



— BUREAU OF —  
RECLAMATION

# **Columbia River Basin Tributary Habitat Restoration**

**FINDING OF NO SIGNIFICANT IMPACT**

**FOR THE**

**PROGRAMMATIC ENVIRONMENTAL ASSESSMENT**

**Columbia-Pacific Northwest Region**

**PN-FONSI-20-4**

## **Mission Statements**

The Department of the Interior conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

# Columbia River Basin Tributary Habitat Restoration

## FINDING OF NO SIGNIFICANT IMPACT

**U.S. Department of the Interior**  
**Bureau of Reclamation**  
**Columbia-Pacific Northwest Region**  
**PN-FONSI-20-4**

### Introduction & Summary

The Bureau of Reclamation (Reclamation) has presented environmental findings in the December 2020 Columbia River Basin Tributary Habitat Restoration Programmatic Environmental Assessment (EA). Reclamation's ongoing Tributary Habitat Program involves activities and projects<sup>1</sup> to restore tributary habitat for fish and wildlife within the Columbia River Basin (excluding the Columbia River estuary) in the states of Oregon, Washington, and Idaho.

The Bonneville Power Administration (Bonneville) initiated the programmatic evaluation in November 2019 with public scoping and invited Reclamation to be a cooperating agency in December 2019; Reclamation accepted the invitation in January 2020. Bonneville, as lead agency, in cooperation with Reclamation as a cooperating agency, prepared an EA to analyze the potential impacts of 10 categories of restoration actions to support more efficient environmental review of site-specific restoration actions and projects. Based on the analysis in the EA, Reclamation has determined that implementing the Proposed Action will not significantly affect the quality of the human environment. Accordingly, Reclamation is issuing this Finding of No Significant Impact (FONSI) for the Proposed Action. Bonneville prepared its own agency-specific FONSI and decision document for the relevant activities and projects.

Reclamation will adopt the Final EA for future habitat actions in the Columbia River Basin per 40 CFR § 1506.3. The Final EA satisfies Reclamation's National Environmental Policy Act (NEPA<sup>2</sup>)

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<sup>1</sup> The term "project" is used to refer to an undertaking which incorporates one or more discrete species or habitat restoration "actions."

<sup>2</sup> On July 16, 2020, the Council on Environmental Quality (CEQ) published a final rule updating its NEPA implementing regulations. These regulations became effective September 14, 2020 and apply to NEPA processes begun after that date. Because the EA was initiated before this effective date, it was prepared in accordance with the prior version of CEQ's implementing regulations and is consistent with NEPA.

requirements, and all comments and suggestions provided to Bonneville regarding the EA have been addressed.

## Public Availability

The Final EA and FONSI are posted on Reclamation's project website (available online at: <https://www.usbr.gov/pn/programs/ea/trib/index.html>).

## Purpose and Need

Reclamation needs a programmatic approach to support efficient and timely environmental review of numerous site-specific tributary habitat improvement and restoration projects proposed each year, many of which are similar in terms of methods, location, and impacts. At present, environmental reviews are conducted for tributary habitat restoration projects on a project-by-project basis. These projects include many routine actions with well-understood and predictable environmental effects common to restoration projects in riverine and terrestrial ecosystems in the larger Columbia River Basin (hereinafter referred to as the Basin). Repeated environmental review of such projects can lead to delays in implementation. A coordinated and programmatic evaluation of environmental impacts of tributary habitat restoration actions in the Basin provides a comprehensive effects analysis and an analytical framework to which subsequent site-specific analyses can efficiently tier (per 40 CFR 1501.11).

In meeting the need for action, Reclamation seeks to achieve the following purposes:

- To help meet Reclamation's obligations under the Endangered Species Act (ESA) by fulfilling ongoing commitments under the 2020 National Marine Fisheries Service (NMFS) Columbia River System Biological Opinion<sup>3</sup>;
- To minimize adverse effects to the human environment, avoid jeopardizing the continued existence of ESA-listed species, and avoid adverse modification or destruction of designated critical habitat; and
- To fulfill the agencies'<sup>4</sup> commitment related to proposed projects contained in the 2008 Columbia Basin Fish Accords Memorandum of Agreement (MOA) among the Confederated Tribes of the Umatilla Indian Reservation, the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes and Bands of the Yakama Nation, the

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<sup>3</sup> The consultation history with NMFS for operation of the Federal Columbia River System is summarized in the 2020 Biological Opinion.

<sup>4</sup> The use of the term "agencies" refers to Bonneville and Reclamation collectively; this is a joint agency purpose.

Columbia River Inter-Tribal Fish Commission, Bonneville, the U.S. Army Corps of Engineers (USACE), and Reclamation; the Accords MOA among the Confederated Tribes of the Colville Reservation, Bonneville, USACE, and Reclamation; the Accords MOA among the Shoshone-Bannock Tribes, Bonneville, USACE, and Reclamation; the Accords MOA among the State of Idaho, Bonneville, USACE, and Reclamation; and the Accords MOA among the State of Montana, Bonneville, USACE, and Reclamation (all extended in 2018 and 2020<sup>5</sup> per the Fish Accord Extension).

## Alternatives

The Programmatic EA analyzed the Proposed Action Alternative and the No Action Alternative. These alternatives are described below.

### Proposed Action

Reclamation's Proposed Action, through its Tributary Habitat Program, is to provide technical assistance, directly or through grant funding, for habitat project development, design, and technical services (Section 2.2.1.2 of the EA). These projects would occur in the John Day, Grande Ronde, Upper Salmon, and Upper Columbia River subbasins. Most of these projects would be implemented in coordination with Bonneville and represent an overall tributary habitat restoration program; some projects, however, may be funded through other Reclamation partners.

Reclamation would use the programmatic EA to help evaluate the potential environmental impacts of the Proposed Action, within the 10 category actions below, and to support NEPA responsibilities for decisions on proposed tributary habitat restoration actions and projects.

Under the Proposed Action described in Sections 2.1 and 2.2 of the EA, restoration actions would be implemented to restore aquatic, riparian, and upland habitats; restore or improve hydrologic connectivity between river flows and those restored habitats; and restore hydrologic and riverine processes (flow patterns, localized flood regimes, sediment accretion, erosion, and floodplain function). The categories of actions evaluated to achieve these objectives include:

1. Reestablishing and Improving Fish Passage
2. Improving River, Stream, Floodplain, and Wetland Habitat
3. Invasive Plant Control and Vegetation Management
4. Piling Removal
5. Road and Trail Erosion Control, Maintenance, Decommissioning, and Construction
6. In-Channel Nutrient Enhancement
7. Irrigation, Water Delivery, and Water Use Actions
8. Fish, Hydrologic, Wildlife, and Geomorphic Surveys
9. Riparian and Upland Habitat Improvements and Structures

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<sup>5</sup> As of October 23, 2020, all parties had signed the 2020 extensions, with the exception of the Columbia River Inter-Tribal Fish Commission and the Confederated Tribes of the Umatilla Indian Reservation.

## 10. Artificial Pond Development and Operation

The programmatic EA evaluates the typical environmental effects and identifies mitigation measures for certain categories of habitat restoration actions that will continue to be proposed for restoration of tributary habitat in the Basin. Under the Proposed Action, individual projects would be evaluated to determine if NEPA coverage would be provided by the programmatic assessment or if additional NEPA analysis would be required. It is anticipated that some of Reclamation's restoration actions would be covered under the programmatic EA. Such actions would be documented to the project file and would incorporate by reference, or tier to, the analysis in the programmatic EA. If additional coverage proved to be warranted, site-specific NEPA analyses would be documented in a categorical exclusion, an EA, or an Environmental Impact Statement (EIS), as appropriate for the specific proposal.

As part of Reclamation's NEPA review, all proposals would also be reviewed to ensure compliance with applicable laws and regulations, including but not limited to the ESA, the National Historic Preservation Act (NHPA), the Clean Water Act, and the Migratory Bird Treaty Act.

In addition, public notification or involvement would be conducted, as appropriate, for projects with potential effects to landowners, local governments, tribes, or interest groups. Public notification or involvement would be conducted to inform the potential stakeholders of proposed restoration actions, to help determine the suitable level of NEPA analysis to be conducted, and to identify issues to be addressed.

The mitigation measures listed in Appendices A, B, and C of the Final EA would be used, as applicable, to help mitigate potential impacts of site-specific actions and projects.

### **No Action Alternative**

Under the No Action Alternative (the status quo, as described in Section 2.3 of the EA), the agencies would continue the current approach of conducting environmental review of tributary habitat improvement actions and site-specific projects without the support of a programmatic EA. The agencies would not utilize analysis in this EA through incorporation by reference or tiering to help expedite site-specific project environmental review.

## **Summary of Environmental Effects**

The EA evaluated the potential environmental effects of typical actions and projects of the Tributary Habitat Program, as well as of the Proposed Action Alternative and the No Action Alternative. The EA analysis was the basis for the determination as to whether the categories of actions could cause significant environmental effects (see Chapter 3 of the EA). Potential impacts are summarized in terms of duration and four impact levels (high, moderate, low, and no impact). The impact levels are

based on the considerations of context and intensity<sup>6</sup> defined in the Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 CFR 1508.27). If not mitigated, high overall impacts could be considered significant, whereas moderate and low overall impacts would be considered insignificant. In general, implementation of restoration actions and projects would have short-term, localized adverse impacts associated with construction disturbances. However, long-term, local, and Basin-wide beneficial effects to natural resources would be realized due to improvement of tributary habitat. Overall, no high, unmitigated impacts were identified in the EA. The Proposed Action would have no significant impacts.

The following discussion provides a summary of the Proposed Action's potential impacts and the reasons these impacts would not be significant. Many of the effects discussed below would be minimized through the application of mitigation measures identified in Appendices A, B, and C of the Final EA, as well as through other resource-protective designs and measures that may be identified during site-specific project review.

## **Fish and Aquatic Species**

Effects on fish and aquatic species would be low, considering both short-term and long-term effects. Potential impacts are summarized below.

- Construction actions that dewater streams and require fish salvage would have high short-term, localized adverse impacts on individual fish, as the fish would be electroshocked, netted, handled, and then released during fish-salvage efforts. Other aquatic species too small to be captured during salvage efforts may be disturbed, injured, or killed during dewatering. This impact would be mitigated through implementation of conservation measures related to work area isolation and fish salvage (Appendix B of the EA).
- The noise and vibrations from construction equipment, or the shock from blasting, could disturb, displace, injure, or kill fish. The use of construction equipment also creates the potential for drips or spills of petroleum-based fluids that are toxic to aquatic species. Impacts would be minimized by the application of mitigation measures.
- Construction activities that reshape channels, beds, and banks would produce short-term plumes of sediment that, though minimized by the application of mitigation measures, would impact aquatic species and their habitat.
- For the long term, fish habitat would be improved. Passage barriers would be removed; previously isolated fish populations would be reconnected; available habitat would be increased; nutrient enhancement would enhance primary and secondary productivity in streams; habitat structure and complexity would be increased in both amount and quality;

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<sup>6</sup> Context and intensity were used to define significance, per 40 CFR 1508.27 of the CEQ 1978 regulations implementing NEPA. Note that CEQ published a final rule updating its NEPA implementing regulations on July 16, 2020, which effectively eliminated this definition to provide flexibility in assessing significance. Future NEPA documents will use the updated CEQ NEPA implementing regulations regarding significance (40 CFR 1501.3).

and streamflow and temperature regimes would be restored to ranges and conditions beneficial to fish and other aquatic species.

- Improved riparian plant communities (a component of tributary channel restoration actions) would benefit aquatic species by increasing organic inputs into the stream in the form of woody debris for habitat and insects for food, and by increasing shade for temperature regulation.
- Riparian and upland habitat improvements, such as road maintenance, decommissioning, and relocation and culvert installations in small tributary streams, would reduce unnatural fine sediment inputs into streams and rivers. Irrigation changes would provide more water for maintaining or restoring desirable flow regimes in rivers.

## **Water Resources**

Effects on water resources would be low, considering both short-term and long-term effects. These effects are summarized below.

- Some actions (irrigation system changes and consolidation/reconstruction of irrigation diversions) would increase water quantity available for instream flows for the long term.
- Tributary restoration actions would create short-term, localized sediment inputs from the actions of heavy equipment in and along streams, though these would be minimized by the application of mitigation measures. Sediment inputs would generally not be in amounts greater than that which occurs naturally during annual high flow events.
- The removal of riparian vegetation during construction activities could cause small, short-term increases in water temperature.
- For the long term, there would be a decreased potential for unnatural sediment inputs, an increased potential for the floodplain to effectively manage its sediment loads, and a reduction of stream temperatures from improvements in stream form, instream habitat structure, and increased riparian vegetative cover.

## **Vegetation**

Effects on vegetation would be moderate, as summarized below.

- Heavy equipment use during short-term construction activities would disturb soils and remove vegetative cover. A few actions could impact areas of up to 100 acres in size, but most actions would impact only about 1 acre or less.
- The creation of bare-soil sites in the short term would create the potential for colonization by invasive plants, but no bare-soil sites would be left in that condition. Weed treatments and replanting with native species are parts of all actions that modify vegetative conditions.
- The reintroduction of flows into side channels or floodplains that have not experienced consistent flowing water for many decades would produce changes in plant communities.

Plant communities would shift from upland plant associations to riparian or wetland communities adapted to seasonal flows.

- The use of herbicides or fire, or juniper removal actions, would remove vegetation and modify plant communities in the short term, or over a series of years if invasive plants are well established and widespread. For the long term, these actions would create site conditions more suitable for desired native plant communities.
- Over the long term, the effects on vegetation would be the restoration, improvement, or maintenance of native plant communities.

## **Wetlands and Floodplains**

Effects on wetlands and floodplains would be low, considering both short-term and long-term effects. These effects are summarized below.

- Existing wetlands that are in poor condition would be temporarily damaged or destroyed in the process of reconstructing improvements for the long term. The short-term impacts from heavy equipment operations may be high, but impacts would be mitigated to the extent possible through application of applicable conservation measures and mitigation measures (see Appendices A and B of the EA). The long-term result would be enhanced functioning of wetland habitat.
- Floodplains may be similarly impacted by construction activities where they would be reconnected to rivers or streams (constructed secondary channels, side channels, and alcoves), but the long-term result would be a hydrologic connection between the floodplain and its water source. This result could elevate groundwater tables and restore or improve floodplain function for the long term.
- Modifications of floodplain connections and function have a risk of failure if uncommonly high flows immediately follow project completion, but structures that increase floodplain “roughness” and that slow water velocities across floodplains would be applied where such risks are possible.
- Prescribed burning in wetlands or floodplains would alter soil and vegetation conditions but would ultimately increase wetland plant abundance and diversity and improve wetland function.
- The long-term beneficial effects of improved stream/floodplain connection, restored floodplain function, and riparian habitat improvements would increase water storage capacity in the floodplain, augment late season streamflows, slow the movement of water during floods, and attenuate peak flood flows.

## **Wildlife**

Effects on wildlife would be low, although short-term effects would vary depending on the types of wildlife being considered. Long-term effects would be beneficial for most types of wildlife. Effects are summarized below.

- Short-term construction activities would adversely impact wildlife through habitat loss for smaller wildlife species and through disturbance and displacement of larger wildlife. Sensitive site avoidance, design and timing criteria, and other mitigation measures would reduce these effects.
- Species with small home ranges that are closely associated with riparian habitats would be most impacted by short-term construction activities. Some small animals may be injured or killed by heavy equipment operations and some would lose all required habitat values during the construction period.
- During the construction period, larger or otherwise more mobile species (such as birds or deer) with larger home ranges would be stressed and displaced into other parts of their range. Timing restrictions would be applied to avoid disturbance of nesting sites.
- Wildlife displaced by short-term construction activities may be forced into neighboring territories where competition with occupants of those territories could result in injuries or fatalities to the involved animals. Longer construction periods and larger areas of disruption would increase this potential.
- Habitat alterations from completed actions may preclude use by species closely-associated with the riparian or floodplain habitats affected during the time it would take for vegetation to recover or grow (three to ten growing seasons). This time may exceed the lifespan of some species; thus, some individuals or breeding pairs may be lost.
- Habitat generalist species that can use a variety of habitats would be less vulnerable to such displacement but would face competitive pressures if displaced into surrounding habitats. Of these species, some could be affected only because their prey species may be dependent on the habitats affected (and thereby lost or displaced).
- The long-term effects of these actions would produce habitats with an increased capacity for higher numbers and a higher diversity of wildlife than was formerly present. While individuals may be adversely affected by the short-term actions, larger wildlife populations would benefit from the long-term results.
- No wildlife species listed as Threatened or Endangered under the ESA are closely associated with the riparian or wetland habitat types primarily impacted during restoration activities. Threatened or Endangered species would be affected only if restoration sites might be part of a larger home range area (e.g., a riparian area within a spotted owl home range).

## **Geology and Soils**

Impacts to geology and soils would be moderate. The relevant impacts are summarized below.

- Some projects would involve a high degree of ground disturbance by displacing, compacting, and mixing soils by the use of heavy equipment for reshaping river banks, beds, side channels, and floodplains. Such impacts impair soil productivity and function in the disturbed locations, but effects would be minimized by the application of mitigation measures.

- Soils would be impacted by prescribed burns that could remove surface vegetation and organic material in the soils, thermally damage soil microorganisms, and alter nutrient content and availability for plant use. These effects would be minimized by the application of properly prepared burn plans as required in related mitigation measures.
- Minor and temporary impacts on soils from herbicide applications are possible. These impacts would be minimized by applying required mitigation measures (see Appendix C of the EA).
- Project actions would create conditions that would improve soil quality and productivity for the long term. Projects would restore proper function to floodplains which provide for seasonal sediment deposits during spring floods. These deposits increase water-holding capacity, supply nutrients, and deliver vegetative propagules and seeds for vegetation establishment. All of these factors contribute to restoring productive soils and improving hydrologic, biologic, and nutrient-cycling functions for the long term.

## **Transportation**

Impacts to transportation would be low, as summarized below.

- Roads may be closed for short periods while culverts are being replaced, bridges are constructed, or road surfaces are being maintained. Road users would be inconvenienced at these times.
- Some low-traffic-volume roads may be decommissioned and some may be relocated; as a result, these roads would no longer be accessible to current users. The end result, however, would be a local transportation system that requires less maintenance, provides improved travel conditions by having improved running surfaces, and is located outside of areas likely to flood, erode, or rut.

## **Land Use and Recreation**

Impacts to land use and recreation would be low to moderate, as summarized below.

- Restoration actions would not require a change in land uses outside of the site being restored. Specific practices, such as grazing timing and intensity and irrigation water uses, may change at the restoration site (with the cooperation of a willing landowner). However, land uses for surrounding land previously in agricultural production or grazing use would not change after restoration actions.
- A few parcels may be converted from agricultural use to aquatic, riparian, or floodplain use on those areas designated as a conservation easement; however, the land use category (i.e., conservation easement) would not change. This could also occur on private lands at the request of a landowner, but this would be an uncommon occurrence.
- Actions on federally-managed or state-managed lands would be consistent with the resource management plans guiding uses of those lands.

- Effects on recreation uses would be minimal since most actions are on private lands where public recreation is precluded, or on publicly-owned state or federal land where recreational access would be maintained. In both situations, habitat would be improved for fish, wildlife, and aquatic conditions, all of which contribute to higher quality recreational experiences on the site or in nearby accessible areas.
- Some river restoration end results may benefit one type of recreation over another. Projects that place logs or log structures in rivers may inconvenience recreational rafters and kayakers, although they would benefit those who fish. Informational signing for public safety may be applied as a mitigation measure in these situations.
- Restoration sites may attract recreationists and some projects may include accommodations for recreational use. If recreational use increases, there could be potential for conflict with neighboring landowners. Most actions, however, are on private lands with no accommodations that would attract public users.

## **Visual Resources**

Impacts to visual resources would be low, as summarized below.

- Construction activities would degrade the scenery in the short term by the removal of vegetation and by the operation of heavy equipment inconsistent with the typical agricultural or rural character of the sites. However, long-term conditions would be consistent with the landscape and would often improve visual quality by improving vegetative conditions.
- No structure or condition would be created in these actions that would be inconsistent with the typical rural agricultural or natural setting of project sites. Most would be indistinguishable in the middle ground or background as seen from publicly-traveled roadways.
- Prescribed burns would temporarily impact visual quality until the vegetation greened up (which would start within weeks or months). Properly designed and executed burn plans, as required for related mitigation measures, would not create long-lasting or visually dominant evidence of a burn.

## **Air Quality, Noise, and Public Safety**

Impacts to air quality, noise, and public safety would be low. These impacts are summarized below.

- Heavy equipment would produce exhaust emissions and cause dust during construction and associated travel along unpaved access roads; this would affect local air quality for short periods only. No long-term emissions would be produced by the proposed restoration actions.
- Herbicide used for invasive species control could cause short-term air quality degradation if applied during high temperatures or inversions, but application according to label requirements and application of mitigation measures would minimize or prevent this effect.

- Heavy equipment use could increase (double) the ambient noise levels during short-term construction periods. In most cases, equipment would be far enough away from homes or workplaces that the noise would likely be noticeable but not disruptive. For projects with the potential for disruptive noise, minimization and mitigation measures would be applied. Completed actions would produce no disruptive noise.
- The short-term construction and restoration activities would not be expected to hinder emergency vehicle access or overly burden the existing health and safety infrastructure. Site-specific road hazards would be mitigated using routine safeguards such as signage and flaggers.

## **Cultural Resources**

Impacts to cultural resources would be low, as summarized below.

- Each project would be reviewed by an appropriately qualified cultural resource specialist to facilitate compliance with Section 106 of the NHPA.
- Project actions with the potential to adversely impact cultural resources would be identified and steps would be taken to avoid, minimize, or mitigate such effects.
- Project actions that could not be appropriately mitigated through the Section 106 consultation process would not be tiered to the programmatic EA.

## **Indian Sacred Sites**

- Pursuant to Executive Order 13007, Reclamation, in evaluating future site-specific projects that that may tier off of this EA, would contact appropriate tribes to request their assistance in identifying sacred sites within the study area.
- Effect analysis methodologies relevant to sacred sites would be utilized, as applicable, per site-specific analysis.
- Project design elements would ensure the avoidance or reduction of project effects to identified sites so that no significant impacts would occur.
- Required mitigation of effects that could not be avoided or minimized through project design would be assessed through site-specific NEPA analysis prior to implementation.

## **Indian Tribal Assets**

- The effects of the Proposed Action on Indian Tribal Assets (ITAs) cannot be discerned at the programmatic level and thus would be identified and analyzed during future project-specific evaluation. Reclamation would utilize its process for identifying ITAs and evaluating site-specific effects. If ITAs are identified, Reclamation will coordinate with the Bureau of Indian Affairs and relevant federally-recognized tribes or tribal individuals on identified trust assets.

- Project design elements would ensure the avoidance or reduction of project effects to identified sites so that no significant impacts would occur.
- Required mitigation of effects that could not be avoided or minimized through project design would be assessed through site-specific NEPA analysis prior to implementation.

## **Socioeconomics and Environmental Justice**

Impacts to socioeconomics and environmental justice would be low. These impacts are described below.

- The Proposed Action would have a low impact on local populations and economies. Permanent jobs would not be created, land uses would not be changed, and project activities would not require people to relocate homes or businesses.
- Some sub-watersheds with long-term restoration activities under this program have seen, and would likely continue to support, new equipment-operator businesses that specialize in construction work for stream restoration.
- Short-term economic benefits would be created by project actions in the form of purchases of supplies and materials, and by expenditures of the workers employed to implement the actions. This economic benefit would be minimal.
- Local tourist-based economies would benefit in the long term from recreation opportunities improved by increased fish runs and improved natural scenery and river flows.
- Potential impacts to lands downstream of flow-altering restoration actions would be considered in project planning to avoid adverse effects.
- The Proposed Action generally includes no activity that would result in displacements of environmental justice populations, activities, or land uses, nor would it generate human health or environmental effects that might disadvantage any population, including minority or low-income populations. Site-specific analyses would be performed to identify and disclose the presence of and potential for impacts to environmental justice populations.
- Restoration projects have been and would continue to be proposed and implemented on or near Indian reservations or non-reservation communities that could meet the definition of an environmental justice population. These actions would often be sponsored by the tribes themselves, either on lands they control or on lands whose owners or managers are participating in the action with funding benefitting tribal governments and individuals.
- Some actions may have the potential for short-term adverse natural resource impacts that could affect use of those resources by tribal members or other environmental justice populations. Site-specific assessments would be required for these actions and would be intended to identify this potential and avoid or mitigate related effects.

## Climate Change

Impacts to climate change would be low, as discussed below.

- Impacts to climate change would come only from the short-term effects of emissions from motorized equipment operations during construction or implementation of the proposed activities.
- Carbon emissions would be offset to some degree by the increased carbon sequestration capability of expanded and improved wetlands.
- Temperature increase from climate change would be locally ameliorated by restored floodplain function with increased groundwater inputs and by water temperature decreases from improved instream and riparian habitat conditions.

## Significance Criteria

### Context

The Proposed Action assessed in the programmatic EA covers tributary habitat restoration actions that may occur at locations across the Columbia River Basin. The Basin provides drainage for hundreds of rivers, creeks, and streams, covering an area of more than 260,000 square miles. Individual categories of action proposed will be limited in geographic scope and dispersed in time and space and will therefore be small in context when compared to the overall size of the subbasins where such actions will be implemented.

### Intensity

Ten criteria for intensity were evaluated as described below.

1. Impacts may be both beneficial and adverse.

The Proposed Action is designed to benefit habitat for ESA-listed fish species. Project design features and mitigation measures will be implemented, as applicable, for site-specific projects to minimize the potential to adversely affect any resource, as described below under “Mitigation.”

2. The degree to which the selected alternative will affect the public health or safety of minority or low-income populations.

Site-specific analyses will be performed to identify and disclose the presence of and potential for impacts to environmental justice populations; see Socioeconomics and Environmental Justice, above.

3. Unique characteristics of the geographic area.

The Proposed Action has been designed to restore tributary habitats in the Columbia River Basin, specifically habitat for ESA-listed fish species.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

Reclamation proposes to continue restoring habitat in the Basin to improve fish and wildlife habitat and survival of at-risk species as proposed in the action consulted upon in the 2020 NMFS Columbia River System Biological Opinion. The actions are beneficial and supported by interested parties.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The Proposed Action applies ecological restoration practices for which the outcomes are well documented and understood. When applied according to the best management practices and project design features included in the EA, there are no predicted effects on the human environment that are considered highly uncertain or involve unique or unknown risks.

6. The action will not establish a precedent for future actions with significant effects, and it will not represent a decision in principle about future consideration.

Actions being proposed under the programmatic EA include many routine actions with well-understood and predictable environmental effects common to restoration projects in riverine and terrestrial ecosystems in the larger Columbia River Basin. Site-specific projects will undergo environmental review to determine coverage under the programmatic EA or if additional NEPA compliance is required.

Reclamation has used programmatic EAs previously to cover habitat actions in the Columbia River Basin (PN-FONSI 03-03<sup>7</sup>; PN-FONSI 03-05<sup>8</sup>) and Bonneville has used a programmatic EA for restoration actions in the Columbia estuary (DOE-EA-2006<sup>9</sup>). Therefore, use of a programmatic EA to cover Reclamation activities does not set a precedent.

7. Whether the proposed action is related to other actions that are individually insignificant but cumulatively significant.

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<sup>7</sup> Finding of No Significant Impact, Programmatic EA for the Implementation of Action 149 Fish Habitat Improvement Measures in 4 Mountain Snake Province Subbasins, Idaho, April 2003.

<sup>8</sup> Finding of No Significant Impact and Final Programmatic EA for Implementation of Action 149 Fish Habitat Improvement Measures from the December 2000 National Marine Fisheries Service Biological Opinion of the Federal Columbia River Power System in Three John Day Subbasins in the Mid-Columbia River Steelhead Evolutionarily Significant Unit in Central Oregon, May 2003.

<sup>9</sup> Columbia Estuary Ecosystem Restoration Program FONSI, Bonneville Power Administration, July 2016.

Section 3.4 of the EA considers the potential for cumulative effects to each resource. Although there would be short-term (weeks to months) adverse impacts generated from some of the habitat actions, these impacts would not be cumulatively significant across the Basin. The long-term cumulative effects of the Proposed Action would be a cumulative contribution of improved environmental conditions to those of ongoing restoration actions of the past few decades.

8. The degree to which the action may adversely affect sites, districts, buildings, structures, and objects listed, or eligible for listing, in the National Register of Historic Places.

All site-specific actions would be reviewed to ensure compliance with Section 106 of the NHPA. Consultation under the NHPA would be conducted, as appropriate, prior to implementation for all actions under this EA. Conservation or mitigation measures identified through these consultations would be applied alongside the applicable design features and mitigation measures identified in Appendices A, B, and C of the EA.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

As described in Section 1.3 of the EA, the project purpose includes fulfilling ongoing ESA commitments under the 2020 NMFS Columbia River System Biological Opinion related to tributary habitat restoration, avoiding jeopardizing the continued existence of ESA-listed species, and avoiding adverse modification or destruction of designated critical habitat.

All actions would be reviewed to ensure compliance with the ESA. Consultation under the ESA would be conducted as appropriate prior to implementation for all actions under this EA. Conservation or mitigation measures identified through these consultations would be applied alongside the applicable design features and mitigation measures identified in Appendices A, B, and C of the EA.

10. Whether the action threatens a violation of federal, state, local, or tribal law, regulation, or policy imposed for the protection of the environment.

The Proposed Action will not violate any federal, state, local, or tribal law, regulation, or policy imposed for the protection of the environment.

## Mitigation

Appendices A, B, and C of the Final EA identify design criteria and mitigation measures that would be applied to applicable action categories under the Proposed Action to lessen potential environmental impacts of implementing site-specific restoration actions. Most measures are focused on mitigating construction type impacts, but also included are measures to be considered during project design and site-specific environmental review.

Following site-specific environmental review of projects tiered to the programmatic EA, Reclamation would implement applicable design criteria and mitigation measures for Bonneville-

funded projects. In cases where Reclamation is supporting restoration actions not funded by Bonneville, Reclamation would work with its sponsors to develop design criteria and mitigation measures, as appropriate. Additional measures would be identified through site-specific analysis, consultations, and permits (see Section 2.2.2 of the EA).

## Finding

Based on the information in the EA as summarized here, Reclamation determines that the Proposed Action is not a major federal action significantly affecting the quality of the human environment within the meaning of NEPA (42 USC 4321 et seq.). This finding is based on the analysis in the EA and consideration of the context and intensity (40 CFR 1508.27) as described above. Therefore, an EIS will not be prepared and Reclamation is issuing this FONSI for the Proposed Action.

## Decision

Reclamation will adopt the Final EA for future habitat actions in the Columbia River Basin per 40 CFR § 1506.3. Individual projects will be evaluated for coverage under the programmatic EA.

## Recommended:

FERRON PETERSON  Digitally signed by FERRON PETERSON  
Date: 2020.12.22 15:02:57 -07'00'

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Jeff Peterson  
Habitat Program Manager  
Columbia-Pacific Northwest Region  
Boise, Idaho

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Date

## Approved:

SCOTT HOEFER  Digitally signed by SCOTT HOEFER  
Date: 2020.12.22 16:40:34 -07'00'

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Scott Hoefer  
Environmental Compliance Officer  
Columbia-Pacific Northwest Region  
Boise, Idaho

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Date