Supplement Analysis
for the
Columbia River Basin Tributary Habitat Restoration
Programmatic Environmental Assessment
(DOE/EA-2126/SA-69)

Oxbow Phase 6 Habitat Enhancement Project
BPA project number 2007-397-00
BPA contract number 96518

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) (Programmatic EA). The Programmatic EA analyzed the potential impacts of implementing habitat restoration actions on Columbia River basin tributaries.

Consistent with the Programmatic EA, this Supplement Analysis (SA) analyzes the proposed Oxbow Phase 6 Habitat Enhancement Project (project). The project would implement many of the specific restoration actions addressed in the Programmatic EA in the Middle Fork John Day River watershed in Grant County, Oregon. Project objectives include increasing floodplain connectivity, increasing off-channel habitat, and enhancing existing channel morphology, instream cover, and complexity to benefit Endangered Species Act (ESA)-listed steelhead (*Oncorhynchus mykiss*), Chinook salmon (*O. tshawytscha*), and ESA-listed bull trout (*Salvelinus confluentus*).

This SA analyzes the site-specific impacts of the proposed project to determine if they are within the scope of the analysis considered in the Programmatic EA. The 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 Programmatic 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 Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO) to implement the Oxbow Phase 6 project on fee-owned tribal land. The project is located within a portion of the Oxbow Conservation Area (OCA) along the Middle Fork John Day River between approximately river miles 56.2 and 57.1 (Figure 1). The OCA is a 1,022-acre property with a history of dredge mining, livestock grazing, and periodic timber harvests that is now managed by the CTWSRO for maximizing aquatic habitat for fish. The OCA property is surrounded by Malheur National Forest land.

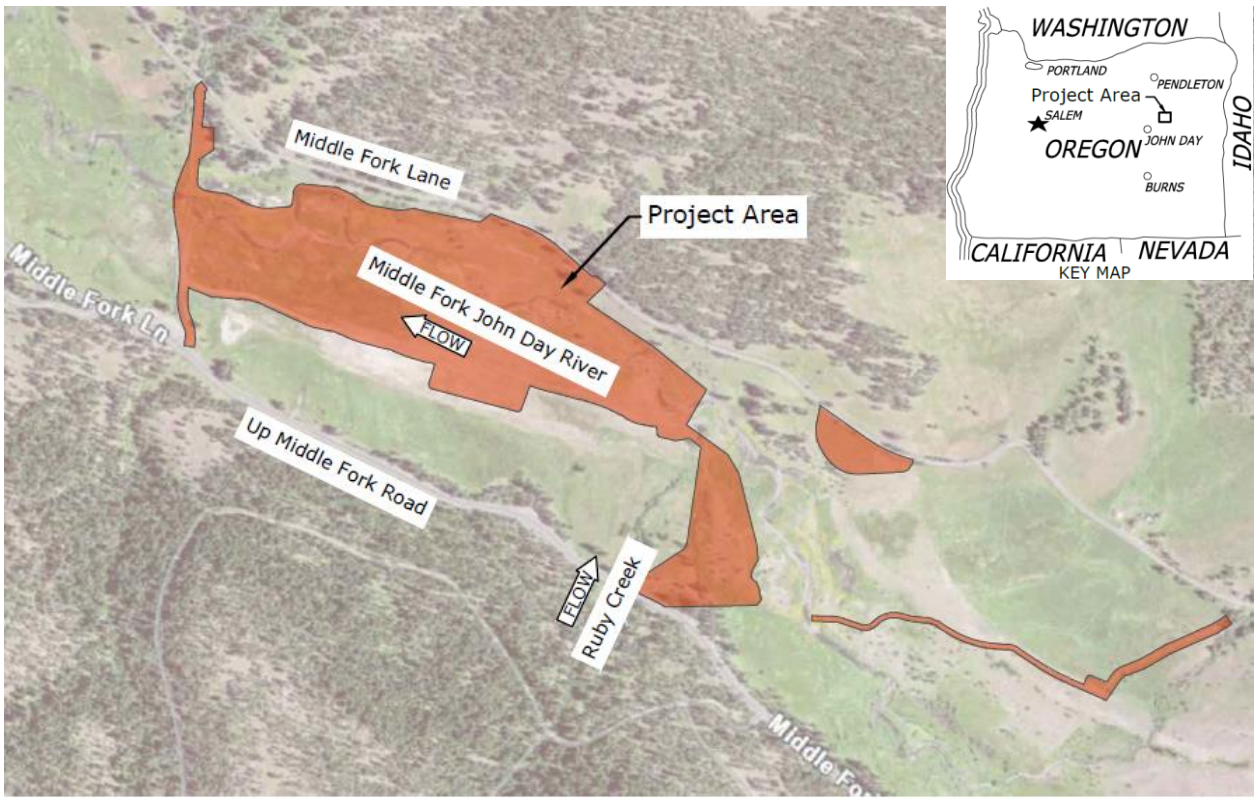

Figure 1. Project Location

Parts of the Middle Fork John Day River within the OCA were dredge mined for gold in the early 1940s, with mine tailings piled alongside the river and left in place. The resulting stream was an artificially straightened channel that was completely disconnected from its historic floodplain, providing very limited fish rearing habitat and opportunity for ground/surface water interchange or natural reestablishment of riparian vegetation. CTWSRO completed Phases 1-5 of restoration work at the OCA site between 2011 and 2016. Work occurring during the previous phases rehabilitated the area by leveling mine tailings, constructing a more sinuous river channel along 6,530 feet of the Middle Fork John Day River and 400 feet of Ruby Creek, and restoring 47 acres of floodplain and riparian area plus seven acres of wetland. The goal of this work is returning the landscape to the most optimal condition possible for ESA-listed salmonid species and returning natural river processes as much as possible given the dredge tailings that now make up the valley bottom.

The proposed Oxbow Phase 6 project is intended to build on previous phases of enhancement work at the OCA, addressing areas that have not shown satisfactory progress based on monitoring completed since the last phase of construction was completed in 2016. The project aims to improve river complexity and floodplain connection at lower flows by taking advantage of existing features and by adding new features. This will result in improvements to groundwater elevation and sediment retention that should increase the success of riparian and floodplain vegetation establishment and further improve rearing habitat for salmonids.

The project would occur along an approximately one-mile length of the Middle Fork John Day River over an approximately 60-acre area, including construction access and staging areas, and would include the following key elements:

- Side Channels The project would involve construction of three side channels that connect to the river through existing alcoves at low river flows. The side channels are designed to maintain connection to the river throughout the year, providing off-channel habitat and encouraging

floodplain activation and vegetation recruitment on newly graded floodplain features. The side channel depth is designed to be a maximum of 1.5 feet deep with the goal of keeping groundwater surfaces within 1.5 feet of the floodplain to support riparian vegetation success.

- Swales Seven high-flow swales would be constructed to better connect the floodplain and reduce channel energy in the river during high flows. The swales are designed to activate at a variety of high flows and be no more than 1.5 feet deep, with the goal of keeping groundwater surfaces within 1.5 feet of the floodplain to support riparian vegetation success.
- In-Stream Wood Structures The project would install large wood in the main river channel and side channels to improve pool complexity, increase in-stream roughness for improved floodplain and side channel connectivity, raise the local water table, and provide refuge and shade for juvenile and adult fish. A mix of wood structures would be used, including approximately 50 single-log structures, 13 apex jams consisting of multiple logs, and 41 cover log structures. Large log key members would provide the foundations and stability for the wood structures, with small wood racking and slash material added for cover habitat.
- Islands and Point Bars Five vegetated islands and four point bars formed by large wood and gravel would be installed in the river to narrow excessively wide pool/riffle transition areas, reduce main channel capacity, and raise water surface elevations to encourage floodplain and side channel connectivity.
- Riffle Enhancement Existing riffles would be enhanced through additional gravel placement to improve floodplain and side channel connectivity and help with raising the local water table.
- Bank Scallops and Gravel Augmentation Bank scallops would be constructed at three river locations on the outside of meander bends, and gravel augmentation would occur at nine locations, to serve as sediment sources to restore topsoil and create better growing conditions for riparian and floodplain vegetation.
- Floodplain Grading and Roughness Elements Strategic floodplain grading would be performed to encourage better connection with the river and more frequent activation. Floodplain roughness elements that include willow baffles, large wood structures, and flood fencing consisting of wooden posts interwoven with woody material, would also be installed to spread flows and enhance riparian vegetation reestablishment success.
- Riparian Vegetation Areas disturbed by construction activity, including newly constructed features, access routes, staging areas, soil borrow areas, and spoils areas, would be seeded with native grass species upon completion of ground disturbing activities. This would include application of a riparian seed mix to approximately 12 acres and an upland seed mix to approximately six acres. Native plantings would be installed in the fall planting season following construction. CTWSRO would monitor and maintain plantings over time.

The key project elements identified above would involve excavation or fill placement (or a combination) across a total area of approximately 13 acres, with the side channels, swales, bank scallops, and floodplain grading consisting primarily of excavation and the islands, point bars, riffle enhancement, and gravel augmentation consisting primarily of fill placement. Construction access improvements to facilitate the work would include excavation or fill (or a combination) over an additional approximately 2.5 acres of the site.

Permanent fill material including the river gravels for the construction of riffle enhancements, point bars, gravel augmentation areas, and islands would come from material excavated on-site for the floodplain cut, side channels, and swales. Fine material generated from sorting the dredge tailings removed through site excavation would be used to augment topsoil placements. The project overall would involve more than 20,000 cubic yards of earthwork (combined excavation/fill), resulting in a net

excavation from the floodplain. Excess excavated material not used as fill for project elements would be deposited and graded into the slope in a designated disposal area in an upland portion of the site, which was established during previous phases of habitat enhancement work.

The project would be implemented primarily during the months of July and August of 2025, with instream work occurring during the in-water work window of July 15th to August 15th. Native plantings would be installed in the fall planting season following construction. A planting contractor would monitor and maintain plantings for the first two years post-construction (2025 and 2026), and CTWSRO would continue targeted supplemental planting efforts in 2027 based on monitored vegetation success.

Heavy equipment including excavators and dump trucks would be used in construction. The project would involve temporary elements required to facilitate construction including temporary stream crossings, a bypass channel to route river flows through the work area and minimize the extent of in-water work required, temporary coffer dams to isolate river island construction areas, and designated equipment access routes and staging areas. These temporary features would be decommissioned when work is complete.

BPA's funding of these actions would support the conservation of ESA-listed species considered in the 2020 ESA consultations with the 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 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*.

Environmental Effects

The implementation of this project requires the use of construction crews and equipment which 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 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 whether these impacts 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 the Middle Fork John Day River are consistent with the analysis in the Programmatic EA, Section 3.3.1 *("Fish and Aquatic Species"*). The Programmatic EA describes overall low impacts to fish and aquatic species after considering moderate short-term adverse effects and beneficial long-term improvements.

ESA-listed Middle Columbia River steelhead and bull trout and their designated critical habitat are present within the project area. Chinook salmon, redband trout, and Pacific lamprey (*Entosphenus tridentatus*) also use the river in the project area. BPA completed ESA Section 7 consultation on the effects of the project actions on ESA-listed 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 the Middle Fork John Day River, likely causing moderate, temporary sediment discharges. A temporary stream bypass and cofferdams would be used to allow construction of many project elements within the existing channel networks outside of active flows.

Project actions would be subject to the conservation measures from BPA's HIP programmatic biological opinions, such as installing temporary erosion and sediment controls before starting work, locating equipment fueling areas at least 150 feet from the river, and working during the approved in-water work window to avoid impacts to fish at critical life stages. Though the amount of sediment discharged would temporarily be elevated above background levels, turbidity is expected to 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"*).

Dewatering a segment of the Middle Fork John Day River to route flows through the temporary bypass and using cofferdams to isolate island work areas would require fish and aquatic organism salvage prior to complete dewatering. These actions would likely kill aquatic organisms not able to survive the temporary dewatering and not large enough to be effectively salvaged (e.g., invertebrates). Fish salvage may involve electroshocking, 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 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 seasonal flushing flows. The anticipated amount of activity and aquatic species disturbance is consistent with the analysis in Sections 3.1.3.1 (*"Dewatering for Instream Work"*) and Section 3.3.1.2.1 (*"Short-Term Effects to Fish and Aquatic Species from Construction Activities"*). The Programmatic EA disclosed direct, harmful, and sometimes fatal impacts to aquatic species, including displacement of fish from their existing habitat during periods of isolation and dewatering and from movement, sounds, and vibrations from human and mechanical activity.

Project implementation would have beneficial long-term effects on fish and aquatic species due to the improvements to the river's floodplain connection, increased quantity and quality of instream and off-channel habitat, and enhanced riparian vegetation. 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 the project on water resources are consistent with the analysis in Section 3.3.2 of the Programmatic EA (*"Water Resources"*), which describes overall low water resources impacts after considering moderate short-term adverse effects and beneficial long-term effects.

There would be short-term localized effects on water quantity as a segment of the Middle Fork John Day River in the project area is temporarily dewatered and flows routed through a temporary bypass channel during construction. The bypass would operate for a period of approximately one month. Flows would be re-introduced to the dewatered section of river channel after construction within that area is complete. Through channel and floodplain grading, excavation of swales and side channels, and addition of floodplain roughness elements (including large wood), the constructed project would increase the frequency and duration of river flows accessing the floodplain and increase groundwater recharge and groundwater elevation in the floodplain in the long-term.

Short-term adverse water quality impacts in the form of elevated suspended sediment and turbidity levels may occur as a result of river channel, bank, and floodplain grading. Ground disturbance increases the potential for sediment mobilization when disturbed soils are exposed to precipitation or streamflow. This could occur when the temporary bypass is closed and streamflow is re-introduced to the constructed channel improvements. Such effects are consistent with the analysis in Section 3.3.2.2.2.1 of the Programmatic EA (*"Sedimentation and Turbidity Effects"*). In-water work elements would be constructed with best management practices designed to minimize the severity and duration of temporary water quality impacts in accordance with the conditions of the U.S. Army Corps of Engineers

(USACE) Regional General Permit 6 for BPA-funded Habitat Improvement Projects and a 401 Water Quality Certification issued by the Oregon Department of Environmental Quality (DEQ). An Erosion and Sediment Control Plan (ESCP) for all areas of construction activity would be implemented under a National Pollutant Discharge Elimination System 1200-C Permit issued by DEQ for construction stormwater discharges.

Over the long-term, the project would increase floodplain connectivity, promote on-site sediment retention in the floodplain, and support diverse native vegetation establishment, all of which may benefit water quality in the Middle Fork John Day River. Considered together, the overall effects of the project on water resources would be low and consistent with the effects described in the Programmatic EA.

3. Vegetation

The effects of the project on vegetation 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.

U.S. Fish and Wildlife Service's (USFWS's) Information for Planning and Conservation (IPaC) tool indicates no federal ESA-listed plant species with ranges known or expected to overlap the project area. There are also no documented occurrences of state-listed plant species in the project area.

Project construction activities including side channel and swale excavation, floodplain grading, bank scalloping, temporary bypass channel installation, and establishment of construction access routes and staging areas, would have moderate short-term impacts on vegetation within the approximately 18 vegetated acres subject to project activities. Plants within these areas would be removed, graded over, and trampled during implementation. The long-term effects of the project on vegetation would be beneficial, as the improvements to the river's floodplain connection, raising of the water table, increases in fine sediment retention, and vegetation plantings would all support native vegetation establishment and higher vegetative diversity than under the existing conditions. Taken together, the overall effects of the project on vegetation would be moderate and consistent with the effects described in the Programmatic EA.

4. Wetlands and Floodplains

Project activities would have impacts on wetlands and floodplains that are consistent with the analysis in Section 3.3.4 of the Programmatic EA (*"Wetlands and Floodplains"*), which describes low overall impacts to wetlands and floodplains after considering short-term adverse effects and beneficial long-term effects.

By design, the proposed construction activities would occur in riverine wetlands and the floodplain of the Middle Fork John Day River. Ground disturbance associated with earthwork and heavy equipment operation would have short-term negative effects on wetlands, with approximately 0.7 acre of delineated wetlands impacted by excavation or fill placement. CTWSRO would obtain required permits issued by the USACE under Section 404 of the Clean Water Act, a Section 401 Water Quality certification from the Oregon DEQ, and any required permit from the Oregon Department of State Lands (DSL) under Oregon's Removal-Fill Law, for construction-related wetland impacts. Construction activities would be managed in accordance with permit conditions to minimize the area and duration of adverse wetland impacts.

The project would have long-term benefits to floodplain functions and riverine wetlands. Proposed grading would result in a net cut of material from the floodplain, increasing floodplain storage. The project would also increase total wetland area and improve wetland functions by: constructing high-

flow swales and side channels to better connect the river with its floodplain; grading select floodplain areas to reduce depth to groundwater, thus encouraging more frequent floodplain activation and increasing wetland habitat; adding floodplain roughness elements to spread flood flows; enhancing river riffles and constructing point bars to raise water surface elevations and encourage floodplain and side channel connection; constructing bank scallops and gravel augmentations as sediment sources to restore topsoil and create better growing conditions for riparian and floodplain vegetation; and installing riparian plantings to increase wetland vegetation diversity. Considered together, the overall effects of the project on wetlands and floodplains would be low and consistent with the effects described in the Programmatic EA.

5. Wildlife

Potential wildlife impacts of the proposed project 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.

The project site is within the geographic range of the ESA-listed Threatened North American wolverine (*Gulo gulo luscus*), the Threatened yellow-billed cuckoo (*Coccyzus americanus*), the proposed Threatened monarch butterfly (Danaus Plexippus), and the proposed Endangered Suckley's cuckoo bumblebee (*Bombus suckleyi*) based on USFWS's IPaC tool. However, there are no documented occurrences of any of these species within the project area, and the project area does not overlap with designated or proposed critical habitat for any of these species. Additionally, the project site does not feature habitat conditions most typically suited to these species, including deep and persistent spring snowpack for the North American wolverine; large stands of riparian willow and cottonwood trees for the yellow-billed cuckoo; abundant milkweed plants for the monarch butterfly; or high floral diversity with flowering throughout the growing season for the Suckley's cuckoo bumble bee. Based on these factors, the project is expected to have no effect on ESA-listed wildlife species.

There are no state-listed wildlife species occurrences documented within the project area. The Columbia spotted frog (*Rana luteiventris*), a state sensitive species, has been documented along the Middle Fork John Day River outside of the project area. By expanding wetland area and improving wetland functions, the proposed project could provide habitat conditions for frogs over time.

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. Construction activities would occur in mid- to late summer, avoiding disturbance during the primary nesting season for migratory birds (generally spring and early summer).

In the long term, the proposed project would improve riparian vegetation and wildlife habitats along the Middle Fork John Day River, increasing the area's capacity to support both a higher number and a higher diversity of wildlife species. The overall effect of the project would be low and consistent with the effects evaluated in the Programmatic EA.

6. Geology and Soils

The effects of the proposed project are consistent with the analysis in Section 3.3.6 of the Programmatic EA (*"Geology and Soils"*), which describes moderate to high short-term effects but low overall effects after accounting for mitigation measures and long-term benefits. Project construction activities – including side channel and swale excavation, floodplain grading, bank scalloping, and temporary bypass channel construction – would temporarily increase localized soil erosion potential. However, use of

erosion and sediment control measures as proposed, including revegetation after construction, would mitigate these impacts.

Long-term improvements to site soil conditions may be expected as floodplain grading and the addition of floodplain roughness elements restore more natural river processes and increase sediment retention on the site. These actions are expected to increase the amount of fine sediment in the floodplain, which has been reduced relative to natural historic conditions as a result of site disturbances including dredge mining. Increasing the fine sediment component in the floodplain is expected to help promote more successful establishment of vegetation, including woody riparian vegetation, which would support soil stability. Considered together, the overall effects of the project on geology and soils would be low and consistent with the effects described in the Programmatic EA.

7. Transportation

The project's transportation impacts are consistent with the analysis in Section 3.3.7 of the Programmatic EA (*"Transportation"*), which describes low impacts given the temporary nature of any effects on roads. The project area is accessible from Middle Fork Road (south side of project) and Middle Fork Lane (north side of project), and construction vehicles and equipment would access work areas from these roads and temporary access routes on the site that would be established for construction. No closure of public roads 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

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 and that overall effects to land use and recreation would be low to moderate. The project is located on fee-owned tribal land within the Oxbow Conservation Area, managed by CTWSRO primarily for fish and wildlife habitat; on-going management activities include weed control, fence maintenance, conservation grazing (seasonal, limited grazing), and tree planting, as well as outreach and education programs. The property is accessible to the public and is used by the public for hiking, sight-seeing, and limited deer and elk hunting.

The proposed project would not change the existing land use of the site as a conservation area, and the project supports the fish and wildlife habitat enhancement goals for the site. Public recreational access to the 60-acre project area would be temporarily unavailable during construction, but other portions of the 1,022-acre conservation property would remain open to public access during construction. Recreation opportunities would remain available on the surrounding Malheur National Forest lands throughout construction. Considered together, the overall effects of the project on land use and recreation would be low and consistent with the effects described in the Programmatic EA.

9. Visual Resources

The effects of the proposed project on visual resources are consistent with the analysis in Section 3.3.9 of the Programmatic EA (*"Visual Resources"*), which describes the effects on scenic values to be low. The Middle Fork John Day River in the project area is identified by the state of Oregon as a State Scenic Waterway. Users of the public Middle Fork Road on the south side of the project area would be able to see construction vehicles, equipment, and human activity along the river 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 riverine 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 project would be constructed in accordance with Oregon's Scenic Waterway Rules after review by the Oregon Parks and Recreation Department through Oregon DSL's Removal-Fill permitting process. 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, and Public Health and Safety

The effects of the project 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 dust and exhaust emissions from construction vehicles and equipment would be temporary and localized in nature, with no short- or long-term violations of state air quality standards expected. Construction equipment operation would temporarily elevate noise above background levels during daylight hours while work is occurring. The proposed work areas are not adjacent to sensitive noise receptors such as residential neighborhoods, schools, or hospitals. 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. Considered together, the overall effects of the project on air quality, noise, and public health and safety would be low and consistent with the effects described in the Programmatic EA.

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"*). The Programmatic EA describes low impacts to cultural resources, with any potential effects being amenable to resolution through the Section 106 consultation process under the National Historic Preservation Act.

BPA initiated consultation with the CTWSRO, the Confederated Tribes of the Umatilla Indian Reservation, the Burns-Paiute Tribe, and the Oregon State Historic Preservation Office on November 27, 2021. On October 13, 2022, BPA determined that the proposed undertaking would result in no historic properties affected, receiving no responses to the consultation. On March 31, 2025, BPA again consulted with the same parties to update the Area of Potential Effects for the project, to capture additional staging, spoils, and access areas not considered in the original consultation. BPA determined the "no historic properties affected" determination remained appropriate for the proposed action. CTWSRO concurred with the determination, and BPA received no other responses from the consulting parties. The overall low effects of the project on cultural resources are consistent with the effects described in the Programmatic EA.

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 is located on fee-owned tribal land that is part of the Oxbow Conservation Area, and the site is surrounded by Malheur National Forest land managed by the United States Forest Service. The project would result in small, temporary but beneficial socioeconomic impacts by providing jobs for construction workers and increasing spending on food, fuel, lodging, and materials and 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 any lands. Considered together, the overall effects

of the project on socioeconomics would be low and consistent with the effects described in the Programmatic EA.

13. Climate Change

The effects of the project on climate change 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 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 Oxbow Phase 6 Habitat Enhancement Project are similar to those analyzed in the Columbia River Basin Tributary Habitat Restoration Programmatic EA (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.

JOHN VLASTELICIA

Digitally signed by JOHN VLASTELICIA
Date: 2025.06.23 16:33:18 -07'00'

John Vlastelicia
Environmental Protection Specialist

Concur:

KATEY GRANGE

Digitally signed by KATEY GRANGE
Date: 2025.06.24 09:11:28 -07'00'

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*.