Supplement Analysis for the Columbia River Basin Tributary Habitat Restoration Project (DOE/EA -2126/SA-55)

## Camp Creek Reach 1 Project BPA project number 2023-004-00 BPA contract number 94057

Bonneville Power Administration Department of Energy



### Introduction

In December 2020, Bonneville Power Administration (BPA) completed the Columbia River Basin Tributary Habitat Restoration Programmatic Environmental Assessment (DOE/EA 2126) (Programmatic EA). The Programmatic EA analyzed the potential environmental 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 effects of the Camp Creek Reach 1 Project (Project) that would implement some of the specific restoration actions assessed in the Programmatic EA in Camp Creek Reach 1 located at the confluence of Camp Creek with the Middle Fork John Day River within Malheur National Forest approximately 25 miles north of John Day in Grant County, Oregon. The project area is approximately 38 acres and extends about 0.5 mile along Camp Creek (see Figure 1 in Proposed Action). BPA would implement this project by providing funds to the United States Forest Service (USFS), with project partners North Fork John Day Watershed Council (NFJDWC) and Oregon Department of Fish and Wildlife (ODFW). The objective of the proposed project is to address limiting factors, including degraded floodplain connectivity and function, degraded channel structure and complexity, degraded riparian areas and large woody debris recruitment, altered flow and other hydrologic processes, and degraded water quality for the benefit of Endangered Species Act (ESA)listed Middle Columbia River steelhead trout (*Oncorhynchus mykiss*) and other non-listed species such as Chinook salmon (*O. tshawytscha*) and Pacific lamprey (*Entosphenus tridentata*) by filling the main channel and reconnecting the multiple threaded channels and adding large and small wood structures throughout the channels and floodplain.

This SA analyzes the site-specific impacts of the Project to determine if the Project is within the scope of the analysis considered in the Programmatic EA. It also evaluates whether there is substantial new circumstances or information about the significance of the adverse effects that bear on the analysis presented in the Programmatic EA. The findings of this SA determine whether additional National Environmental Policy Act (NEPA) analysis is needed pursuant to 40 Code of Federal Regulations (CFR) § 1502.9(d) and 10 CFR § 1021 *et seq*.

#### **Proposed Activities**

BPA is proposing to fund the USFS to oversee, manage, and implement the Camp Creek Reach 1 Project with NFJDWC and ODFW. The NFJDWC will manage contracts for crews and equipment. ODFW may assist with implementation and riparian fence construction. The USFS would complete the necessary design, compliance documentation, and permitting. The USFS and NFJDWC would share on-site project management and implementation duties. The project location is shown in Figure 1 below and project construction would begin during the summer of 2024.



Figure 1. Camp Creek Reach 1 Project Area Vicinity Map.

The Project area lies within an unconfined large depositional valley which historically supported a substantial stream-meadow network with consistent floodplain inundation to support extensive riparian vegetation. Multiple threaded channels were located within this area based on LIDAR surveys. It currently is characterized as a single channel, with an inset floodplain and channel ranging from 30 to 50 feet across and the valley floor extends to about 550 feet at its greatest width. The Project includes side-channel construction and channel filling, installation of wood structures, plantings, and fence construction. Heavy equipment would be used, such as excavators, grapple skidders, a log truck and trailer or the equivalent for hauling trees to the site, and off-road dump truck and bulldozers. In-water work would be conducted from July 15 to August 15, 2024.

The proposed Project includes the following primary treatments:

- 1) The Camp Creek Reach 1 project proposes to fill in the existing channel and create and reconnect the multiple historic threaded channels. Side channels would be excavated/cut into the floodplain. Approximately 15,500 cubic yards of fill would be placed within the existing incised channel to raise the bed elevation. Fill would come from 19,000 cubic yards of cut material resulting from onsite floodplain grading and the remaining 3,500 cubic yards of cut would be redistributed onsite. Partial and whole trees would be buried within the fill areas. Riparian vegetation within the existing channel would be salvaged as much as feasible and replanted back into the reconstructed floodplain. A total of 2.5 miles of side channel would be used for earthwork.
- 2) Approximately 1,400 trees ranging from 6 to 21 diameter at breast height, with root-wads attached, would be embedded or placed in the floodplain, side channels, or channel fill zones and used to create approximately 54 wood structures. Large wood and small wood as well as slash would be placed throughout the channels and embedded within floodplain as well as any cut or fill areas. Beaver Dam Analogs and Post Assisted Log Structures would be utilized to increase floodplain connectivity and roughness, facilitate aggradation, water storage, increase habitat complexity and cover for juvenile fish and beaver. Wood material for this project would be sourced from the Big Mosquito Project riparian enhancement treatments at Gibb and Jungle creeks, if possible. Gibb and Jungle creeks are located two miles northwest of the Project. The Big Mosquito Project is proposed by the USFS and not funded by BPA. Additional in-stream and floodplain woody debris for this project would be excess material sourced from Gibb and Jungle creeks as part of the USFS Big Mosquito Project. The priority for wood material from the Big Mosquito project would first add small and large wood to Gibb and Jungle creeks to improve stream and riparian habitat and then any excess material from prescription treatments would be removed and used within Camp Creek Reach 1, if possible. The wood for the Camp Creek Reach 1 Project would be used for aquatic restoration purposes including fencing of aspen stands. A log truck and trailer or the equivalent would be used for hauling trees to the site, and a dump truck would be used for moving excess slash from the Big Mosquito Project. Grapple skidders and bulldozers would be used to position piles of slash. Environmental compliance (ESA, NEPA, and National Historic Preservation Act, etc.) for the tree harvest areas were covered under the Camp Lick Vegetation Management Project conducted by USFS Malheur National Forest in 2021.
- A riparian exclosure would be constructed after the completion of the restoration actions for the Camp Creek Reach 1 Project. The new exclosure would consist of 5,250 feet of the rebuilt exclosure and an additional 1.5 miles of wildlife-friendly exclusion fence.

Access to the site is available at several points from existing USFS roads. Construction would begin at the Project's upstream end and advance in a general West to East downstream direction via phases (Figure 2). The work area isolation, fish and mussel salvage, and instream construction activities would start July 15 and end August 15, and construction activities are anticipated to last through 2024. Excavated materials would be distributed on site, some excess may be used in other Malheur National Forest projects if determined to be needed by the USFS. Riparian vegetation would be salvaged as much as feasible. Approximately 35 acres would be revegetated in the fall of 2024 with up to 15,000 potted cottonwood, willow, service berry, western birch, and other native shrubs, and another 20,000 planted in fall of 2025. Follow up monitoring would assess the need for additional plantings in subsequent years. If needed, replacement plantings would be installed within the project disturbance area as needed.



Figure 2. Camp Creek Reach 1 project proposed design and phased construction.

This project supports BPA and United States Department of Agriculture, Forest Service, Region 6 2022 Memorandum of Understanding to design and implement highest priority habitat actions on USFS managed lands that support BPA's mitigation obligation under the Columbia River System Biological Opinion for ESA-listed Middle Columbia River steelhead.

These actions would support conservation of ESA-listed species considered in the 2020 ESA consultations with National Marine Fisheries Service and US Fish and Wildlife Service on the operation and maintenance of the Columbia River System, while also supporting 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**

. Implementation of this Project would require the use of heavy equipment. The Project includes channel construction, installation of wood structures, and the planting of salvaged and new native plants, and fence construction. Heavy equipment would be used, such as four excavators, grapple skidders for staging and placement of wood structures, a log truck and trailer or the equivalent for staging and hauling trees to the site, and off-road dump truck and bulldozers for staging, hauling, and excavators and bulldozers for hauling materials. These restoration actions during construction would disturb and displace soil in and along the creek, damage vegetation, create noise and vehicle emissions, stress fish, and temporarily increase vehicle traffic and human activity in the Project area. The typical effects associated with the environmental disturbances created by these actions are described in Chapter 3 of the Programmatic EA. 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. Because the Project is designed to improve both aquatic and riparian habitats in the long term, adverse effects from soil and vegetation disturbance and human and mechanical activity would be short-term effects only. This project is in a National Forest and would disrupt potential recreationalists that may be in the area due to reducing opportunities for birdwatching, primitive camping, etc. during construction activities.

### 1. Fish and Aquatic Species

The effects of using mechanized equipment and manually working in and along Camp 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 ("Effects Conclusion for the Proposed Action on Fish and Aquatic Species") describes overall low impacts to fish and aquatic species after considering moderate short-term adverse effects and beneficial long-term effects.

Camp Creek supports ESA-listed Middle Columbia River steelhead and bull trout (*Salvelinus confluentus*) and other non-listed species such as Chinook salmon and Pacific lamprey. Camp Creek contains critical habitat for Middle Columbia River steelhead and bull trout as designated by the National Marine Fisheries Service and United States Fish and Wildlife Services, respectively (Streamnet, 2024). Juvenile Chinook salmon also use the reach for rearing habitat and adult spawning occurs within the Middle Fork John Day River in proximity of the confluence of Camp Creek. Bull trout overwinter in the area. Consultation on the Project's effects on these species was completed under the USFS's Programmatic Aquatic Restoration Biological Opinion II consultation, and it was concluded that the Project would likely adversely affect these species or destruction or adverse modification of their designated critical habitat. The effects of using heavy equipment and manually working in and along the river and side channels are consistent with the analysis in the Programmatic EA, "Fish and Aquatic Species," Section

3.3.1. The Programmatic EA, Section 3.3.1.3, describes overall low impacts to fish and aquatic species after considering moderate short-term adverse effects and beneficial long-term effects.

The short-term adverse effects of the Project would expose, displace, reconfigure, or compact earth through the use of heavy equipment within and along the river and side channels, and likely create conditions where sediment would be released for short periods of time following construction activities. The amount of sediment anticipated from the Project would be moderate because there would be instream excavation. However, mitigation measures as detailed in the Programmatic EA (e.g., requiring instream work areas to be isolated during construction) would be applied. The sediment inputs would be typical of the amounts that fish and other aquatic species naturally encounter in their environment during high flow events, but well below the larger amounts evaluated in the Programmatic EA at Section 3.3.1.2.1 and ameliorated through the use of mitigation measures.

The work area isolation, fish salvage, and instream construction activities would displace fish from work areas until the work activities are completed. Small aquatic organisms that could not be salvaged would likely not survive. The newly constructed instream areas would be re-colonized by fish and other aquatic organisms with full recovery likely within the following months to years. The anticipated amount of activity and the level of aquatic species disturbance, however, is consistent with the analysis in the Programmatic EA at Sections 3.1.3.1 and 3.3.1.2.1. In the Programmatic EA, direct, harmful, and sometimes fatal impacts to aquatic species are disclosed, and movement, sounds, and vibrations of human and mechanical activities are discussed as likely to disturb fish and displace them from their preferred habitat for as long as that movement, sound, and vibration are present.

The Project's long-term beneficial effects include creation of more complex instream habitat for the benefit of Chinook salmon, steelhead, bull trout, and other non-ESA-listed species such as Pacific lamprey. This would occur through the addition of wood structures and floodplain reconnection treatments thereby creating or restoring pool habitat, fish cover, spawning gravel, and rearing habitat. Considering the short- and long-term impacts, the Projects overall, effects on fish would therefore be low, consistent with the analysis in the Programmatic EA found in Section 3.3.1.2.2.

### 2. Water Resources

The effects of using heavy equipment and manually working in and along Camp Creek and its floodplain are consistent with the analysis in Section 3.3.2 of the Programmatic EA, ("Water Resources"). The Programmatic EA, Section 3.3.2.3, describes overall low impacts to water quality after considering moderate short-term adverse effects and beneficial long-term effects. Section 3.3.2.2.1 of the Programmatic EA analyzes effects on water quantity. There would be an effect to overall water quantity as a result of these Project activities related to recreating a functional system. The Project activities would cause changes to the existing hydrology in Camp Creek. The wood structures and channel filling and increased floodplain connection soils are expected to be able to store and provide natural filtration. There would be a beneficial long-term effect of this Project on water quantity because it would increase long-term water table inputs through restored floodplain function and increased connectivity of the side channels to their floodplain.

This Project would create short-term, localized, sediment inputs from the impacts of heavy equipment working in and along the river and side channels. Sediment produced from this restoration action and subsequent rewatering is not anticipated to be greater than what occurs naturally during annual, natural, high flow events. As in the Programmatic EA, these are short-term effects which would be lessened by the application of mitigation measures such as protection of existing vegetation, minimization of areas to be impacted, and revegetation when the Project is complete. Any mussels (*Unionidae* spp.) located within the site would be salvaged prior to in-water work. 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 and naturally function (e.g., manage sediment loads); and a reduction of creek temperatures from improved form, instream habitat structure, and increased riparian vegetative cover. These long-term beneficial effects are consistent with those described in the Programmatic EA.

The overall negative effects on water quality would be low in the short-term and beneficial in the longterm. The overall effects on water quality would be low, consistent with the conclusions of the Programmatic EA.

## 3. Vegetation

The effects of using mechanized equipment and manually working in the Camp Creek floodplain are consistent with the analysis in Section 3.3.3 of the Programmatic EA ("Vegetation"). Section 3.3.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Vegetation") describes overall moderate impacts to vegetation after considering moderate short-term adverse effects and beneficial long-term effects. No ESA-listed or other sensitive plant species are present within the Project area.

The construction activities are anticipated to have impacts consistent with those described in the Programmatic EA. Installing the temporary access, grading the floodplain, constructing side channels, and tree harvest would remove vegetation from those sites, though all impacted sites would be planted or seeded following construction activities. Section 3.3.3.2 of the Programmatic EA ("Environmental Consequences for Vegetation") evaluated constructed features that could disturb large areas of acreage; the vegetated area impacted by the Project would measure about 35 acres. Impacts to vegetation would also include trampling of herbaceous vegetation by mechanized equipment and human foot traffic (from which the vegetation would be anticipated to recover). The addition of sediment would provide increased survival of planting efforts. The completed project area would be seeded and planted with native shrubs and trees, which would benefit from the relocation of sediment. The exclosure fencing would also protect riparian vegetation and aspen stands. This level of effect would be beneficial and consistent with that described in the Programmatic EA.

In summary, the short-term effects on vegetation would require the removal of some individual plants and be moderately negative, the long-term effects would be beneficial to vegetation in the project area. The overall effects on vegetation would therefore be moderate, consistent with the analysis in the Programmatic EA.

## 4. Wetlands and Floodplains

The effects of using mechanized equipment and manually working in and along Camp Creek and its floodplain are consistent with the analysis in Section 3.3.4 of the Programmatic EA ("Wetlands and Floodplains"). Section 3.3.4.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Wetlands and Floodplains") describes overall low impacts to wetlands and floodplains after considering short-term adverse effects and beneficial long-term effects.

The Project is anticipated to have impacts similar to those described in the Programmatic EA. Specifically, there would be short-term (i.e., weeks-long) adverse effects to the floodplain due to earthwork. Appropriate Clean Water Act permitting would be obtained by the USFS prior to any wetland disturbance.

Consistent with the Programmatic EA, Project implementation would also have long-term beneficial effects. It would create conditions in this reach of Camp Creek with increased connectivity to the floodplain, improve groundwater exchange, diversify wetland conditions, and thereby increase the amount and quality of wetlands in the Project area. There would also be some flow redirection as wood structures and side channels would facilitate more natural lateral movement and sinuosity of channels, slow water velocities, and connection between the channels and the floodplain, and provide for more

efficient sediment movement and retention in the floodplain. This level of effect would be low after considering short-term adverse effects and beneficial long-term effects, and is consistent with the Programmatic EA.

## 5. Wildlife

The effects of using mechanized equipment and manually working in and along Camp Creek are consistent with the analysis in Section 3.3.5 of the Programmatic EA ("Wildlife"). Section 3.3.5.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Wildlife") describes overall low impacts to wildlife after considering short-term adverse effects and beneficial long-term effects.

ESA-listed gray wolf (*Canis lupus*) may be present within Grant County, but suitable habitat is not located within or near the Project site, and the Project would thus have no effect on gray wolf. No other ESA-listed, state-listed, or other sensitive wildlife species have been documented within the Project area.

The disturbance of wildlife by the movement, sounds, and vibrations of human and mechanical activity during construction would displace them temporarily from their preferred habitat while those activities are present. No work would occur during breeding or nesting season. The Project would create conditions within this reach that are conducive for beaver recolonization. Disturbed areas would be revegetated and would be beneficial to local wildlife species in the long term.

The Project's short-term effects would be consistent with those analyzed in the Programmatic EA. The actions of humans and machines in this area would temporarily displace wildlife from their preferred locations and prevent them from reoccupying the site until construction is complete, at which point that habitat would be more diverse but vegetatively similar. The effects on small, individual wildlife species may be moderate to high for individuals that are harmed or killed by construction activities, but effects would be comparatively minor for larger animals that may only be temporarily displaced. The long-term effects on wildlife populations would be beneficial from the increased habitat quality and carrying capacity resulting from the Project. The overall effects of the Project would be beneficial and consistent with those evaluated in the Programmatic EA.

### 6. Geology and Soils

The effects of using mechanized equipment and manually working in Camp Creek and its floodplain are consistent with the analysis in Section 3.3.6 of the Programmatic EA ("Geology and Soils"). Section 3.3.6.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Geology and Soils") describes moderate impacts to geology and soils.

The Project is anticipated to have impacts consistent with those described in the Programmatic EA. Side channel creation, channel fill, and wood structure installation would require excavation and thereby cause soil displacement, compaction, and mixing of soil horizons. The Programmatic EA considered actions that could disturb large areas at any one site. The area impacted by this action would be about 38 acres. Design criteria, mitigation measures, and best management practices such as stockpiling of topsoil, dust abatement, and erosion protection measures would all be applied as described in Section 2.4 of the Programmatic EA ("Mitigation Measures and Design Criteria") to minimize impacts and maintain long-term soil productivity.

The Project does not specifically target soils for restoration or enhancement (as it does fish habitat and hydrologic functions), but the proposed actions would result in maintaining and improving soil properties and functions as hydrologic function is restored within the floodplain and from sediment relocation and revegetation efforts.

In summary, the effects of the Project on soil and geology could be moderate in the short-term, but these potential moderate effects would be minimized to the greatest extent possible through the use of BMPs that would reduce the overall impacts from project actions on soils and geology to moderate, consistent with the conclusions of the Programmatic EA. There would be a positive impact to soils in the long term.

## 7. Transportation

The effects of this Project in and along Camp Creek are consistent with the analysis in Section 3.3.7 of the Programmatic EA ("Transportation"). Section 3.3.7.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Transportation") describes low impacts to transportation.

Although this Project is adjacent to several USFS roads (Figure 2), it would not impact any roads, neither open or closed, nor public or private. No roads would be closed, temporarily blocked, or relocated. No work would be conducted from the highway or its shoulders. As part of the Project, vehicles transporting workers and equipment to project sites would be sharing local USFS roads with other traffic during construction, and the road would remain open. This level of impact would be low, consistent with the Programmatic EA.

### 8. Land Use and Recreation

The effects of the proposed Project in and along Camp Creek are consistent with the analysis in the Programmatic EA, Section 3.3.8, "Land Use and Recreation." The Programmatic EA, Section 3.3.8.3, states that overall effects on land use and recreation would be low to moderate.

There would be no effect on land use, and minimal effect on recreation from the proposed Project. Land uses would not change, and public recreational opportunities at this location would result in short-term displacement during construction activities in 2024 of recreational users from the immediate project area. There are other recreational dispersed camping and birdwatching opportunities in the areas to serve as alternatives during the construction. No permanent change in land use or recreation would occur from the proposed Project. This level of effect is low and consistent with that described in the Programmatic EA at Section 3.3.8.2, which describes impacts to land use and recreational opportunities. These impacts would be low in the short-term, but beneficial as recreational opportunities return. Overall, there would be a low temporary effect on land use practices and recreation, consistent with the conclusions of the Programmatic EA.

## 9. Visual Resources

The effects of the proposed Project in and along Camp Creek would be consistent with the analysis in Section 3.3.9 of the Programmatic EA ("Visual Resources"). Section 3.3.9.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Visual Resources") describes low impacts to visual resources.

The proposed restoration actions are immediately adjacent to several USFS roads, and most activities would be readily visible to travelers along this route. As described in Section 3.3.9.2 of the Programmatic EA ("Environmental Consequences for Visual Resources"), Project-related construction would accordingly result in some short-term visual impacts, including some disturbance that detracts from the view and the visible presence of newly planted grasses, forbs, and shrubs. However, these visual impacts would last for only a few weeks during staging, construction, and replanting. When construction is complete, the river would gradually appear less disturbed as the newly planted seeded grasses and forbs grow. Within a year or two, the matured vegetation would provide the same natural scenery that can be seen elsewhere along this road. This level of impact would be low and beneficial, as consistent with the Programmatic EA.

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

The effects of the proposed Project in and along Camp Creek would be consistent with the analysis in Section 3.3.10 of the Programmatic EA ("Air Quality, Noise, and Public Health and Safety"). Section 3.3.10.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Air Quality, Noise, and Public Health and Safety") describes low impacts to air quality, noise, and public health and safety. This Project is about 25 miles north of John Day, Oregon, which is too far for noise, dust, or exhaust from construction activities to affect the residents during the few weeks of construction activities; and no long-term source of emissions or noise would be created. Impacts to safety would come from workers sharing the roads when travelling to and from work sites; and the visual distraction that construction work close to the road might pose to passing motorists. This Project has no potential to impact public safety infrastructure (e.g., roads, telecommunications equipment, etc.) and some potential to burden emergency services (e.g., police, fire, and emergency medical services), which would be ameliorated through the use of mitigation measures, such as preconstruction safety identification and proper safety gear. This level of impact would be low and adverse in the short term, but beneficial in the long-term, and overall, the effects of the Project on public health and safety would be low and consistent with the Programmatic EA.

#### 11. Cultural Resources

The effects of this Project are consistent with the analysis in Section 3.3.11 of the Programmatic EA ("Cultural Resources"). Section 3.3.11.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Cultural Resources") 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.

Site-specific National Historic Preservation Act Section 106 consultation for the Project was completed with BPA as the lead agency, in coordination with USFS archaeologists. BPA reviewed a cultural resource survey, and consulted with the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes of the Umatilla Indian Reservation, USFS - Malheur National Forest, and the Oregon State Historic Preservation Office. Based on the results of that survey, BPA determined that the Project would have no adverse effect on historic resources and notified the consulting parties. The consultation was completed on August 31, 2023. BPA did not receive a response from the other parties consulted during this process.

### 12. Socioeconomics and Environmental Justice

The effects of this restoration Project along Camp Creek would be consistent with the analysis in Section 3.3.13 of the Programmatic EA ("Socioeconomics and Environmental Justice"). Section 3.3.13.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Socioeconomics and Environmental Justice") describes low socioeconomic and environmental justice impacts.

Consistent with the effects described in the Programmatic EA, the Project would not generate a requirement for additional permanent employees nor would it require individuals to leave the local area, or relocate to it. There would be no effect on housing available for local populations. This Project would not displace people or eliminate residential suitability of lands being restored, or from lands near it. The Project would generate short-term employment for those directly implementing the restoration actions and would provide small short-term cash inputs to local businesses for fuel, equipment, and meals.

There are no environmental justice populations present that could be affected, as this Project and its impacts are limited to the private lands on which they are located, and no offsite effects are anticipated that could impact environmental justice populations elsewhere.

In summary, the effects of the Project on socioeconomics would be low and short-term, and there would be no effects to environmental justice populations. These effects are consistent with the conclusions of the Programmatic EA.

## 13. Climate Change

The effects of this Project in and along Camp Creek are consistent with the analysis in in Section 3.3.14 of the Programmatic EA ("Climate Change"). Section 3.3.14.3 of the Programmatic EA ("Effects Conclusion for the Proposed Action on Climate Change") describes low impacts on climate change.

Due to the short duration of construction and the relatively small number of construction vehicles and other gas-powered equipment, emissions associated with project construction activities are anticipated to be short-term and low. Additionally, trees harvested as large woody debris for this project represent loss of carbon sequestration and added carbon as the trees decay. Therefore, the project would have a low level of greenhouse gas production and would have a low contribution to climate change from short-term emissions from motorized equipment operations during implementation of the restoration actions. Further, these greenhouse gas emissions would be offset to some degree by the ameliorating effects of restored floodplain function such as increased carbon sequestration in expanded wetlands and riparian plantings. This project would also provide for an increase of long-term water table inputs through restored floodplain function and increased connectivity of the river and side channels to their floodplain. It would also increase riparian shading along the river and side channels. These results could ameliorate the effects of climate change on aquatic species. The effects of the Project on climate change would be low in the short-term and have low long-term benefits. The overall effects on climate change would be low, consistent with the Programmatic EA.

## **Findings**

BPA finds that the types of actions and the potential impacts related to the proposed Camp Creek Reach 1 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 10 CFR § 1021.314 and 40 CFR § 1502.9. Therefore, no further NEPA analysis or documentation is required.

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Concur:

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# **References**

StreamNet. 2024. StreamNet Mapper (arcgis.com). Available: https://psmfc.maps.arcgis.com/apps/webappviewer/index.html?id=3be91b0a32a9488a901c3885bbfc2b0b