Supplement Analysis for the Columbia River Basin Tributary Habitat Restoration (DOE/EA-2126/SA-65)

Asotin Creek Project Area 11.2 Fish Habitat Restoration BPA project number 1994-018-05 BPA contract number 95078

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 effect of the proposed Asotin Creek Project Area 11.2 Fish Habitat Restoration (project), which would implement many of the specific restoration actions assessed in the Programmatic EA in the Snake River Basin in Asotin County, Washington. Project objectives include increasing habitat diversity and quantity of key habitats, such as pools, gravel bars, and undercut banks, for Endangered Species Act (ESA)-listed steelhead (*Oncorhynchus mykiss*), Chinook salmon (*O. tshawytscha*) and bull trout (*Salvelinus confluentus*) and improving access to the Asotin Creek floodplain.

This SA also evaluates whether the proposed project presents 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 proposes to fund the Asotin County Conservation District (ACCD) to complete the project along a 1.4-mile-long section of Asotin Creek, near river mile 15, starting below the confluence of the North and South Fork of Asotin Creek and ending above the confluence of the mainstem of Asotin Creek and Charley Creek (Figure 1). Asotin Creek is a tributary of the Snake River and land use varies from residential to agricultural and cattle use. The channel, riparian area, and floodplain in the project area has been straightened and habitat has been simplified due to channel modifications that were in response to historic floods and agricultural and rural development. These actions have contributed to channel incision and decreased habitat complexity. Additionally, the Lick Creek fire in 2021 burned a large portion of the riparian forest near the upstream end of the reach on river left.

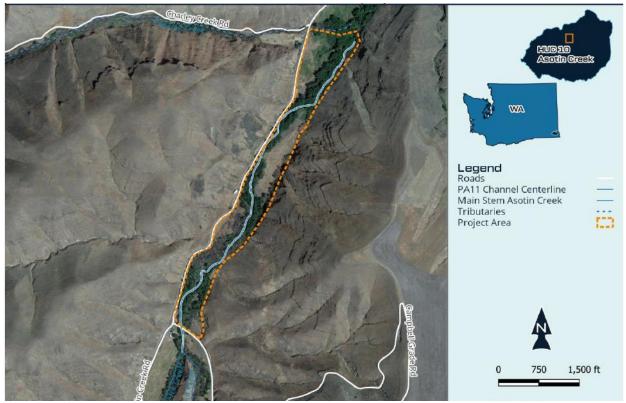


Figure 1. Project vicinity map.

Project actions would occur over an 86-acre area and would impact about 7 acres through the activities described below.

1. Wood Structures

The project would install four types of engineered log jams (ELJs), including up to five apex jams, nine mid-channel jams, 20 bank-attached jams, and seven channel spanning jams. Boulders and native alluvium would be used as ballast, and hardware may be used to hold the jams together. To increase the stability of the wood jams, key pieces may be buried into the banks or streambed, ballasted with boulders, wedged between live trees, or a combination of all options. Live cuttings of native riparian shrubs, emergent trees, and native grass seed would be added to ELJs during installation, prior to backfilling with boulders and native alluvium. Logs used for ELJs would be procured from an offsite logging operation and the native alluvium would be excavated onsite during levee modification and side channel grading (as described further below). Heavy equipment would be used to dig trenches, move material into place, and bury portions of the structures. Saws and other gas-powered and handheld tools would be used to aid in the construction of ELJs. Work area isolation would be implemented during installation.

An estimated 1,650 cubic yards of material would be excavated during installation of ELJs. Some of that material would be reused as backfill or in other parts of the project. Excess excavated material would be deposited in a spoils disposal area, outside of the 100-year inundation boundary.

The project would also install Post Assisted Log Structures (PALS) by driving untreated wood fence posts into the streambed and banks, a minimum of 2.5 feet deep, at alternating angles. PALS installation would be focused on areas within the floodplain that are outside of the ordinary high water mark and

would not require work area isolation. Bank-attached PALS would span 50 to 95 percent of the bankfull channel, be connected to a bank, and be oriented downstream. Mid-channel PALS, typically wider than they are long, would span 50 to 70 percent of the bankfull channel and not be connected to a bank. Channel-spanning PALS would be built to span the full bankfull channel, connected to both banks, and placed generally perpendicular to the primary flow. Channel-spanning PALS may be oriented up to 30 degrees to shunt flows in a preferred direction. A minimum of seven posts would be used per structure and be driven into the streambed with a hand or gas-powered post pounder. Posts would not exceed bankfull elevation or 3 feet in height, whichever is less, and would be cut with a chainsaw if needed. In high-energy, bedload-dominated sections of the reach, cobbles and boulders may be placed within the PALS and arranged in a line at the base of posts on the upstream side to increase stability. Source materials would be from local native species, such as conifers (posts) and materials excavated onsite (boulders and cobbles).

2. Levee Modification

Levees and berms that cut off access to floodplain areas and do not coincide with human infrastructure would be re-graded to elevations that allow floodplain activation at the two-year recurrence interval. Levees would only be partially graded to maintain protection of existing structures and reduce costs. Approximately five levees in the project area would be modified. None of these levees would need approval for the modifications by the United States Army Corps of Engineers under Section 408 of the Rivers and Harbors Act of 1899. Heavy equipment would be used for grading and excess excavated material would be deposited outside of the 100-year inundation boundary. Excavated material may be used on-site as ballast for the installation of large wood structures. An estimated 1,300 cubic yards of material would be excavated. Work would be done in the dry so no work area isolation would be required for this activity.

3. Side Channel Reconnection

Up to 10 side channels with activation recurrence intervals greater than the two-year recurrence interval would have grading at the inlet to decrease the activation recurrence interval. Only side channel inlets would be graded to reduce the impact on existing riparian vegetation and allow for natural processes to further distribute flow across side channels and the floodplain. Heavy equipment would be used for the work and approximately 600 cubic yards of material would be excavated and excess excavated material would be deposited outside of the 100-year inundation boundary. Excavated material may be used on-site as ballast for the installation of large wood structures. Work would be done in the dry so no work area isolation would be required for this activity.

4. Riffle

The project would construct an engineered riffle at the entrance to one of the side channels near the existing ford to stabilize the headcut forming at the ford. The engineered riffle would maintain side channel connectivity during higher flows but minimize erosive potential, minimizing risk to the existing ford. The work area would need to be isolated and heavy equipment would be used to place the streambed materials to construct the riffle. Fines would be washed into each layer of materials with a trash pump and fire hose.

5. Legacy Structure Removal

Four existing structures within the project area would be modified or removed to improve fish passage. One structure is a relic diversion and fish screen that is no longer in use and would create a barrier in a newly reconnected side channel. This structure would be removed using the heavy equipment that would be present for grading the side channels. The other structures include a log weir and two rock weirs that have been evaluated for juvenile passage and found to be barriers. These structures would be modified by moving their individual components (boulders and logs) in the stream, using heavy equipment operated from the banks, to allow for improved passage conditions.

6. Fencing

There is existing fencing in the project area. Fencing that no longer provides a function would be removed. Fencing that is damaged would be repaired during construction clean up.

7. Site Preparation, Reclamation, and Restoration

Site access, staging, and sequencing would be implemented in accordance with conservation measures outlined in BPA's Fish and Wildlife Habitat Improvement Program (HIP). The site would be accessed from Asotin Creek Road on the north side of the creek. Existing ranch roads or feedlot areas would be used where possible. Depending on site conditions, a stabilized construction entrance may be required for access from public roads. Two temporary staging/stockpile areas with nearby refueling/fuel storage areas (minimum 150 feet from the creek or wetlands) would be created. Two spoils disposal areas would be created, outside the 100-year inundation boundary. Temporary staging/stockpile and spoils disposal areas would total approximately 190,000 square feet. Approximately 6,500 linear feet of temporary access roads would be created where there are no existing roads to connect work areas with staging/stockpile and spoils disposal areas. Up to eight temporary stream crossings would be built to allow access to both sides of the creek. Erosion and sediment controls would be installed and maintained throughout construction and until all disturbed soils are revegetated or stabilized. Construction may require the use of an excavator (tracked), log loaders (tracked or wheeled or a combination), haul trucks, dump trucks, an excavator mounted vibratory pile driver, work trucks, chain saws, drills, cut-off saws, and other handheld tools.

Project construction would take place within the approved in-water work window with revegetation planting occurring during construction, in the fall, or the following spring. Work areas that are within the wetted channel at the time of construction would be isolated from surface water flow. Fish would then be salvaged from the isolated area prior to any construction activities. Work area isolation measures may include bulk bags, super sacks, or sheet pile coffer dams. Any isolated area would be monitored for turbidity during construction activities and turbidity curtains may be used as necessary. Construction activities that would require dewatering may include excavation, pile driving, or large wood placement (or a combination). Water from dewatering pumps would be discharged to an upland location for infiltration.

All disturbed areas would be rehabilitated in a manner that results in similar or improved conditions relative to pre-project conditions. All streambanks, soils, and vegetation would be cleaned up and restored as necessary using stockpiled large wood, topsoil, and native channel material. All project-related waste would be removed. All temporary access roads, crossings, and staging areas would be decompacted and re-contoured. When necessary for revegetation and infiltration of water, compacted areas of soil would be loosened.

Seeding and planting with local native seed mixes or plants would occur in all disturbed areas, including approximately two acres in riparian areas and six acres in upland areas. All shrubs excavated during construction would be salvaged to the extent practicable and replanted or buried throughout the excavated areas of the site. Bare root trees, emergent trees and shrubs, and live cuttings of shrubs would be planted throughout the project area. Herbaceous grass and forb species would be seeded throughout all areas disturbed during construction, including in temporary access, staging, and fueling areas after they are no longer in use, with native seed mixes that are readily available and appropriate

for the site. Seeding would be conducted through broadcast hand seeding methods. Seeding may be accompanied by mulching (weed free straw) to reduce erosion, provide ground cover, and reduce the likelihood of invasive species encroachment. Seeding may also occur a year after construction and may require scarifying the original seed bed. Weeds in the project area may be removed, up to a year after construction, via mechanical or chemical means. Crews may dig up, pull, or spot spray weeds in the project area with herbicides to reduce encroachment of invasive species in the project area. Equipment used for planting, seeding, and weeding would include shovels, weed eaters, brush cutters, planting spades, and planting bars.

8. Adaptive Management

ACCD would monitor the effectiveness of the improvements for 10 years after construction is complete. If failures in system function, structure function and integrity, or risks to infrastructure, riverscape processes, or fish passage occur, ACCD would implement adaptive management procedures. These procedures would include installation of new structures of the same type originally installed (not to exceed two per year) or modification of structures (not to exceed the addition of more than 100% of materials used during original construction of the structure) or a combination of both. ACCD would also implement adaptive management procedures if there were low survival or establishment of native vegetation.

These actions would support the conservation of ESA-listed species considered in the 2020 ESA consultations between National Marine Fisheries Service and the U.S. Fish and Wildlife Service (USFWS) on the operation and maintenance of the Columbia River System. Funding the project would also support ongoing efforts to mitigate for effects for 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*.

Environmental Effects

The implementation of this project requires the use of construction equipment and manual hand tools which would disturb and displace soil in and along the streams; damage vegetation; produce noise and vehicle emissions; and temporarily increase vehicle traffic and human activity in the project area. Chapter 3 of the Programmatic EA, as summarized in 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 effects of the project and an assessment of whether these effects are consistent with those described in the Programmatic EA.

1. Fish and Aquatic Species

The effects of using mechanized equipment and manually working in and along Asotin Creek are consistent with the analysis in the Programmatic EA, Section 3.3.1 (*"Fish and Aquatic Species"*), which describes overall low impacts to fish and aquatic species after considering moderate short-term adverse effects and beneficial long-term improvements.

ESA-listed Snake River steelhead, Chinook salmon, and bull trout, and their designated critical habitats are present within the project area. No other state or federally listed species are known to be present within the project area. BPA completed ESA Section 7 consultation on the effects of the project's actions on these species in its HIP programmatic consultation, which found that such actions would likely adversely affect these species and their designated critical habitat in the short term, but would not be likely to result in jeopardy to the species or result in destruction or adverse modification of their designated critical habitat.

In the short term, the project would expose, displace, reconfigure, or compact earth through the use of mechanized equipment within and along Asotin Creek, likely causing moderate, temporary sediment discharges, primarily from the introduction of first-time flows into the newly constructed area. These impacts would be minimized because new excavations would be accomplished in the dry with no exposure to stream flows wherever possible, and where not possible, the work area would be isolated from the main channel. Project actions would be subject to the conservation measures from BPA's HIP consultations, such as installing temporary erosion controls before starting work, locating equipment fueling areas at least 150 feet from the stream, and working during the approved in-water work window to avoid impacts to fish at critical life stages, such as during spawning. Though the amount of sediment discharged would be elevated, turbidity levels would be 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").

Movement, sounds, and vibrations from construction-related human and mechanical activity would likely 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 excavation and grading for the levee modification and side channel reconnection would be done in the dry, but some work in the main channel would require work area isolation. Dewatered work areas would require fish and aquatic organism salvage prior to complete dewatering and would likely kill aquatic organisms (e.g., invertebrates) not able to survive the temporary dewatering and not large enough to be effectively salvaged. Fish salvage involves electro-shocking, capture, and handling to relocate the fish. This is stressful for individual fish but avoids leaving the fish stranded in a dewatered location. The newly constructed instream 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 aquatic species disturbance is consistent with the analysis in Sections 3.1.3.1 and 3.3.1.2.1 of the Programmatic EA ("Dewatering for Instream Work" and "Short-Term Effects to Fish and Aquatic Species from Construction Activities," respectively). The Programmatic EA disclosed direct, harmful, and sometimes fatal impacts to aquatic species, including displacement of fish from their preferred habitat during periods of movement, sounds, and vibrations from human and mechanical activity.

Project implementation would have beneficial long-term effects on fish and aquatic species due to increased stream complexity and enhanced riparian cover along Asotin Creek, increased available floodplain access and flows, and an expected reduction in summer water temperatures. The beneficial effects are consistent with the analysis in Section 3.3.1.2.2 of the Programmatic EA (*"Effects to Fish and Aquatic Organisms unique to the Categories of Action"*).

2. Water Resources

The effects of using mechanized equipment and manually working in and along Asotin Creek are consistent with the analysis in Section 3.3.2 of the Programmatic EA ("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 likely be a low effect on water quantity, as this project would make no water withdrawals, but there could be increased groundwater recharge since the connection between surface flows and the floodplain would be increased over both space and time.

The project would produce localized short-term sediment inputs from the impacts of using mechanized equipment along and in the creek to install wood structures, construct a riffle, grade levees, and open side channel inlets. Restoration actions would disturb lengths of stream or riverbank consistent with the

analysis in Section 3.3.2.2.2.1 of the Programmatic EA ("Sedimentation and Turbidity Effects"), but resulting sediment discharges likely would not be greater than what occurs naturally during annual high-flow events. There would be short-term effects which would be lessened by the application of mitigation measures, such as installing sediment barriers in all work areas and removing vegetation and soil from equipment before starting work and where feasible, operating equipment from the bank or previously cleared areas, as detailed in Section 2.4 of the Programmatic EA ("Mitigation Measures and Design Criteria"). The long-term effects of this project, however, would be a decreased potential for unnatural sediment inputs; an increased potential of the floodplain to effectively manage its sediment loads; and a reduction of stream temperatures from improved stream form, instream habitat structure, and increased riparian vegetative cover. These long-term beneficial effects are consistent with those described in the Programmatic EA.

3. Vegetation

The effects of using mechanized equipment and manually working in and along Asotin Creek are consistent with the analysis in Section 3.3.3 of the Programmatic EA ("*Vegetation*"), which describes overall moderate impacts to vegetation after considering moderate short-term adverse effects and highly beneficial long-term effects.

No ESA-listed or state-listed plant species are known to exist within the proposed project area. The USFWS Information for Planning and Conservation (IPaC) tool lists Spalding's catchfly (*Silene spaldingii*), ESA-listed Threatened, as having the potential to be present in the project area. However, there is no designated critical habitat and no confirmed presence of the species in the project area. Spalding's catchfly is found predominantly in Pacific Northwest bunchgrass grasslands and sagebrush -steppe environments, including in the Palouse region that is partially located in southeastern Washington where the proposed project is located. However, the area once occupied by Palouse region grasslands has seen nearly 100 percent conversion to cultivated crops and cattle grazing. Remnants of the grassland are now restricted to small areas on the edge of cultivated or grazed fields or rocky slopes along the margin of the former prairie. Because the project area and surrounding areas have been used for decades for agricultural and cattle operations, it is unlikely any grassland remnants exist within the project area. Without suitable habitat and protection from cattle, it is unlikely Spalding's catchfly would be present in the project area, and the project would have no effects on the species.

Project implementation, including levee modifications, side channel activation, construction of a riffle, installation of large wood structures, and establishment of overland access routes, staging areas, and spoil disposal areas, would have moderate short-term impacts on vegetation. Plants within the project area would be removed, graded over, and trampled during implementation. Disturbance to riparian areas would be minimized per mitigation measures, such as seeding and planting native species in any disturbed areas and preventing the spread of noxious weeds by washing construction equipment and applying weed control measures at the site. Increased floodplain inundation would improve water-tolerant vegetation diversity and density in the long-term. Thus, the overall effects of the project would be moderate and would be consistent with the effects described in the Programmatic EA.

4. Wetlands and Floodplains

Project activities are expected to have impacts to wetlands and floodplains that are consistent with the analysis in Section 3.3.4 of the Programmatic EA (*"Wetlands and Floodplains"*). Wetlands in the project area are classified by the National Wetlands Inventory as riverine, which includes all wetlands and deepwater habitats contained within a channel. By design, proposed construction activities would occur in wetlands and heavy equipment use and earth-moving activities during project construction would have short-term negative impacts. ACCD would obtain required permits issued by the U.S. Army Corps

of Engineers under Section 404 of the Clean Water Act. The ACCD would adhere to all requirements, conditions, and prescriptions set forth in the Army Corps permit.

Consistent with the analysis in the Programmatic EA, there would be long-term beneficial effects from increased connectivity between the existing Asotin Creek mainstem channel and its floodplain. The project is intended to increase wetland acreage and improve floodplain conditions. Added instream roughness, side channel activation, and wood placement would slow stream flows, increase floodplain inundation potential, and provide more efficient sediment movement and retention. The proposed levee modifications would allow the channel to naturally migrate and connect to the floodplain. Wetland quality would improve with the restoration of natural flow patterns and the replacement of invasive plant species with native plants. With greater floodplain connectivity at the site, wetland hydrology would likely improve, potentially expanding the wetland area and re-establishing native vegetative communities.

5. Wildlife

Potential wildlife impacts are consistent with the analysis in Section 3.3.5 of the Programmatic EA ("Wildlife"), which describes overall low impacts to wildlife after considering short-term adverse effects and beneficial long-term effects.

No ESA-listed or state-listed wildlife species are known to exist within the proposed project area. IPaC lists the yellow-billed cuckoo (*Coccyzus americanus*), ESA-listed Threatened, and monarch butterfly (*Danaus plexippus*), ESA-proposed Threatened, as having the potential to be present in the project area. There is no designated critical habitat and no confirmed presence of either species in the project area. Washington Department of Fish and Wildlife indicates that the yellow-billed cuckoo probably nested in Washington until at least the early 1940s, but is now considered functionally extirpated in the state and thus, unlikely to be present in the project area. Monarch butterflies require abundant milkweed plants and a wide variety of flowers for nectar during breeding, migration, and overwintering. Cattle grazing and farming activities have limited the growth of milkweed and nectar resources in the project area, and it is unlikely monarch butterflies would be present in the project area. Therefore, the project would have no effects to ESA-listed wildlife species.

In the short-term, human presence would cause sound and movement that temporarily disturbs or displaces local wildlife. Construction activities would destroy the habitats of small animals. This would temporarily displace medium-size or larger animals from their preferred habitats during construction, and they would likely re-occupy the site once human activity has moved or ceased. Construction activities would occur in mid- to late summer, and would thus avoid disturbance to migratory bird nesting, which occurs in the spring. Abundant similar wildlife habitat is present adjacent to the project area, these effects would be limited in duration, and thus, there would be no long-term negative changes to wildlife habitat.

In the long-term, the proposed project would improve riparian vegetation and wildlife habitats along Asotin Creek, increasing the area's capacity to support both a higher number and a higher diversity of wildlife species. The overall effects of this project would be low and consistent with those evaluated in the Programmatic EA.

6. Geology and Soils

The effects of using construction equipment in and along Asotin Creek are consistent with the analysis in Section 3.3.6 of the Programmatic EA ("*Geology and Soils*"), which anticipates moderate-to-high short-term effects but low overall effects after accounting for mitigation measures and long-term benefits. The overall effects of this project would be consistent with those evaluated in the Programmatic EA.

Project construction activities – including secondary channel and riffle reconstruction, modification of levees, large wood installation, and soil compaction by heavy equipment – would temporarily increase localized soil erosion potential and decrease soil structure. However, use of erosion and sediment control devices, 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.

7. Transportation

The project's transportation impacts are consistent with the analysis in Section 3.3.7 of the Programmatic EA (*"Transportation"*), which anticipates a low impact given the temporary nature of any effects on roads.

The project area is accessible via Asotin Creek Road, which runs adjacent to the project area. Temporary access routes developed during project mobilization would provide off-road access. Asotin Creek Road would not be blocked or closed during the scheduled implementation. However, congestion may occur for short periods along Asotin Creek Road as vehicles transport workers and equipment to the project area. Overall, the project would have a low effect on transportation due to the short duration of vehicle congestion near the work area.

8. Land Use and Recreation

Impacts to land use and recreation are consistent with the analysis in Section 3.3.8 of the Programmatic EA (*"Land Use and Recreation"*), which concludes that land use practices at underlying project sites would remain unchanged in most cases. The project is located on private land used for cattle grazing and has no public recreational opportunities.

In the short-term, construction activities would require relocation of cattle to another grazing pasture for the duration of construction. In the long-term, cattle grazing in the riparian zone would be restricted. Cattle would still have access to the stream at the existing ford, which will continue to be used to provide access to an adjacent grazing pasture. Although a small amount of land along the stream may revert from grazing uses back to the wetland and riparian conditions from which they historically were converted, the project's overall effects on land uses would be low, and there would be no effect to recreation, consistent with those evaluated in the Programmatic EA.

9. Visual Resources

Impacts of the proposed project on the visual quality are consistent with the analysis in Section 3.3.9 of the Programmatic EA (*"Visual Resources"*), which concluded the effects on scenic values would be low. The proposed project area is not located within a visually sensitive area, but users of Asotin Creek Road would be able to see project activities. Road users would see heavy equipment during project activities and the result of project activities, including large wood structures across the floodplain, modified levees, and exposed soil until vegetation is re-established. After vegetation re-establishment, the project area would have a natural appearance and would not visually detract from the area.

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

The effects of the project in and along Asotin Creek are consistent with the analysis in Section 3.3.10 of the Programmatic EA (*"Air Quality, Noise, and Public Health and Safety"*), which describes low impacts to 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 project implementation. 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. The nearest residence is approximately 0.5 mile away on Asotin Creek Road, and its residents may hear muted construction noise, but nothing above typical traffic noise on Asotin Creek Road and only during daylight hours. Adequate signage and other routine safeguards would minimize risks to worker and public safety for the duration of construction and site restoration. Only portions of existing levees would be removed to provide access to the floodplain. Remaining sections would maintain protection of existing structures. In addition, reconnecting the floodplain would increase resiliency of downstream infrastructure to future flood events by providing more space for flood flows in the floodplain.

11. Cultural Resources

The effects of the project on cultural resources are consistent with the analysis in Section 3.3.11 of the Programmatic EA (*"Cultural Resources"*), which describes low impacts to cultural resources. Here, project construction would avoid cultural resources and the National Historic Preservation Act (NHPA) Section 106 consultation process would appropriately resolve any effects.

BPA conducted a NHPA Section 106 consultation with the Washington State Department of Archaeology and Historic Preservation (DAHP), Nez Perce Tribe, and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). A cultural resource survey was performed and subsurface testing identified one archaeological site within the area of potential effect. BPA determined on September 5, 2024, that the archaeological site is eligible for listing in the National Register of Historic Places under Criterion D and that implementation of the proposed undertaking would result in no adverse effect to historic properties provided that the following stipulations are met: no equipment or project materials would be staged within about 130 feet (40 meters) of the site boundaries and an about 130 feet (40 meter) buffer would be clearly marked as an area to be avoided prior to project implementation. Concurrence with the no adverse effect determination was received from Nez Perce Tribe on September 9, 2024, and from DAHP on September 10, 2024. No response from CTUIR was received within 30 days.

As described in the Programmatic EA, the results of this consultation were that the project would not adversely affect historic properties. In the unlikely event that cultural material is inadvertently encountered during the implementation of this project, BPA would require that work be halted in the vicinity of the finds until they can be inspected and assessed by BPA in consultation with the appropriate consulting parties.

12. Socioeconomics

The effects of the project are consistent with the analysis in Section 3.3.13 of the Programmatic EA (*"Socioeconomics and Environmental Justice"*) which describes low socioeconomic impacts. The project would have small, temporary, but beneficial socioeconomic impacts by providing jobs for construction workers and increasing spending on food, fuel, lodging, and materials at local businesses. 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 lands being restored or near them.

13. Climate Change

Impacts to climate change due to project activities are consistent with the analysis in Section 3.3.14 of the Programmatic EA ("*Climate Change*"), 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 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 wetland habitats, and potentially decreased water temperatures from improved instream and riparian habitat conditions.

Findings

BPA finds that the types of actions and the potential impacts related to the proposed *Asotin Creek Project Area 11.2 Fish Habitat Restoration* project 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 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 10 CFR § 1021.314 and 40 CFR § 1502.9.¹ Therefore, no further NEPA analysis or documentation is required.

Jacquelyn Schei Environmental Protection Specialist

Concur:

Katey Grange NEPA Compliance Officer

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 DOE's own regulations implementing NEPA at 10 C.F.R. Part 1021, to meet its obligations under NEPA, 42 U.S.C. §§ 4321 *et seq*.