Instream Structures

Engineered large wood (LW) structures would be installed along the reconnected historic mainstem channel and at the upstream end of channel plugs to support channel function and create aquatic habitat. LW structures would be bank-buried and covered with approximately 2.5 feet of native backfill, with rootwads exposed. Slash would be woven between logs to create habitat complexity within the LW structures.

Road Berm

A narrow berm of fill would be placed along a segment of Marion Drain Road at the downstream end of the Project area. Toppenish Creek has been aggrading at this section of Marion Drain Road. The berm would reduce the flow inundation of the road, however, it is not designed to protect the road at all flood events. The berm would be constructed of course material such as a mix of sand, gravel, and silt.

Vegetation Management

YN would revegetate areas disturbed by construction activities with native plantings using seed mixes and live plants (potted, plugs, and stakes). Additionally, willow trenches would be planted with native

willows to assist in the creation of floodplain roughness and shade of the newly enhanced floodplains and channels. The upland seed mix would include Blue wildrye (*Elymus glaucus*), Bluebunch wheatgrass (*Pseudoroegneria spicata*), Indian ricegrass (*Achnatherum hymenoides*), Sandburgs bluegrass (*Poa secunda*), Western yarrow (*Achillea millefolium*), Idaho fescue (*Festuca idahoensis*), and Dryland alfalfa (*Medicago sativa*). The riparian seed mix would include Blue wildrye, Thickspike wheatgrass (*Elymus lanceolatus*), and Bluejoint reedgrass (*Calamagrostis canadensis*). The riparian live plants would include Black cottonwood (*Populus balsamifera ssp. trichocarpa*), Coyote willow (*Salix exigus*), Black hawthorn (*Crataegus douglasii*), Mock orange (*Philadelphus lewisii*), Red osier dogwood (*Cornus sericea*), Pacific willow (*Salix lucida ssp. lasiandra*), Woods' rose (*Rosa woodsia*), and Western serviceberry (*Amelanchier alnifolia*). The willow trenches would consist of Black cottonwood, Coyote willow, and Pacific willow.

As part of the revegetation plan, the YN would mechanically and chemically treat invasive species within the Project area. This would help to minimize invasive species while promoting the increase in the native vegetation within the Project area. All herbicide treatments would follow BPA's Habitat Improvement Program (HIP) best management practices.

Livestock Exclusion Fence

YN would construct a new livestock exclusion fence, where needed, to protect the Project area from undesired grazing impacts. An existing fence that runs east to west along an access road in the middle of the Project area and across the reactivated mainstem channel would be removed.

Environmental Effects

Chapter 3 of the Programmatic EA as summarized in relevant analysis below, discusses typical environmental disturbances and impacts stemming from habitat restoration in the Columbia River basin. Below is a description for the Project's potential site-specific impacts and an assessment of whether these impacts are consistent with those described in the Programmatic EA.

1. **Fish and Aquatic Species**

The effects of using construction equipment in and along Toppenish Creek are consistent with the analysis in Section 3.3.1 of the Programmatic EA (*"Fish and Aquatic Species"*). Section 3.3.1.3 of the Programmatic EA describes overall low impacts to fish and aquatic species after considering moderate short term effects.

ESA-listed Middle Columbia steelhead (*Oncorhynchus mykiss*), Chinook salmon (*Oncorhynchus tshawytscha*), coho salmon (*Oncorhynchus kisutch*), and their designated critical habitat are present within the Project area. BPA completed Section 7 consultation on the potential effects of the Project on ESA-listed species under BPA's programmatic Fish and Wildlife HIP biological opinion. The Project would include implementation of HIP conservation measures, such as staged rewatering of newly formed area and exposed soils to minimize turbidity.

Overall, short-term Project impacts to fish and aquatic species would be moderate, consistent with the analysis in Section 3.3.1.2.1 of the Programmatic EA (*"Short-term Effects of Fish and Aquatic Species from Construction Activities"*). The short-term effects of the Project would include exposing, displacing, reconfiguring, or compacting earth with mechanized equipment within and along Toppenish Creek. This would likely cause moderate, temporary sediment discharges, primarily from the introduction of first time flows into newly constructed floodplain and channels. These impacts would be minimized because new excavations would be accomplished "in the dry" with no exposure to new flows wherever possible while applying conservation measures from BPA's ESA consultation upon wetting the newly excavated areas. Though the amount of sediment discharge would be elevated, turbidity levels would be less than that which they would encounter annually during natural high flow events as discussed in Section 3.3.2.3 in the Programmatic EA, and below levels harmful to fish and at durations not anticipated to cause harm as evaluated in Section 3.3.1.2.1 of the Programmatic EA (*"Short-term Effects to Fish and Aquatic Species from Construction Activities"*). As described therein, these durations would have a low

potential for triggering the behavioral and physiological effects from elevated water temperatures induced by high suspended sediment concentrations absorbing and transferring solar energy into the water.

Movement, sounds, and vibrations from construction-related human and mechanical activities would temporarily disturb and displace fish and aquatic organisms from their preferred habitats for the duration of the disturbance. This sound and vibratory disturbance would be minimized as the new sections of side-channels would be constructed in the dry; some work in the existing channel, such as channel plugging, would require work area isolation if water is present. The work area isolation and in-stream construction activities would displace fish until it is reintroduced to creek flows. Small aquatic organisms that could not be practicably salvaged would likely be destroyed. The newly constructed in-stream environment would be recolonized by fish and other aquatic organisms, with nearly all fish likely returning in a matter of hours to days, and with full returns likely following the seasonal flushing flows. The anticipated amount of activity and the level of aquatic species disturbance is consistent with the analysis in Section 3.3.1.2.2 of the Programmatic EA (*"Short-term Effects of Fish and Aquatic Species from Construction Activities"*) which analyzed similar work area isolation and associated effects.

Project implementation would have beneficial long-term effects on fish and aquatic species from increased stream complexity, enhanced riparian cover, improved erosion protection along Toppenish Creek, increased floodplain access and flows, and an expected reduction in summer water temperatures. These beneficial effects are consistent with the analysis in Section 3.3.1.2.2 of the Programmatic EA (*"Effects to Fish and Aquatic Species"*).

Overall, Project impacts would be consistent with Section 3.3.1.3 of the Programmatic EA (*"Effects Conclusion for the Proposed Action on Fish and Aquatic Species"*), which concluded low impacts to fish and aquatic species after considering moderate short-term adverse effects and beneficial long-term effects.

2. **Water Resources**

Several aspects of Project construction – including mechanized equipment operation, channel plugging, channel enhancement, large wood structures, and floodplain enhancement along Toppenish Creek – would temporarily expose, displace, reconfigure, or compact earth. In-stream construction, work area isolation, and floodplain and channel enhancement could briefly cause plumes of sediment discharge during work area isolation and reintroduction to flow activities. These short-term effects would be lessened by the application of mitigation measures, such as staged rewatering to slowly reintroduce flows into dewatered areas, installing sediment barriers in work areas as needed, and soil stabilization utilizing mulch to reduce erosion of bare soil, as detailed in Section 2.4 of the Programmatic EA (*"Mitigation Measures and Design Criteria"*). With the implementation of the mitigation measures and the extent and duration of any resultant turbidity plume, the Project's anticipated impact to water quality would be low, consistent with the analysis in Section 3.3.2.3 of the Programmatic EA (*"Effects Conclusion for the Proposed Action on Water Resources"*). The Programmatic EA describes overall low water quality impacts after considering moderate short-term adverse effects and beneficial long-term effects. There would be no impact on water quantity as no water withdrawls are proposed.

The Project would result in a long-term decrease in unnatural sediment inputs by increasing sediment storage potential and increased floodplain access. The Project is expected to result in long-term reduction in stream temperatures from improved stream form, increased floodplain access, and increased vegetative cover and protection. These long-term beneficial effects are consistent with those described in the Programmatic EA.

3. **Vegetation**

No ESA-listed or state special-status listed plant species are present within the Project area. Project implementation, including the channel plugging, channel and floodplain enhancement, herbicide treatment, establishment of overland temporary access routes, staging, and spoil disposal areas would

have moderate short-term impacts to the floodplain, and YN would minimize disturbance to riparian areas during construction to the extent practicable. Herbicide treatments would target non-native and invasive plant species, avoiding populations of native species in the Project area. Any trees or woody material removed during Project construction would be re-established. After construction, YN would re-vegetate temporary work areas. YN would expand the limited existing riparian corridor by re-seeding and planting using native stock. Increased floodplain inundation would improve vegetation diversity and density in the long term.

The effects of using construction equipment and manually working in and along Toppenish Creek are consistent with the analysis in Section 3.3.3.3 of the Programmatic EA (*"Effects Conclusion for the Proposed Action on Vegetation"*). The Programmatic EA describes overall moderate impacts to vegetation after considering moderate adverse short-term impacts on vegetation from construction and highly beneficial long-term benefits from increased riparian habitat and restored or improved vegetative conditions. Consistent with the Programmatic EA, the overall effect of this Project would be moderate.

4. **Wetlands and Floodplains**

The wetlands delineated in the overall Project area totals about 16.4 acres; however, about 0.1 acre of wetlands would be directly impacted by Project activities. The short-term effects on wetlands would be moderate and temporary ranging from crushing wetland vegetation to the potential removal of wetland vegetation and soils through the use of heavy equipment operations in and around the identified wetlands. Construction activities would require excavation adjacent to the wetlands during Project activities which could cause short term negative impacts. The YN worked with the U.S. Army Corps of Engineers (Army Corps) and determined this Project fits under Nationwide Permit 27 under Section 404 of the Clean Water Act. The YN would avoid adjacent wetlands and would adhere to all requirements and prescriptions set forth in the Army Corps permit for activities occurring within the wetland.

In the long term, the Project could increase wetland acreage and improve floodplain conditions. The floodplain roughness, large wood structures, and channel enhancement would slow down stream flows and increase floodplain inundation potential. Wetland quality would improve due to the restoration of natural flow patterns and enhancement of native plants. With greater floodplain connectivity at the site, wetland hydrology would likely improve, potentially expanding the wetland area and reestablishing native vegetative communities.

Flow redirection from large wood structures and channel enhancement would facilitate more natural lateral movement onto the floodplain, which would slow velocities, facilitate more effective connection between channels and the floodplain, and provide more effective sediment movement and retention in the floodplain. The long-term beneficial effects on wetlands from improved floodplain connectivity would outweigh the negative short-term effects. Impacts to wetlands and floodplains are consistent with the analysis in Sections 3.2.2, 3.2.9, and 3.3.4 of the Programmatic EA (respectively entitled *"Effects Specific to Category 2 – Improving River, Stream, Floodplain, and Wetland Habitat," "Effects Specific to Category 9 – Riparian and Upland Habitat Improvements and Structures,"* and *"Effects to Resources by Resource Type – Wetlands and Floodplains"*). Consistent with the Programmatic EA, there would be long term beneficial effects from increased connectivity between Toppenish Creek and the floodplain.

5. **Wildlife**

No ESA-listed or state special-status terrestrial species are known to exist within the proposed Project area. In the short term, human presence may cause sound and movement that temporarily disturbs local wildlife. Specifically, construction and vegetation removal may temporarily displace mobile species such as birds and small mammals for the duration of such activity, while harassing, harming, or killing smaller, less mobile species and depriving them of habitat. However, abundant similar wildlife habitats are present adjacent to the Project area. These effects would be limited in duration, and there would be no long-term negative changes to wildlife habitat. In the long term, the proposed Project would increase

the richness and diversity of plant species as well as the extent, heterogeneity, and structural diversity of riparian habitat.

Potential wildlife impacts are consistent with the analysis in Section 3.3.5.3 of the Programmatic EA (*"Effects Conclusion for the Proposed Action on Wildlife"*). The Programmatic EA determined moderate-to-high short-term effects on individual small wildlife species, such as potential construction-related mortality, but comparatively minor impacts on larger animals that may only be temporarily displaced from construction-affected habitats. No population level impacts to wildlife species are anticipated. In the long term, however, wildlife populations would benefit from the increased habitat quality and carrying capacity resulting from the Project. The overall effects of this Project would be low and consistent with those evaluated in the Programmatic EA.

6. **Geology and Soils**

The short-term effects from this Project's construction activities would be moderate due to the proposed channel enhancement; channel plugging; large wood structure construction; floodplain roughness; work area isolation actions; and soil compaction by heavy equipment which were considered in the Programmatic EA. These impacts would temporarily increase localized soil erosion potential and decrease soil structure. However, use of erosion and sediment control measures, coupled with post-construction site-restoration activities – including site decompaction and re-seeding – would mitigate these impacts.

Long-term improvement to soils is expected once disturbed surfaces are re-seeded and riparian plantings are established and stabilize the soil surface. Long-term improvement to sediment transport and floodplain access within the Project reach would restore natural sediment-forming processes.

Impacts to geology and soils are consistent with the analysis in Section 3.3.6.3 of the Programmatic EA (*"Effects Conculsion for the Proposed Action on Geology and Soils"*), which anticipates overall moderate impacts to geology and soils after considering moderate-to-high short term adverse effects lessened by the implementation of mitigation measures for long term beneficial effects. The overall effects of this Project would be consistent with those evaluated in the Programmatic EA.

7. **Transportation**

The Project area is accessible via Pom Pom Road, which runs along the eastern extent of the Project area. Temporary access routes developed during Project mobilization would provide off-road access across the Project area. Temporary closing of Pom Pom Road could detour traffic to either Marion Ditch Road, Mission Road, or Signal Peak Road for about six months during the construction of the bridge and culverts along Pom Pom Road. Once construction is completed, YN would reopen Pom Pom Road with full access. Yakima County and Washington State Department of Transportation evaluated and agreed upon all bridge, culvert, and road closures. Overall, the Project would have a low effect on transportation due to the availability of detours around the work areas.

The Project's transportation impacts are consistent with the analysis in Section 3.3.7.3 of the Programmatic EA (*"Effects Conclusion for the Proposed Action on Transportation"*), which anticipates a low impact overall given the temporary nature of any effects on roads.

8. **Land Use and Recreation**

The Project is located on YN Reservation land previously utilized as rangeland for cattle grazing, a practice that continues on adjacent land that the YN leases. Recreation is not currently – nor planned to be – a primary use of this land. In the short-term, construction activities would require relocation of the lessees' cattle to another grazing allotment for the duration of construction. In the long term, cattle grazing in the riparian zone – though currently allowed – would be restricted. Changes to cattle grazing in the area would not be a major effect on the overall quantity of land available due to the plentitude of adjacent grazing areas. Further, the changes in grazing use in the Project area would be consistent with

the YN's objectives in managing this area (i.e. improving fish passage, fish populations, and species diversity, and restoring riparian habitats, among other goals).

Impacts to land use and recreation are consistent with the analysis in Section 3.3.8.3 of the Programmatic EA ("*Effects Conclusion for the Proposed Action on Land Use and Recreation"*), which concludes that land use and recreation practices underlying Project sites would remain unchanged in most cases. Although the floodplain and channels would become reconnected and wetted, the Project's overall effects on land uses and recreation would be low due to the short duration of the Project's construction and return to pre-Project land uses after construction. This would be consistent with the level of impact evaluated in the Programmatic EA.

9. **Visual Resources**

The proposed Project is not within a visually sensitive area, but tribal and private users of the adjacent Reservation land would have the potential to be able to see Project activities. Users would have the potential of seeing heavy equipment during Project activities within the channel and temporarily exposed soil until vegetation is re-established. After vegetation re-establishment, the Project would have a natural appearance and would not visually detract from the area.

Impacts to visual resources are consistent with the analysis in Section 3.3.9.3 of the Programmatic EA (*"Effects Conclusion for the Proposed Action on Visual Resources"*), which concludes that the effects on scenic values would be low. The overall effects of this Project on visual resources are expected to be low and would be consistent with those evaluated in the Programmatic EA.

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

Air quality impacts from exhaust and dust emissions from construction equipment would be temporary and localized in nature, with no long- or short-term violations of state air quality standards expected as a result of the Project implementation.

Noise levels for users of the adjacent area would be affected by the operation of construction machinery during excavation of channels and floodplain, and placement of habitat structures. This temporary effect, however, would be minor as it would be generated by a small number of additional vehicles and equipment for a short period of time. Further, it is expected that noise levels would be temporary, and users would use alternative nearby locations that would be subject to less noise. Although construction, transportation, and site-rehabilitation activities would temporarily elevate ambient noise levels at the construction site, the Project would not result in long term changes to noise levels.

Adequate signage, road closures, and other routine safeguards would minimize risks to workers and public safety, including Pom Pom Road and off-road access locations, for the duration of construction and site restoration.

Impacts to air quality, noise, and public health and safety are consistent with the analysis of Section 3.3.10.3 of the Programmatic EA ("*Effects Conclusion for the Proposed Action on Air Quality, Noise, and Public Health and Safety"*), which found the Project's noise effects – and the restoration program's effects on air quality, public health, and safety – to be low. The Project's overall effects would be consistent with those evaluated in the Programmatic EA.

11. **Cultural Resources**

Consistent with National Historic Preservation Act (NHPA) Section 106, BPA initiated consultation (WA 2022 223) with the Confederated Tribes and Bands of the YN and the YN Tribal Historic Preservation Office (THPO) on October 14, 2022. YN THPO responded on October 14, 2022, concurring with the area of potential effect (APE) as proposed, and requested cultural survey of the area in addition to monitoring of all proposed activities during implementation. BPA re-initiated consultation on April 2, 2023 with an amended APE, and again on May 1, 2023 when the APE was further amended. On September 25, 2023, BPA received and reviewed a letter from the YN THPO summarizing the archaeological survey for the Project, in which YN THPO concurred with the YN Fisheries archaeologist's

recommendation of a determination of no adverse effect to historic properties. On October 5, 2023, BPA determined that the Project would have no adverse effect to historic properties based on the determination from the YN THPO.

Potential cultural resource impacts are consistent with the analysis in Section 3.3.11.3 of the Programmatic EA (*"Effects Conclusion for the Proposed Action on Cultural Resources"*). The Programmatic EA describes low impacts to cultural resources, with any potential effects being resolved through the Section 106 consultation process under the NHPA, and the impacts from the Project would be consistent with those evaluated in the Programmatic EA.

12. **Socioeconomics**

The Project would have small, temporary, but beneficial socioeconomic impacts by providing jobs for construction workers and boosting purchases of food, fuel, lodging, and materials during construction and restoration activities from local businesses in smaller communities. Improvements to natural scenery and recreational enjoyment could have long term socioeconomic benefits.

Consistent with the analysis in Section 3.3.13.3 of the Programmatic EA ("*Effects Conclusion for the Proposed Action on Socioeconomics and Environmental Justice*"), the Project is anticipated to have low socioeconomic impacts due to the small scale and dispersed nature of the work involved. Overall, there would be no permanent adverse socioeconomic effects from the Project, and the effects would be consistent with those evaluated in the Programmatic EA.

13. **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 anticipated to be low. This minimal contribution to climate change would be offset to some degree by the increased functioning of the floodplain including increased water table inputs, increased carbon sequestration in expanded and improved riparian habitats, and potentially, decreased water temperatures from improved instream and riparian habitat conditions. The overall contribution to climate change and greenhouse gas production would be low.

Impacts to climate change from the Project are consistent with the analysis in Sections 3.2.2, 3.2.9, and 3.3.14 of the Programmatic EA (respectively entitled "*Effects Specific to Category 2 – Improving River, Stream, Floodplain, and Wetland Habitat,*" "*Effects Specific to Category 9 – Riparian and Upland Habitat Improvements and Structures,"* and "*Effects to Resources by Resource Type – Climate Change"*). The Programmatic EA found effects on climate change would be low, and the Project's impacts would be consistent with those evaluated in the Programmatic EA.

Findings

BPA finds that the types of actions and the potential impacts related to the proposed Project are similar to those analyzed in the *Columbia River Basin Tributary Habitat Restoration Programmatic Environmental Assessment* (DOE/EA-2126) and Finding of No Significant Impact. There are no substantial changes in the Programmatic 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 Programmatic EA's Proposed Action or its impacts within the meaning of the 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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