National Park Service Finding of No Significant Impact US 101 Elwha River Bridge Replacement Downstream Mitigation/ Environmental Assessment

February 2024

The National Park Service (NPS) has determined that the US 101 Elwha River Bridge Replacement Downstream Mitigation project will have no significant impact on the human environment. This finding of no significant impact (FONSI) is based on the US 101 Elwha River Bridge Replacement Downstream Mitigation Environmental Assessment (EA). The EA was prepared in compliance with the National Environmental Policy Act of 1969. The EA has been determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an EIS is not required.

This FONSI documents the decision of the NPS to adopt the preferred alternative in the US 101 Elwha River Bridge Replacement Downstream Mitigation EA. The proposed action includes the construction of twelve engineered log jams (ELJs) as mitigation for riverine impacts of the Washington State Department of Transportation (WSDOT) US 101 Elwha River Bridge replacement project.

The Superintendent's determination of no impairment, prepared in fulfillment of the NPS *Management Policy 2006* requirements, is attached.

Alternatives Analyzed

The following alternatives were considered:

- No Action: "No Build Alternative" the project activities will not be implemented.
- Proposed Action Alternative: "Build Alternative" the construction of twelve ELJs as mitigation for riverine impacts of the US 101 Elwha River Bridge replacement project.

Selecting the Alternative

Description

The Build Alternative was chosen after a process that evaluated engineering feasibility of several alternatives. Alternatives considered but not selected are each briefly described in Section 2.3 of the EA. The Build Alternative involves the construction of twelve ELJs as mitigation for riverine impacts of the WSDOT US 101 Elwha River Bridge replacement project. Design plans include twelve proposed ELJ sites and three alternate (Alt) sites (Figure 2 of the EA). Alternate sites will be utilized during construction of up to three of the twelve primary ELJ sites which may need to be relocated due to subsurface conditions, such as shallow bedrock, that will prevent the ELJs from being built to design specifications. This may not be determined until in the field during construction. The ELJs will be constructed during the in-water work windows (July 15 to August 31) of 2024 and likely 2025.

ELJ Design

The ELJs are piling/post-reinforced structures consisting of large, untreated green timber and sized approximately 100-feet wide and 50-feet long. Each ELJ will consist of approximately 16 timber piles or posts (e.g., untreated 40-foot long Douglas-fir timber piles of 22-inch butt diameter), 14 large logs with rootwads (e.g., 24" diameter by 40-50 foot long trees), 9 large logs without rootwads (e.g., 24" diameter by 40-60 foot long), roughly 400 small-diameter logs (e.g., "racking", 6-12" diameter by 20-50 foot long), and approximately 700 cubic yards of limbs, brush, and twigs (Figure 3 of the EA).

Site Access, Preparation and Staging Areas

Access to all ELJs will be gained from the eastern side of the river. Temporary access routes to reach ELJ sites across floodplain surfaces will stem from the upland access roads that will be established for the bridge work. The temporary access roads below the Ordinary High-Water Mark (OHWM) will be aligned primarily on dry gravel bars and will minimize impact to existing riparian vegetation and existing wood accumulations. Wetlands and other sensitive areas will be avoided. Temporary access routes will be established with tracked excavators and dozers by clearing, grubbing, and grading of floodplain surfaces in-the-dry to a width of 16 feet or less to allow machine access to ELJ sites. Temporary roads will be constructed with native material and no imported material will be necessary for access routes. No use of quarry rock or geotextile material is anticipated to be used in the construction of temporary roads and bridges.

At least one temporary stream crossing (e.g., temporary bridges) will be needed to access ELJ locations surrounded by flowing channels. The stream crossings will need to span approximately 150 feet of the main Elwha River channel based on its current location with a maximum width of up to 16-feet. Additional "minor" stream crossings may be needed if significant flow is in the side channel at time of construction. Minor crossings, less than 50 feet across, are typically constructed with logs as stringers and decked with a steel plate.

ELJ Construction Sequencing

ELJ work areas will be isolated from flowing water with cofferdams. Cofferdams will consist of filling plastic "bulk-bags" with onsite gravels generated during excavation and placing the bulk-bags in the flowing channel as a linear barrier to isolate the work area from flow. Following work site isolation, fish will be removed and relocated to areas outside of the work area (fish removal will be conducted via netting and electrofishing per WSDOT fish moving protocol and permit conditions).

After the work area is isolated, a roughly 10-foot deep pit (e.g., the structure foundation excavation) with roughly 1:1 side slopes will be excavated beneath the adjacent river thalweg. Excavated alluvium will be temporarily stockpiled next to the pit and used as backfill after the construction of the timber structure. Timber piles will be driven to a maximum depth of approximately 26-feet below the thalweg elevation.

After timber piles or rootwad posts are installed and while the excavation pit is maintained in a dry condition by dewatering, equipment will be used to place the logs between the timber piles

or rootwad posts. Log lengths and diameters used in the structure may vary slightly, but frame log members will be between 40-60-feet long with a maximum diameter of 26-inches.

Approximately 400 small diameter (<12-inch) racking logs of 20–50-foot lengths will be placed within, and in front of, the core of the ELJ. After each layer of the structure is complete, the excavated alluvium stockpiled during foundation excavation will be placed within and downstream of the structure as non-structural backfill.

Restoration and Site Cleanup

After construction, the CSA at each ELJ site will be restored and stabilized by reconstructing natural wood accumulations in or near their pre-project location, removing track marks and decompaction of soils, and scattering of slash and native vegetation debris cleared during site preparation across unvegetated surfaces. Based on the particular site conditions, existing wood moved from natural logjams or floodplain surfaces to allow construction may be either placed back in its pre-project condition or placed within constructed ELJs at the direction of the project engineer.

The final elements of work consist of restoration of temporarily disturbed areas, site cleanup, and demobilization. Affected natural habitat and vegetation will be revegetated with native species similar to those removed. Restoration of disturbed areas will generally follow the standards contained in WSDOT's Standard Specifications (WSDOT 2023) for roadside restoration and WSDOT's Roadside Policy Manual (WSDOT 2015), and NPS standards.

Construction Stormwater and Water Quality Management

Stormwater during construction operations will be reduced by following the best management practices (BMPs) outlined in the Temporary Erosion and Sediment Control (TESC) Plan per current WSDOT's Highway Runoff Manual and Environmental Manual (Appendix E of the EA).

A Water Quality Management Protection Plan (WQMPP) is in development to guide the planning, implementation, monitoring, and performance of BMPs used during in-water work.

Other Alternatives Evaluated

WSDOT and the Lower Elwha Klallam Tribe (LEKT) discussed the proposal of restoring Indian Creek into its historic channel and determined that WSDOT's Elwha Bridge Replacement Project impacts were of a scope, scale, and location that made the Indian Creek restoration inadequate in type, size, and location to compensate for bridge relocation project impacts. Chapter 2, Section 2.3, page 8, of the EA describes the alternatives considered but dismissed.

Why the Selected Alternative Will Not Have a Significant Effect

After considering the environmental consequences described in the EA, the NPS has determined that the Selected Alternative and its associated actions will not have a significant effect on the quality of the human environment. Thus, an Environmental Impact Statement (EIS) will not be prepared. This finding is based on the following:

• The Selected Alternative will not result in significant effects on the unique natural resource characteristics of the area, including prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

- The project area of potential effect (APE) for the US 101 Elwha Bridge Replacement Project was expanded in 2022 to include the proposed ELJ locations and access roads (Figure 4 of the EA). A survey occurred in April 2022 and resulted in the identification of no new cultural resources. The US 101 Elwha River Bridge Replacement project will have an adverse effect on cultural resources. A Memorandum of Agreement (MOA) has been developed with the State Historic Preservation Office (SHPO), Advisory Council on Historic Preservation (ACHP), and the LEKT detailing the mitigation for adverse effects on cultural resources.
- The Selected Alternative will have the following effects on species listed or proposed for listing as endangered or threatened or their critical habitat as determined under the Endangered Species Act (ESA) of 1973 through consultation with the US Fish and Wildlife Service (USFWS) and National Marine Fisheries Services (NMFS).

USFWS:

- No effect to streaked horned lark (Eremophila alpestris strigata) and yellow-billed cuckoo (Coccyzus americanus);
- May affect, is not likely to adversely affect marbled murrelet (Brachyramphus marmoratus), Taylor's checkerspot butterfly (Euphydryas editha taylori); and Northern spotted owl (Strix occidentalis caurina);
- o May affect, is likely to adversely affect bull trout (Salvelinus confluentus); and may affect, is likely to adversely affect bull trout critical habitat.

NMFS:

- May affect, is not likely to adversely affect Eulachon (Southern DPS)
 (Thaleichthys pacificus) and Southern resident killer whale (Orcinus orca); and is no effect to Eulachon critical habitat.
- May affect, is likely to adversely affect Chinook salmon (Oncorhynchus tshawytscha), and steelhead trout (Oncorhynchus mykiss); there is no effect to Chinook salmon critical habitat and the project may affect, is likely to adversely affect Steelhead critical habitat.
- The Selected Alternative has a wide range of beneficial and adverse effects (see Measures to Minimize Environmental Harm below).
- The Selected Alternative will not adversely affect public health or safety.
- The Selected Alternative will not violate federal, state, or local laws or requirements for the protection of the environment.

Geology and Soils

Under the Selected Action, localized, short- and long-term, adverse impacts to soils will occur from the use of heavy equipment. Excavation associated with the large wood structures and floodplain channels will displace soil and alluvium in those locations. Driving heavy equipment on unpaved temporary access routes across the floodplain to clear vegetation, haul materials, and access the construction areas will result in compaction of soils along these routes, as well as from pile driving. Further long-term adverse effects to soils could occur if soil disturbance and vegetation removal result in erosion. However, the final design will include best management

practices (BMPs) for limiting soil exposure during construction, and the contractor will be responsible for developing and implementing a temporary erosion and sediment control plan (TESC).

For mitigation measures, consideration will be given to limiting earthwork operations to the drier times of the year when erosion potential is reduced. However, the potential for erosion during construction operations will be reduced by following the BMPs outlined in the TESC Plan sections of WSDOT's current Highway Runoff Manual and Environmental Manual.

The ELJ project, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; and the establishment of a new mining and processing area, this project will add a small increment to the long- and short-term cumulative adverse impacts to soils in the project area. The selected alternative will not result in impairment of geology or soils within or adjacent to the park because adverse impacts will be short-term and primarily associated with the construction of the ELJs.

Vegetation

The Selected Action will have short-term adverse effects to vegetation within the footprint of construction, staging, and access routes totaling approximately 9 acres. This is due to clearing and grubbing that will occur in all areas identified for ELJs, temporary access routes, and staging areas. Vegetation removal will consist mainly of cottonwood trees that are less than 10 years old or 5 to 10 inches diameter at breast height.

Temporary impact areas will be restored with native trees and shrubs appropriate for the specific region and conditions of the site and per the current WSDOT Roadside Manual and in collaboration with the NPS. Per requirements of WSDOT Standard Specification 8-02.3(2)B, the contractor will develop a Weed and Pest control plan that outlines how invasive species will be prevented, controlled, and addressed.

The ELJ project, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal project and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; and the establishment of a new mining and processing area, this project will add a small increment to the short-term adverse cumulative impacts and long-term beneficial cumulative impacts, due to area restoration, to vegetation in the project area. Additionally, vegetation growth in this area occurs rapidly and the areas cleared for staging and access will be naturally restored

rather quickly. The selected alternative will not result in impairment of vegetation within or adjacent to the park because adverse impacts will be mostly short-term and will be primarily associated with the construction of the ELJs.

Water Resources

Under the Selected Action, construction activities have the potential to cause short-term adverse impacts to water quality during construction. Excavation and fill of the stream bed, banks, and floodplain could lead to localized increases in turbidity when those areas are re-wetted. The use of heavy equipment near the river could increase the risk of hydraulic fluid leaks or fuel spills and pollution from runoff if proper containment precautions are not taken. The project will have no effect on the quantity and timing of river flows.

The project requires authorization for the Selected Action under the Clean Water Act Section 401 and individual water quality certificates from Ecology. The contractor will operate according to an approved Water Quality Management Protection Plan (WQMPP) and Spill Prevention, Control, and Countermeasure (SPCC) Plan will be implemented by the contractor to minimize the risk of adverse effects to water quality.

Mitigation measures to reduce impacts to water resources will include the following:

- In-water work will be scheduled to occur during periods of low river flow that typically occur between June 15th-August 31st.
- Areas of in-water work will be isolated by the installation of measures such as the placement of a bulkbag cofferdams, filled of onsite gravel, around the work area to prevent flowing water from entering the excavation area.
- Dewatering systems will be installed to maintain a dry work area. Construction water will be discharged to upland areas for infiltration, or to an alternate system that prevents turbid water from re-entering the stream channel.
- Dewatering and rewatering rates will be monitored to minimize sediment disturbance and to prevent fish stranding.
- Erosion and sediment control BMPs will be installed according to TESC Plan.

The ELJ project, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal project and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; and the establishment of a new mining and processing area, this project will add a small increment to the short-term adverse cumulative impacts during construction but overall long-term cumulative beneficial impacts to water quality in the project area due to restoration of floodplain functions. The selected alternative will not result in impairment of water resources within or adjacent to the park because adverse impacts will be short-term and will be primarily associated with the construction of the ELJs.

Fish

Under the Selected Action, in-water work may lead to short-term adverse effects to water quality, specifically turbidity and sediment released during the re-wetting of isolated work areas. The Selected Action creates a risk of pollutant spills, which could in turn affect the quality of aquatic habitat and fish behavior in the area. Disruptions caused by construction will have short-term adverse effects on fish. Protocols to exclude fish from the in-water work areas involve capturing and handling fish before releasing them in safe areas. Fish removal will be conducted via netting and electrofishing per WSDOT fish moving protocol and permit conditions. While this activity is intended to reduce overall harm to fish within the area, this handling can lead to disturbance and injury to a small percentage of salvaged fish.

Mitigation measures to reduce impacts to fish resources include the following:

- In-water work activities will be restricted to the approved work windows during periods of low river flow that typically occur between June 15th -August 31st.
- Direct harm to fish will be minimized by isolating the in-water work areas and relocating fish according to the BMPs established by resource management agencies.
- Soil and erosion control BMPs will be implemented to eliminate sediment discharges into waterways and wetlands.
- Work areas will be maintained in a clean condition, with no unsecured food or trash that will attract corvids or other nuisance species.
- In-water equipment will be visually examined for aquatic invasive species.
- Conservation measures developed during consultation with the USFWS and NMFS will be applied.

The ELJ project, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; and the establishment of a new mining and processing area, this project will add a small increment to the short-term cumulative adverse impacts to fish and fish habitat in the project area from increase in sedimentation associated with installation and removal of work isolation areas, as well as from any vibratory sounds during construction. The project will add a small increment to the overall both the short-term adverse impacts to fish during construction activities, and longterm beneficial impacts to fish and fish habitat in the project area by improving the quality of habitat for both adult and juvenile salmonids. The selected alternative will not result in impairment of fish within or adjacent to the park because adverse impacts will be short-term and will be primarily associated with the construction of the ELJs.

Wildlife and Wildlife Habitat

The Selected Action will have short-term adverse effects to terrestrial wildlife species. Construction activity and crews onsite will generate noise and visual disturbance in the area that could temporarily disrupt the distribution and behavior of wildlife. These activities will include the use of haul trucks, excavators, and pile drivers on the floodplain and periodic use of other construction equipment such as pumps and chainsaws. Vegetation clearing required for staging

areas, access routes, and large wood structures will result in short- and long-term adverse effects to species that use those plant communities for habitat.

Wildlife habitat effected by temporary construction impacts will be restored through native tree and shrub plantings as described in the Vegetation section of this chapter. Portions of the vacated roadway will be similarly restored. Noise abatement that will mitigate impacts to wildlife during project construction is described in the Acoustic Environment section of the EA.

Mitigation measures to reduce impacts to wildlife and wildlife habitat include the following:

- Construction limits will be delineated to protect existing vegetation and minimize noise and visual disturbance to wildlife.
- Soil and erosion control BMPs will be implemented to eliminate sediment discharges into waterways and wetlands.
- Construction activities will be restricted to the approved work windows to minimize potential disturbance to marbled murrelets.
- Direct harm to fish will be minimized by isolating the in-water work areas and relocating fish according to the BMPs established by resource management agencies.
- Work areas will be maintained in a clean condition, with no unsecured food or trash that will attract corvids or other nuisance species.
- In-water equipment will be visually examined for aquatic invasive species.
- Conservation measures developed during consultation with the USFWS and NMFS will be applied.

The ELJ project, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; the establishment of a new mining and processing area; and noise from continued administrative, commercial, and military overflights, this project will add a small increment to the long- and short-term adverse cumulative impacts to wildlife and wildlife habitat in the project area due to noise and crew presence during construction and the loss of vegetation from clearing. However, the Selected Action will add a small increment to the overall long-term cumulative beneficial impacts to the ecosystems and biological communities in the river by adding complexity to the system. The large wood structures will improve the quality of habitat for both adult and juvenile salmonids that wildlife prey on. The selected alternative will not result in impairment of wildlife or wildlife habitat within or adjacent to the park because adverse impacts will be mostly short-term and will be primarily associated with the construction of the ELJs.

Threatened and Endangered Species

Chinook salmon, steelhead trout, and bull trout

Under the Selected Action the project *may affect, is likely to adversely affect* Chinook salmon, steelhead trout, and bull trout due to the following actions:

- In-channel construction activities will likely create locally elevated levels of turbidity during construction within 1,800 feet of in-water construction activities.
- The ELJ construction will increase disturbance to benthic habitat by over 217,500 SF. This includes up to 27,000 SF for the placement of cofferdam supersacks on the bed for construction of the ELJs; 190,500 SF for the excavated riverbed alluvium for construction of up to 15 ELJs (only 12 of 15 sites, or 152,400 SF, will be constructed to final detail including de-watering and fish isolation converting the excavated river alluvium into the ELJ structure), any ELJ sites not constructed to final detail, up to 38,100 SF, will be restored to pre-project baseline conditions (i.e., ELJ pits will be backfilled, and the temporary access roads will be removed and graded to pre-project conditions-in-the-dry).
- Conversion of the bed and benthos from construction of the ELJ locations is likely to lower prey availability to juvenile Puget Sound Chinook and steelhead. The activity could temporarily reduce prey availability in the immediate vicinity of the ELJs by a total of 152,400 SF in the vicinity of the final 12 locations.
- Conversion of the bed and benthos on and immediately around of the ELJ locations will likely greatly alter forage for juvenile bull trout and bull trout prey for sub-adult and adult bull trout. The activity could temporarily reduce prey availability in the immediate vicinity of the ELJs by a total of 152,400 SF in the vicinity of the final 12 locations.
- Temporary in-channel features may create localized increases in stream velocities resulting in localized scour or deposition of streambed materials during construction.
- Construction activities will be occurring in a reach with documented spawning, potentially temporarily reducing the overall amount of available spawning habitat for Chinook salmon and steelhead trout during construction.
- Dewatering activities will include fish isolation, removal, and handling activities and may affect Chinook salmon, steelhead trout, and bull trout.
- Removal of 1.29 acres of riparian vegetation may indirectly affect habitat functions for Chinook salmon, steelhead trout, and bull trout such as riparian shading of the stream corridors, contributions of invertebrates to the aquatic food chain, and streambank protection.
- Chinook and steelhead juvenile, and bull trout may be present during installation of cofferdams. These cofferdams will isolate a substantial area and will require fish removal so that work can occur in the dry.

Steelhead and bull trout critical habitat

The Selected Action *may affect, is likely to adversely affect* steelhead and bull trout CH for the following reasons:

- Steelhead and bull trout CH includes the mainstem Elwha River, as well as Indian Creek and Little River that occur within the action area for the project.
- Steelhead freshwater spawning sites may be affected due to turbidity and scour during construction that may affect spawning habitat in the immediate vicinity of the project. These areas may also be temporarily reduced by construction access features, and potentially degraded by fine sediment deposition during in-water construction activities. Freshwater rearing sites may be affected due to increased in-stream turbidity during construction activities. Freshwater migration corridors may be affected due to increased in-stream velocities caused by construction access pads and cofferdams installed to isolate demolition areas.

- Juvenile steelhead occurring within the action area may be temporarily displaced or may avoid freshwater rearing habitat near in-water construction.
- The migration of juvenile and adult steelhead may be altered due to the placement of temporary construction access features and increased flow velocities within the project area.
- In-water construction areas will result in long-term alteration of steelhead CH in the area.
- For bull trout, migratory habitat may be affected due to increased in-stream velocities caused by construction access pads and cofferdams installed to isolate demolition areas. Also, inwater construction access features will result in the alteration of complex river, stream, and reservoir systems and processes in the action area; alterations to water quality and quantity although long-term reductions in the rate of pollutant loading from stormwater are expected to occur; and migration habitat will be altered due to the placement of temporary construction access features and increased flow velocities within the project area.

These factors, when taken together, will likely result in temporary, but unavoidable effects, on one or more steelhead and bull trout primary constituent elements (PCEs).

Chinook salmon and Eulachon CH

There will be *no effect* on Chinook salmon and eulachon CH as there is no CH for either of these species within the construction limits.

Northern Spotted Owl and Marbled Murrelet

The Selected Action *may affect, is not likely to adversely affect* northern spotted owls and marbled murrelets for the following reasons:

- While the nearest active spotted owl nesting territory is more than 5 miles from the project site, spotted owls may forage in or disperse through forested habitats near the project site. However, there are no potentially suitable nest trees present within 195 feet of the project site, meaning the potential for adverse effects is discountable. Also, the project site is at a low-elevation (approximately 240 feet), valley-bottom location, whereas sites where spotted owls persist on the Olympic Peninsula are in steep terrain at relatively high elevations (above 2,900 feet, on average). Also, the most suitable nesting habitat on the Olympic Peninsula has been taken over by barred owls, and evidence from monitoring studies suggests that spotted owls are unlikely to recolonize areas of suitable habitat outside of active territories on the Olympic Peninsula. As such, the potential for adverse effects on nesting spotted owls is discountable.
- Marbled murrelets are not known or expected to nest within 328 feet of areas where heavy equipment will be operated. The nearest known nest site is approximately 4.2 miles south of the project site, and all locations where behaviors associated with nesting have been observed are more than 1 mile from the project site. No potentially suitable nest trees are present within 328 feet of areas where heavy equipment will be operated, meaning the potential for adverse effects on nesting murrelets is discountable. Results of surveys conducted in and near the project area indicate that marbled murrelets do not nest in the valley-bottom forest habitat in the project area.
- Forested habitats in the action area could provide suitable nesting/roosting habitat for spotted owls and marbled murrelets. Vegetation clearing for construction activities will remove approximately 3 acres of forest habitat. Also, project-related noise and human activities will

- cause a temporary increase in the level of disturbance to any spotted owls and marbled murrelets that may be present in the immediate construction area.
- No suitable nesting or roosting habitat for spotted owls will be removed by project activities, and no potentially suitable nest trees for marbled murrelets will be removed either, so project-related impacts on habitat will be insignificant. Vegetation clearing in the project action area will occur along existing road corridors and will not fragment cover or create new travel corridors for avian predators into suitable nesting, roosting, or foraging habitat for spotted owls or marbled murrelets. For the same reasons, project-related vegetation clearing will not reduce the capacity for forest habitat at the project site to function as dispersal habitat. As such, project-related effects on nesting, roosting, foraging, or dispersal habitat will be insignificant. Any effects that may occur will be minimal in scope and transitory in duration and will have no measurable effect on the long-term survival of northern spotted owls and marbled murrelets.

Northern Spotted Owl and Marbled Murrelet CH

The Selected Action will have *no effect* on designated CH for northern spotted owls and marbled murrelets. There is no designated CH within or adjacent to (i.e., within 150 feet) the project footprint; therefore, project activities will not affect any of the PCEs of spotted owl or marbled murrelet CH.

Streaked-horned Lark

The Selected Action will have *no effect* on Streaked-horned lark or designated CH. Breeding habitat for streaked horned larks in Washington consists of grasslands and sparsely vegetated areas at airports, sandy islands, and coastal spits. No such habitat is present in the action area. The nearest known breeding area is more than 60 miles from the action area. The nearest location where CH has been designated for the streaked horned lark is more than 80 miles from the project action area.

Yellow-billed Cuckoo

The Selected Action will have *no effect* on Yellow-billed Cuckoo or designated CH. No CH for the yellow-billed cuckoo has been designated in Washington.

Taylor's Checkerspot Butterfly

The project *may affect, is not likely to adversely affect* Taylor's checkerspot butterflies for the following reasons:

- Extant populations of Taylor's checkerspot butterflies have been documented approximately 1 mile from the project site, and plant species that may be suitable as hosts for larvae or nectar sources for adults may be present within areas where ground-disturbing activities will occur. However, the project site lacks the features of suitable habitat for Taylor's checkerspot butterflies, so the potential for adverse effects is discountable. Also, no areas with high densities of larval host plants are present at the project site, further reducing the potential for adverse effects on this species.
- Adults are extremely unlikely to venture into the project area because dispersal of adults from occupied habitats occurs as only a random event, limited to few individuals, so the potential for adverse effects on adult butterflies is discountable, any project-related effects will be unsubstantial.

Taylor's Checkerspot Butterfly CH

The Selected Action will have *no effect* on designated CH for Taylor's checkerspot butterflies. There is no designated CH within or adjacent to (i.e., within 150 feet) the project footprint; therefore, project activities will not affect any of the PCEs of CH for the species.

Mitigation Measures

- Construction limits will be delineated to protect existing vegetation and minimize noise and visual disturbance to wildlife.
- Soil and erosion control BMPs will be implemented to eliminate sediment discharges into waterways and wetlands.
- Construction activities will be restricted to the approved work windows to minimize potential disturbance to marbled murrelets.
- Direct harm to fish will be minimized by isolating the in-water work areas and relocating fish according to the BMPs established by resource management agencies.
- Work areas will be maintained in a clean condition, with no unsecured food or trash that will attract corvids or other nuisance species.
- In-water equipment, such as the barge, will be visually examined for aquatic invasive species.
- Conservation measures developed during consultation with the USFWS and NMFS (see the
 decision document for the terms and conditions as provided by the USFWS and NMFS) will
 be implemented.
- Any areas disturbed on a temporary basis will be permanently stabilized and restored in a
 manner consistent with the WSDOT's Roadside Policy Manual (WSDOT 2015). The
 WSDOT will remove any temporary fills and till-compacted soils and restore woody and
 herbaceous vegetation according to an engineer-approved restoration or planting plan.
- A minimum 1-year plant establishment plan will be implemented to ensure survival, or replacement, of vegetation by stem count at the end of 1 year.
- Before, during, and immediately after isolation and dewatering of the in-water work area, fish from the isolated area will be captured and released using methods that minimize the risk of fish injury, and in accordance with the ESA consultation requirements, HPA permit conditions and WSDOT protocols for such activities (WSDOT 2012).

The Selected Action, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; the establishment of a new mining and processing area; and noise from continued administrative, commercial, and military overflights, this project will add a small increment to the long- and short-term adverse cumulative impacts to threatened and endangered species in the project area due to noise and crew presence during construction and the loss of vegetation from clearing. However, the Selected Action will add a small increment to the overall long-term cumulative beneficial impacts to the ecosystems and biological communities in the river by

adding complexity to the system. The large wood structures will improve the quality of habitat for both adult and juvenile salmonids that wildlife prey on. The selected alternative will not result in impairment of threatened and endangered species or their Critical Habitat within or adjacent to the park because adverse impacts will be short-term and will be primarily associated with the construction of the ELJs.

Cultural Resources

Construction of ELJs will occur within the Indian Valley TCP. Construction of the structures will cause short-term adverse impacts on aesthetics within the TCP from construction equipment and soil disturbance. The ELJ structures will be a permanent feature in the river floodplain. As described in section 2.2 of the EA, the ELJs are timber construction and are built to mimic natural conditions.

The cultural resources survey that was conducted in 2022 for the proposed ELJs, water dispersion areas, and associated access roads did not result in identification of additional cultural resources. Although the 2022 survey area is in an area used by Native American groups, no material evidence of precontact activity was identified. All new project impacts associated with the ELJs are located on young landforms containing river gravels and have a low probability of containing buried cultural resources. In the event of an inadvertent discovery, all project work will stop immediately, ONP's archeologist will be contacted, and work will not begin until approval is provided, in writing, from the ONP Superintendent.

Activities associated with the ELJ construction, which occurs in the active river channel, will not impact previously identified eligible historic properties within the project area and will have no adverse effect on the Indian Valley TCP. This is due to newly added impacts located on active Elwha River channels and young deltaic landforms that are currently being naturally disturbed by river action, which will not compromise the overall historic integrity of the TCP. Restoration of disturbed areas will occur following completion of the construction. The State Historic Preservation Officer (SHPO) concurred with the finding that the ELJ work will have no adverse effect on historic properties in a letter to WSDOT dated August 23, 2022 (Appendix D of the EA). Therefore, the proposed action will add no additional impacts to the overall cumulative effects on cultural resources in the project area. The selected alternative will not result in impairment of cultural resources within or adjacent to the park because adverse impacts will be short-term, if any, and will be primarily associated with the construction of the ELJs.

Measures to Minimize Environmental Harm

The environmental commitments described below have been identified as the practicable means to avoid and minimize effects from the Project. WSDOT is responsible for implementation and compliance with all environmental commitments.

Resource	Environmental Commitments
Soils	To the extent possible, earthwork operations will be limited to the drier times of
	the year when erosion potential is reduced. This can be accomplished by careful
	planning of construction staging and by the use of geometric covers. Potential for
	erosion during construction operations will be replaced by following the BMPs
	outlined in the Standard Specification Erosion Control Requirements and the

	Tamperary Fracian and Sadiment Central (TESC) Plan sections of WSDOT's
	Temporary Erosion and Sediment Control (TESC) Plan sections of WSDOT's Highway Runoff Manual and Environmental Manual.
Vegetation	 Temporary impact areas will be restored with native trees and shrubs. Development of a Weed and Pest Control Plan outlining how invasive species will be prevented, controlled, and addressed.
Surface Water	Water quality effects will be limited by the use of Best Management Practices (BMPs) which will be outlined in the contract specifications for the project. The project will maintain compliance with state water regulations in WAC 173-201A. P. 6
	Before project completion, WSDOT will install water quality treatment facilities along new roadway segments and construct conveyance structures to carry stormwater to planned treatment areas and discharge points.
Fish, Wildlife, and Threatened and Endangered Species	 The project Biological Assessment Supplement (WSDOT & FHWA 2022) prescribes numerous specific impact avoidance and minimization measures pertaining to fish species. Project activities will fully comply with the Hydraulic Project Approval's (HPAs) issued for the project by WDFW (Washington's Department of Fish and Wildlife).
	 Before, during, and immediately after isolation and dewatering of the inwater work area, fish from the isolated area will be captured and released using methods that minimize the risk of fish injury, and in accordance with the ESA consultation requirements, HPA permit conditions and WSDOT protocols for such activities (WSDOT 2012). Direct harm to fish will be minimized by isolating the in-water work areas
	 and relocating fish according to the BMPs established by resource management agencies. In-water equipment, such as the barge, will be visually examined for aquatic invasive species.
	• The contractor will designate at least one employee as the erosion and spill control lead. That person will be responsible for installing and monitoring erosion control measures and maintaining spill containment and control equipment. The erosion and spill control lead will also be responsible for ensuring compliance with all local, state, and federal erosion and sediment control requirements, including discharge monitoring reporting for the Washington State Department of Ecology.
	• Erosion control blankets or an equally effective BMP will be installed on steep slopes that are susceptible to erosion and where ground-disturbing activities have occurred. Doing so will prevent erosion and assist with establishment of native vegetation.
	• Project staging and material storage areas will be located a minimum of 150 feet from surface waters or in currently developed areas such as parking lots or previously developed sites.
	Erodible material that may be temporarily stored for use in project activities will be covered with plastic or other impervious material during rain events to prevent sediments from being washed from the storage area to surface waters.

Exposed soils will be seeded and covered with straw mulch or an equally effective BMP after construction is complete. Any temporary construction impact areas will be revegetated with native plants following final grading activities. All exposed soils will be stabilized during the first available opportunity, and no soils shall remain exposed for more than 2 days from October 1 to April 30, and for more than 7 days from May 1 to September 30. Any areas disturbed on a temporary basis will be permanently stabilized and restored in a manner consistent with the WSDOT's Roadside Policy Manual (WSDOT 2015). The WSDOT will remove any temporary fills and till-compacted soils and restore woody and herbaceous vegetation according to an engineerapproved restoration or planting plan. Conservation measures developed during consultation with the USFWS and NMFS (see the decision document for the terms and conditions as provided by the USFWS and NMFS) will be implemented. A minimum 1-year plant establishment plan will be implemented to ensure survival, or replacement, of vegetation by stem count at the end of 1 year. Elwha River flows will be monitored throughout construction using the Northwest River Forecast Center station at McDonald Bridge, upstream of the project site. During flow events approaching the 2-year discharge, equipment and materials will be moved off the access pads until water levels subside. • During flow events approaching the 2-year discharge, equipment and materials will be moved off the demolition laydown pads until waters subside. Portions of the cofferdam may be selectively removed to provide flow relief and prevent catastrophic failure. Construction limits will be delineated to protect existing vegetation and minimize noise and visual disturbance to wildlife. Construction activities will be restricted to the approved work windows to minimize potential disturbance to marbled murrelets. Work areas will be maintained in a clean condition, with no unsecured food or trash that will attract corvids or other nuisance species. Cultural Resources A MOA, signed by consulting parties in May 2021, details how the adverse effects to cultural resources will be managed and mitigated. WSDOT will remove the minimum amount of vegetation necessary to complete Visual Resources the project. Once the final design has been approved, a tree survey will be undertaken to determine the number and size of trees the project will remove. When trees are removed for a project, WSDOT replaces them within the limits of the project. All plant materials, including seeding will be funded by the project for weed suppression and plant establishment for a minimum of 3 years.

Public Involvement

The US 101 Elwha River Bridge Replacement Downstream Mitigation EA was posted on the Olympic National Park's project website for public comment. The public comment period was open from October 22 to November 22, 2023. Twenty-eight pieces of correspondence were received from 29 commentors. The Concern Responses are provided in Attachment A.

Public engagement for the WSDOT US 101 Elwha River Bridge Replacement Project/EA, which included the ELJ project element, has been extensive. For the bridge replacement project, WSDOT held an online open house where the public could learn about project details and provide comments on the EA. The US 101 Elwha Bridge Replacement EA was posted on the project website and the WSDOT Engage webpage for review and comment, and a press release was sent out to local and regional media outlets. Notification of the open comment period appeared in the Forks Forum, the Peninsula Daily News, WSDOT's Facebook and Twitter accounts, and the project website.

Due to restrictions on in-person meetings due to the pandemic, no in-person public meetings were held during the comment period. A voicemailbox was set up to provide the public another way to provide comment, request project information, or copies of the project documentation. WSDOT and NPS held six in-person public meetings between 2016 and 2019 in Port Angeles and Forks. WSDOT officials presented to two Port Angeles City Council meetings, one Forks City Council meeting, one West End Business Association Meeting in Forks, and to two other stakeholder groups in Port Angeles and Forks.

Agency and Tribal Consultation

Several agencies, and the LEKT, have provided technical support addressing a variety of issues and impacts associated with this project. These agencies include the NPS, Washington Department of Archaeology and Historic Preservation (DAHP), US Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and US Army Corps of Engineers (USACE). The following outreach and coordination actions have been completed or are underway:

• Washington Department of Archaeology and Historic Preservation

Coordination with the Washington Department of Archaeology and Historic Preservation began in 2017 for the US 101 Elwha River Bridge Replacement project, concluding with a MOA signed in April 2021. The project APE was expanded in 2022 to include the proposed ELJ locations and access roads. A survey occurred in April 2022 and resulted in the identification of no new cultural resources.

• Lower Elwha Klallam Tribe

The NPS, FHWA, and WSDOT consulted with the LEKT during the development of the US 101 Elwha River Bridge Replacement EA. Mitigation measures to address adverse effects from the project are documented in a MOA (Appendix G of the Bridge Replacement EA).

• U.S. Fish and Wildlife Service and National Marine Fisheries Service

Endangered Species Act Section 7 Consultation began in September 2017, with the submittal of a Biological Assessment to the USFWS and NMFS. Concurrence on the effects determinations was received from the USFWS on March 19, 2018, and from the NMFS on March 2, 2018. FHWA and WSDOT re-initiated consultation with the Services for the in-water mitigation. Reinitiation concluded and NMFS issued a revised biological opinion (BiOp) on 8/1/2023; USFWS issued a revised BiOp on 7/26/2023.

• U.S. Army Corps of Engineers

A Joint Aquatic Resources Permit Application (JARPA) was prepared and has been submitted to the USACE. Pre-filing notifications for Section 401 Water Quality Certification were submitted and the Washington State Department of Ecology (Ecology) on December 28, 2018. The permit applications are currently being revised to reflect planned in-water mitigation and will be received prior to the project going to construction.

Finding

Recommended:

Attachments:

Attachment A. Concern Responses

Attachment B. Determination of Non-Impairment

The NPS has determined that the US 101 Elwha River Bridge Replacement Downstream Mitigation project will have no significant impact on the human environment. This FONSI is based on the attached Environmental Assessment (EA) which has been independently evaluated by the NPS and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an EIS is not required.

On the basis of the information contained in the EA as summarized above, the NPS has determined that implementing the Proposed Action Alternative is not a major federal action nor is it an action without precedent or similar to an action that normally requires an EIS. The conclusions of non-significance are supported by the conservation planning and environmental impact analysis completed and the capability of listed mitigation measures to reduce or eliminate impacts. There will be no adverse effect to cultural or historical resources; and there are no significant impacts. This determination also included due consideration of all agency and public comments. Therefore, in compliance with the National Environmental Policy Act, an EIS will not be prepared, and the selected project may be implemented immediately.

Sula Jacobs Superintendent Olympic National Park Approved: David Szymanski Acting Regional Director Interior Regions 8, 9, 10, and 12

US 101 Elwha River Bridge Replacement Downstream Mitigation FONSI

Attachment A: Concern Responses

US 101 Elwha River Bridge Relocation Downstream Mitigation/EA Concern Responses

Comments out of scope of the project:

- Addressing the status of the Elwha watershed upstream due to glacial retreat and requesting a full assessment of the Northern Peninsula water situation over the next few decades.
- Questions regarding reconstruction of the Hurricane Ridge Day Lodge.
- Questions about the Olympic Hot Springs Road project.
- Request to place ELJs above Glines Canyon Dam.
- Requests for the NPS, WSDOT, and Clallam County regarding working together for future recreation opportunities on Elwha Project Lands.
- Comments that are argumentative and focus on the Elwha River and Ecosystem Restoration/EIS and the Secretary of the Interior's decision through the EIS process to remove both dams on the Elwha River in order to restore the ecosystem.
- Comments that place blame on the need for a new bridge and subsequent mitigation.

Purpose and Need:

Concern 1: One commenter stated, "Mitigation for the current bridge relocation should only address the instream work for current construction. Mitigation as presented in this EA is assumed as necessary because of the failure of the Federal Government to mitigate the damage and this bridge solution to construct a free span bridge that will not have bridge infrastructure in the river zone; this was demonstrated in previous EA action taken and not responded to beyond verbal stating the added cost. But now estimated \$2 million of the estimated \$42 million to take the bridge action is being spent to expend logs downstream for a failure of the Federal Government action to mitigate the continued loss of the current bridge in their anthropogenic upstream action. All historic and current additional bridge crossings upstream and downstream have/are free span bridges, State Highway 112 being as complex as the Highway 101 crossing. Bridge pilings do not belong in this now wild uncontrolled river complex."

Response 1: The need for a new and slightly relocated US 101 Elwha River Bridge was due to several factors as described in the Bridge Relocation FONSI. This FONSI can be found at https://parkplanning.nps.gov/WSDOTBR. The Bridge Relocation EA and related documentation can be found here: https://wsdot.wa.gov/construction-planning/search-projects/us-101-elwha-river-bridge-bridge-replacement. The cost of this mitigation measure was already included in the cost of the bridge relocation project, this is not an additional cost. WSDOT engineers designed the new bridge and the mitigations to the standards best suited for this location. Additionally, mitigation is for the riverine impacts from the bridge replacement and removal, and for riverine impacts that occurred due to emergency scour countermeasures.

Comments not in support of selected action:

Concern 2: One commenter stated that, "Action should not allow for instream mitigation under the alternatives presented, this should be an action required by the State of Washington and not the Federal Government. (This is meant to [signified] the intrusive nature of several Federal agencies on the State of Washington with this EA, and not take responsibility/pay openly for the mitigation themselves that appear to mostly be for the purpose of a tribal desire to put more and more logs in the river blocking my [motor boat] from speeding up and down Lake Aldwell."

Response 2: Mitigation is for the riverine impacts from the bridge replacement and removal, and for riverine impacts that occurred due to emergency scour countermeasures.

Jurisdiction:

Concern 3: One commenter stated, "The aspects defined in this EA are not within the jurisdiction of the National Park Service, the river aquatics are waters of the [S]tate of Washington and not a legal standing of the NPS. When the lower dam was removed, the navigability of the Elwha River was extended upstream; and the Elwha Project Lands did not transfer ownership of the river itself. The 1992 Act for restoration did not designate the river as property of the Federal Government, thereby it remains in the State rights of Washington to alone determine instream mitigation. If the excuse that Federal funds require such, that only applies to the lands in legal possession of the Federal government and not the jurisdiction of the State. Any such State requirement can go through JARPA, Clallam County Shoreline Management regulations/permitting, and WA DNR aquatics jurisdiction/oversight/SEPA. The No Action is the only alternative that is legally defendable in a Federal NEPA process." The commenter further stated, "The NPS and the Federal government must be held accountable and recuse itself from violating 10th Amendment State and Citizens Rights. The 1992 Act called for disposal of the Elwha Project Lands upon completion of restoration per the Act; that having been accomplished, a right of way shouldn't even be a tool of being held hostage, at least this portion of the EPL should be disposed of to the interests of the State of Washington, Fee Simple."

Response 3: Olympic National Park is the only park within Washington State that has exclusive jurisdiction over its waterways. The project occurs on Elwha Project Lands that are legislatively administered by the NPS until such time as subsequent legislation transfers these lands to a permanent management entity. Alternatively, it is possible that these lands could remain in the administration of the park. Until that determination is made, the park must continue to manage these lands as if they are part of the park's administrative boundary.

Concern 4: One commenter stated, "The Federal agency has no authority to demand from the WSDOT to prepare this EA, the NPS is responsible for doing that because it is the NPS that mandated a concise EA after the fact of the EA for the bridge project was completed. The Federal agency had the chance to challenge in that phase of bureaucracy

and failed to do so; could have done that in the same public comment period we the people were only offered."

Response 4: The NPS did not "demand" that WSDOT prepare the EA. While the ELJs were identified as compensatory mitigation for the LEKT and USACE, their impacts were not analyzed and shared for public review in the bridge relocation EA. WSDOT and FHWA do not conduct impact analysis on mitigation measures, the NPS is required to. While the NPS was a cooperating agency on the Bridge Relocation EA, they were not provided an opportunity to review that EA ahead of public release. It wasn't until then that the NPS discovered the addition of these extensive log jams as having been agreed to as compensatory mitigation under an MOA as well as under the Clean Water Act 404 permit, but the EA had no coverage of their impacts. The NPS did not stop the Bridge Relocation EA process as it will've held up WSDOT's and FHWA's acquisition of the required Highway Easement Deed (HED) to begin construction of the bridge, which is currently underway. It was determined that a separate EA will allow acquisition of the HED and will not hold up procurement and early construction actions for the bridge relocation project.

Overarching Concern: One commenter expressed concern about WSDOT's and FHWA's need to acquire a Highway Easement Deed (HED) from the NPS. They had identified several "Whereas" statements from within the HED to which they questioned the NPSs statements based on provisions in the Elwha Act. The commenter further claims the NPS is holding WSDOT and FHWA "hostage" based on the stipulations in the HED.

Concern 5: "HED: WHEREAS, the Elwha Act recognized that the Elwha Project Lands may be suitable for addition to other lands owned or managed by other entities;" The Act did not "recognize", it calls for disposal upon completion of the restoration per the Act.

Concern 6: "HED: WHEREAS, the Elwha Project Lands are currently administered by the NPS; but may be legislatively transferred to another entity..." The act authorized the transfer to another entity and the NPS has failed to do so in a significant amount of time since the Act's restoration was completed.

Concern 7: "HED: WHEREAS, the Department of the Interior, acting by and through the NPS, in its consent to the appropriation of the Federal land, has agreed to the transfer by the DEPARTMENT of an easement over the land to the STATE, subject to the conditions contained herein;" Commenter states, "Since the Highway Deed was not an aspect of the previous EA, it should be clear that the NPS inserted a requirement that is not a fact of law, section 11 of the conditions of the deed to install NPS boundary signs and other sorts."

Concern 8: "HED: All signing within the right-of-way shall be installed and maintained by the STATE, or the NPS, at its discretion. The STATE will provide signs to mark National Park Service boundaries (both entering and leaving),

markers to delineate the width of the right-of-way granted through National Park Service lands, intersecting park or other roads, directional signs to nearby National Park Service information facilities that are staffed throughout the year, and signs to geographic or recreation areas. The STATE will install displays (panels or posters), furnished by the NPS, at rest stops or other suitable locations near Park." Commenter stated, "None of the land that is affiliated with this project are National Park Service lands, per the ACT of 1992 or any subsequent legislative action...The 1992 Act only designated the manager of the Elwha Project Lands under the NPS land management protocols, not designating it as National Park! The Elwha Project Lands are not National Park Service lands, at best they are Federal owned lands that are managed by the NPS for the purpose to implement the 1992 Act to include its disposal legislated requirement."

Response 5-8: The HED was an aspect of the Bridge Relocation EA and is a requirement for WSDOT and FHWA for Right-Of-Way (ROW) access for constructing the bridge on Elwha Project Lands. Elwha Project Lands are legislatively administered by the NPS until such time as subsequent legislation transfers these lands to a permanent management entity. Alternatively, it is possible that these lands could remain in the administration of the park, until that determination is made, the park must continue to manage these lands as if they are part of the park's administrative boundary. The NPS has no control over if and/or when the lands will be transferred to a permanent management entity.

Planning Process:

Concern 9: One commenter expressed that this process is "poor planning" and that "these log jams have already been under contract for a year," asking what this analysis wasn't completed before the job was bid, further noting that "Any changes will allow the contractor to get a change order which could potentially cost taxpayers even more."

Response 9: The ELJ project element was included in the bridge removal and replacement contract and included in the total cost of the project. This additional NEPA documentation was needed to satisfy National Park Service NEPA requirements for actions taken on the Elwha Project Lands. While the ELJs were identified as compensatory mitigation for the LEKT and USACE, their impacts were not analyzed and shared for public review. WSDOT and FHWA do not conduct impact analysis on mitigation measures, the NPS is required to do so. The NPS was not given the opportunity to review that EA ahead of public release and therefore, instead of holding up the Bridge Relocation EA process, we completed that EA so the bulk of the work could move forward while we completed the subsequent EA that will provide the full analysis of the ELJs.

Concern 10: One commenter expressed that they felt they were lied to in noting that WSDOT prepared the EA on behalf of the NPS, and questioned the validity of the EA.

Response 10: WSDOT prepared the EA on behalf of, and in coordination with, the NPS, due to workload and staffing constraints. The NPS adequately followed the National Environmental Policy Act (NEPA) requirements for document development and public engagement.

Public Outreach and Staff Availability:

Concern 11: One commenter stated, "There has been no public outreach about this negotiated mitigation; everything was done behind closed doors with complete lack of transparency and open government. There is not even a public meeting to allow explanation and discussion in order to provide a productive comment to this project. Denial to do so is a barrier for the citizen served because none of the alternatives are reality and therefore the EA has not been satisfied; environmental impact to the citizen is the result."

Response 11: There was an online open house that occurred through July and August 2021 for the WSDOT US 101 Elwha River Bridge Replacement EA, which included the ELJs. The NPS followed National Environmental Policy Act (NEPA) requirements and, due to the low level of interest in and public comment for the Bridge Relocation EA, determined a public meeting was not warranted for the tiered downstream mitigation EA. Public meetings are encouraged but are not required for EAs and EISs. The NPS provided a 30-day public comment period for the downstream mitigation EA, as required for all EA- and EIS-level projects.

Concern 12: One commenter stated that the project contact phone number "is not staffed" and suggested that this "precludes being able to participate in the process and therefore must be an impediment to fair and non-discriminatory practices."

Response 12: The contact information provided included a message directing folks how to schedule a meeting to discuss this or any other park projects. Only one voicemail was received during the entire 30-day comment period, and no name nor contact information was provided for the park's project lead to return the call.

Concern 13: One commenter stated, "This 'mitigation' was totally hidden from the viewing and interested public."

Response 13: This mitigation was provided in the Bridge Relocation EA, Terms and Conditions from the USACE, and the Memorandum of Agreement between WSDOT, the LEKT, and SHPO.

Consultation:

Concern 14: One commenter suggested consultation with Mike McHenry of the Lower Elwha Klallam Tribe Natural Resources Department on this project.

Response 14: WSDOT worked directly with Mike McHenry and the Lower Elwha Klallam Tribe on all phases of the design and will continue to coordinate with the LEKT.

Concern 15: One commenter asked, "For the purpose of this EA, what agencies were notified by USACE and was Clallam County one of those "agencies" whom this river and lands are in the sub agent of the State's county? Was the State of Washington (not just WSDOT notified?" and further noted, "That information is not provided in this EA or made publicly available for the comment evaluation of this EA). If the notification was made to WSDOT only, the preparer of this EA, WSDOT made no effort to either notify specific interested citizens of this affected area or on their project web site that such permit action was taking place and the public's means to request information from USACE, let alone have an opportunity to address the permit during the process by USACE."

Response 15: USACE notifies all of the tribes within the County, DNR, Ecology and NMFS/USFWS (if applicable). The Washington State Department of Ecology sends Section 401 notifications to every private individual, agency or company who voluntarily subscribed to 401 notifications. To subscribe to the list, please see the following link: https://ecology.wa.gov/about-us/who-we-are/news/email-lists. Clallam County is not specifically notified by the USACE for the Tribal and Agency notice. Olympic National Park posted the EA on their public website for comment.

Concern 16: One commenter suggested that citizens also have asserted treaty rights, and suggested that, "The tribe as a party to the USAC[E] action and at that table which gets hidden behind closed doors of 'government to government' failed to remain friendly with the citizens in being exclusive in its influence over the permit and not making its interest and desires open and transparent; and desires in its asserted treaty rights that could possibly cause depredation on property."

Response 16: Given that the Bridge Relocation project was going to have an adverse effect on tribal and cultural resources and properties, per the National Historic Preservation Act Section 106 an MOA is required to provide compensatory mitigation for the adverse effect to or for the affected party(ies). In this event, the affected party is the Lower Elwha Klallam Tribe.

Concern 17: One commenter stated, "Clallam County Roads as the agent of the county on behalf of the Board of County Commissioners has a role in any aspect of this project and to include the river mitigation especially: For the purpose of potentially affected county properties (Lake Aldwell Road, and the boat ramp acreage in the ownership of the county) as a function of public works. The county's Shoreline Management [P]lan is a factor for both the potential impacts within the landward riverine reach, waters of the State, and the [C]ounty's Comprehensive [P]lan (WA Growth Management Act). The State's Department of Natural Resources is the representative of the waters of the state due to navigability; no evidence has been present [that] the WDNR aquatic division has been consulted with even for the sensible issue of these waters remaining navigable in the place of such jams. When the [S]tate considers its on [sic] internal mitigation-restoration

it does so to include that navigability factor (The salmon recovery agency considers impacts to river recreation). These are State waters..."

Response 17: WSDOT did not coordinate with Clallam County Roads while developing the EA for the downstream mitigation as all work is within the river. WSDOT did coordinate with the County during development of the US 101 Bridge Replacement EA, from which this downstream mitigation EA is tiered. Additionally, Olympic National Park has exclusive jurisdiction over its waterways.

Concern 18: One commenter felt that "The EA is incorrect in determining no cultural resource impact. Section 3.7 is a complete determination fallacy; other historic/historic aspects exist within at least the east side LWD placements, but not identified let alone addressed in the analysis. The project's Section 106 consultation Memorandum of Agreement finalized in May 2021 required monitoring and reporting on an annual basis to all parties to the MOA. Neither that activity has occurred by the responsible agency, Olympic National Park, nor the listed preparer of this EA, nor was any amendment to address just what this EA is attempting to address was adhered to per the MOA to all parties, if any.

It is claimed the USACE in its 404 permit action was derelict in its [S]ection 106 duties to notify all parties addressed in the MOA so as to minimize no information/awareness and or disinformation; a cumulative impact that is so evident throughout this entire project's slow movement that many have delayed or what they can get out of the deal. This lack of openness is supported by the statement in the MOA regarding 404, that even though FHWA was designated in the MOA to act on behalf of the USACE, at least one should be held accountable for dropping the ball.

Was the SHPO even informed during the 404 permit process or addressing the affected cultural resource determination by Olympic National Park and the EA preparer?"

Response 18: The SHPO was engaged during the Section 106 process and the Section 106 documentation was provided to the USACE as part of the 404/401 permitting process. The MOA is still in place and is being adhered to by all parties.

Funding/Costs:

Concern 19: One commenter asked from where the project funding is coming to install the ELJs.

Response 19: This project is anticipated to cost approximately \$2 million dollars with the funding from Connect Washington.

Concern 20: Another commenter expressed that the cost to do this is exorbitant for the benefit gained.

Response 20: The total project budget for all phases is \$41.17 million. Of that amount, there are several federal funding types that add up to \$39.75 million, and the balance of \$2.42 million is state funding.

Concern 21: One commenter stated, "Provided cost[s] by WSDOT, and nothing heard from Olympic National Park into the tax dollars it has spent or plans to spend or actually will spend. The National Park Service and the Department of Interior has [sic] failed its primary obligation to representative expenditure of tax dollars in the best interest of the people; and not some undetermined priority system of what makes its system feel good. This same agency was ultimately responsible in its obligation of the 1992 Act to determine the restoration of the river but did so negligently in not mitigating the downstream damage that occur[ed] and continues to occur by choosing per the Act to remove the upper dam. The EA does not provide a cost estimate nor cost analysis of the alternatives and choices. But WSDOT's best disclosed estimate is a \$2 million dollar ticket. With that kind of money and the previous request of the public to construct a free span/no piling in the river bridge, for which all other road crossings of the Elwha are free span, was discounted by the agency as too cost prohibitive. I say because the too expensive was a waist [sic] on such bureaucracy and politics as this mitigation measure by select interest. This EA spends money that we can't afford and impacts economically the sustainability of a reliable road system for this region; this is an economic impact. I understand the logs for this project come off a State trust land harvest in the area; so instead of that valuable resource being an option for an economy to sustain itself in the lumber that could be produced, they are thrown in the river to rot, divert the river to threaten property and create a public safety liability in recreation on the river. Once the balance sheet comes in on the project, will the cost of these logs be captured and announced and then will that cost include all the financial benefits [that] will have been if the log[s] wound up at the mill instead."

Response 21: The project does not consider the economic benefits of the no-build alternative. The ELJ construction is anticipated to cost approximately \$2 million dollars which is included in the total cost of the project. It is up to the contractor to procure the logs and materials needed for construction. The ELJ designs for the Elwha River bridge are not channel spanning, however, the Elwha River is a dynamic system and the ELJs will not be maintained post construction. We do not anticipate the ELJs obstructing the navigability of the system or damage any property.

Concern 22: One commenter expressed that the "Federal agency is responsible for that [which] benefits we the people and our constitutional rights, and the NPS should be held accountable out of its own budget to pay for any mitigation work regarding the 'emergency pilling [sic]' work for the current bridge; due to its negligence in the matter of removing the upper dam. The WSDOT justification that past...riverine impacts that occurred due to emergency scour countermeasures should only be an obligation of the NPS. The NPS must bear the burden of those that believe "pools" are the answer, the NPS must be held accountable for those particular mitigation dollars; it doesn't get to hide under the coattail of some other Federal funding not appropriated for the purpose of the NPS obligations to do its job correctly for one, to protect the current bridge from

impacts of its chose [sic] action [of] removing the dam. (Page 11 first listed past projects, consideration of the Elwha River Restoration Final EIS, did such log jam activity get addressed?)

Response 22: Mitigation is for the riverine impacts from the bridge replacement and removal, and for riverine impacts that occurred due to emergency scour countermeasures. The Elwha EIS did not address the need for these ELJs. All planning efforts, whether conducted by a city, county, state, or federal entity are developed with the best available science and modeling at that time. They will not always be able to identify all future needs and impacts, however, the potential for direct, indirect, short-term, and long-term impacts are captured and considered as thoroughly as possible at the time of development. Additionally, the original bridge piers were not built into bedrock and the bridge itself has served its original intended lifespan.

Maintenance:

Concern 23: One commenter asked, "What is the maintenance of this for the future, will there be a crew to work on this and monitor its' condition? Logs will need to be replaced from rotting, so was there any comparison to use a more durable material, like rocks/boulder, concrete pieces?"

Response 23: The engineered log jams will not be maintained after installation. The ELJs are intended to be stable but will change over time as the river returns to a more natural condition.

Recreation:

Concern 24: One commenter expressed concern that the ELJs will interfere with the safe passage of rafts and other watercraft. They noted that ELJs have eliminated safe passage on the Dungeness River and fear the same will happen to the Elwha River, further stating that "There is already a substantial portage for most who float the Elwha River at the old Elwha Dam site."

Response 24: The ELJ designs for the Elwha River bridge are not channel spanning, however, the Elwha River is a dynamic system and the ELJs will not be maintained post construction. At installation, the ELJs will not obstruct the navigability in the river.

Bridge Impacts:

Concern 25: One commenter shared an observation that there was a huge log jam on the I-5 bridge over the Snohomish River a few years ago that appeared to be made primarily of logs with root wads that had been placed to improve fish habitat. These logs did not affect the highway. The commenter asked for reassurance that the ELJs will never cause any problems downstream.

Response 25: The ELJs are located downstream of the US 101 Elwha River bridge. The ELJ designs included a detailed hydraulic model both upstream and downstream to accurately reflect the anticipated changes as a result of the project. The river and riverbed are still adjusting from the removal of the Elwha dam. No impacts to the bridge and community are anticipated from the construction of the ELJs.

River Impacts:

Concern 26: One commenter stated, "Riverine impacts for either aspect have not been identified by the treaty tribe nor the US Corp of Engineers nor as a matter of the Clean Water Act 404 required compliance. Not identified in this EA adequate for the reasonable person to determine the legitimacy of any "hypothetical" level of claim, nor to the level of the mitigation measures stated as the action. 404 willn't likely be needed if the lake was still there, removed by an anthropogenic action that created the need for countermeasures in most part in the first place."

Response 26: For Nationwide Permits, like the one WSDOT received for this project in May 2023, the USACE notifies agencies and Tribes who have requested to be notified for the type of permit in the requested area. The public is allowed to request information from the USACE during this notice period.

Road Impacts:

Concern 27: One commenter expressed that, "The WSDOT plans dated 8-18-22 do not indicate any protection along the west bank. Clallam County Road Department has concerns about impacts to roads and lands maintained by the County to the west of the logiam placement."

Response 27: The goal of the ELJ placements is to be compatible with natural adjustments (incision, aggradation, and channel migration) that have been occurring since dam removal. Clallam County's Lake Aldwell Road appears to be safe as it is cut into the hillslope and not built on reservoir sediment. The parking lot at the end of the road appears to be built on legacy sediments of the Elwha delta that formed when the reservoir was in place. Since 2018, a meander has migrated hundreds of feet westward towards the road, eroding legacy reservoir sediments. Regardless of the WSDOT ELJs, channel migration within the old reservoir is likely to extend across the valley and thus could reach the parking area. The intent of the ELJs is not to stop this natural process of eroding the reservoir sediment but is to diffuse energy of the river by splitting flow into multiple channels which should reduce the likelihood of a single large channel reaching the western valley margin. When the reservoir was in place, an active channel flowed along the western valley margin where the road is located and along the parking lot. Since dam removal, this channel feature does not remain, but provides context that the road and parking lot has always been at risk from flooding and erosion.

Concern 28: The distribution layout of LWD in the proposal does not address or factor in stream migration to the western side of the valley, which will likely have a detrimental

effect on the County's Lake Aldwell Road with associated established wetlands. Potential direct threat to the historic Lake Aldwell boat launch and its 3+ acres of county ownership (not Elwha Project Lands Federal management) are in a target zone of stream migration contributed to by the placement of the LWD. Again, whereas the Lake provided a buffer for these assets/properties, an anthropogenic action by the Federal government to remove a viable dam took away the projections of a ravaging river and the hypothetical belief than any such LWD will not cause harm to property, at least be a significant contributor to the river migration and thus unprotected loss.

Response 28: ELJs will be constructed on both the eastern and western side of the Elwha River. The Elwha River is a dynamic system, natural processes will occur. The ELJ layout does factor in river migration. The ELJs are not intended to prevent it, as channel migration is a natural and necessary response to dam removal as the river establishes a new floodplain that is in equilibrium (lower than the reservoir sediment surface) with the river's natural grade. Since dam removal, the river has been naturally migrating westward at high rates, coming closer to the western valley margin. Without the project, this is expected to continue and thus poses an erosion risk to the parking lot. The proposed ELJs are not intended to stop erosion but may diminish the risk by splitting flow into multiple channels rather than the formation of a large, single erosive channel against the valley margin. We think most of the Lake Aldwell Road is not at immediate risk because it is built on the hillside and not on the legacy sediments. The parking lot is at risk with or without the project.

Water Quality:

Concern 29: One commenter shared that their main concern about this project is regarding water quality for Port Angeles, due to the water source coming from the Ranney collector well (as described at https://www.cityofpa.us/265/Water-Utility) downstream from this project and asked if WSDOT could put this project on a path that helps to improve the local water quality.

Response 29: Neither WSDOT, nor ONP are aware of any water quality issues at this location. Restoration plantings include native plants. The project will be designed to current standards in the Highway Runoff Manual and will meet permit requirements. WSDOT is limited to treating road runoff from the transportation infrastructure and within state right-of-way.

Wild and Scenic Rivers:

Concern 30: One commenter noted that, "It does not appear this EA evaluated a condition in the 1992 Act regarding Wild and Scenic River, not that such designation has been established but such interim disposal activities to adhered to as a condition will likely be something an NPS EA must factor in."

Response 30: The reach of the Elwha River listed on the Nationwide River Inventory (NRI) of all rivers eligible for Wild and Scenic River designation includes only the

former backwaters of Glines Canyon Dam at River Mile 15 up to the headwaters and all the tributaries that begin in Olympic National Park. Therefore, the section of the Elwha River from Glines Canyon to the Strait of Juan de Fuca is not included on the NRI and therefore is not eligible for Wild and Scenic River designation. Given this information, it was unnecessary to address impacts to Wild and Scenic Rivers in this or the Bridge Relocation EA.

Attachment B: Determination of Non-Impairment

OLYMPIC NATIONAL PARK US 101 Elwha River Bridge Relocation Downstream Mitigation/ Environmental Assessment

NON-IMPAIRMENT DETERMINATION

By enacting the National Park Service (NPS) Organic Act of 1916 (Organic Act), Congress directed the U.S. Department of the Interior and the NPS to manage units "to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such a means as will leave them unimpaired for the enjoyment of future generations" (16 United States Code [USC] 1). Congress reiterated this mandate in the Redwood National Park Expansion Act of 1978 by stating that the NPS must conduct its actions in a manner that will ensure no "derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress" (16 USC 1a–1). NPS *Management Policies 2006*, Section 1.4.4, explains the prohibition on impairment of park resources and values:

While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the Nation Park Service. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

The NPS has discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of a park (NPS 2006:Sec. 1.4.3). However, the NPS cannot allow an adverse impact that will constitute impairment of the affected resources and values (NPS 2006:Sec. 1.4.3). An action constitutes an impairment when its impacts "harm the integrity of Park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values" (NPS 2006:Sec. 1.4.5). To determine impairment, the NPS must evaluate "the particular resources and values that will be affected; the severity, duration, and timing of the impact; the direct and indirect effects of the impact; and the cumulative effects of the impact in question and other impacts" (NPS 2006:Sec. 1.4.5).

This determination on impairment has been prepared for the selected alternative described in the Finding of No Significant Impact (FONSI). An impairment determination is made for all resource impact topics (geology and soils, vegetation, water resources, fish, wildlife and wildlife habitat, threatened and endangered species, and cultural resources) analyzed in detail in the Environmental Assessment (EA) for the selected alternative. An impairment determination is not made for visitor use and experience, soundscapes, or viewshed because impairment findings relate back to park resources and values, and these impact topics are not generally considered to

be park resources or values according to the Organic Act and cannot be impaired in the same way that an action can impair park resources and values.

Geology and Soils

Under the Selected Action, localized, short- and long-term, adverse impacts to soils will occur from the use of heavy equipment. Excavation associated with the large wood structures and floodplain channels will displace soil and alluvium in those locations. Driving heavy equipment on unpaved temporary access routes across the floodplain to clear vegetation, haul materials, and access the construction areas will result in compaction of soils along these routes, as well as from pile driving. Further long-term adverse effects to soils could occur if soil disturbance and vegetation removal result in erosion. However, the final design will include best management practices (BMPs) for limiting soil exposure during construction, and the contractor will be responsible for developing and implementing a temporary erosion and sediment control plan (TESC).

For mitigation measures, consideration will be given to limiting earthwork operations to the drier times of the year when erosion potential is reduced. However, the potential for erosion during construction operations will be reduced by following the BMPs outlined in the TESC Plan sections of WSDOT's current Highway Runoff Manual and Environmental Manual.

The ELJ project, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; and the establishment of a new mining and processing area, this project will add a small increment to the long- and short-term cumulative adverse impacts to soils in the project area. The selected alternative will not result in impairment of geology or soils within or adjacent to the park because adverse impacts will be short-term and primarily associated with the construction of the ELJs.

Vegetation

The Selected Action will have short-term adverse effects to vegetation within the footprint of construction, staging, and access routes totaling approximately 9 acres. This is due to clearing and grubbing that will occur in all areas identified for ELJs, temporary access routes, and staging areas. Vegetation removal will consist mainly of cottonwood trees that are less than 10 years old or 5 to 10 inches diameter at breast height.

Temporary impact areas will be restored with native trees and shrubs appropriate for the specific region and conditions of the site and per the current WSDOT Roadside Manual and in collaboration with the NPS. Per requirements of WSDOT Standard Specification 8-02.3(2)B, the contractor will develop a Weed and Pest control plan that outlines how invasive species will be prevented, controlled, and addressed.

The ELJ project, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal project and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; and the establishment of a new mining and processing area, this project will add a small increment to the short-term adverse cumulative impacts and long-term beneficial cumulative impacts, due to area restoration, to vegetation in the project area. Additionally, vegetation growth in this area occurs rapidly and the areas cleared for staging and access will be naturally restored rather quickly. The selected alternative will not result in impairment of vegetation within or adjacent to the park because adverse impacts will be mostly short-term and will be primarily associated with the construction of the ELJs.

Water Resources

Under the Selected Action, construction activities have the potential to cause short-term adverse impacts to water quality during construction. Excavation and fill of the stream bed, banks, and floodplain could lead to localized increases in turbidity when those areas are re-wetted. The use of heavy equipment near the river could increase the risk of hydraulic fluid leaks or fuel spills and pollution from runoff if proper containment precautions are not taken. The project will have no effect on the quantity and timing of river flows.

The project requires authorization for the Selected Action under the Clean Water Act Section 401 and individual water quality certificates from Ecology. The contractor will operate according to an approved Water Quality Management Protection Plan (WQMPP) and Spill Prevention, Control, and Countermeasure (SPCC) Plan will be implemented by the contractor to minimize the risk of adverse effects to water quality.

Mitigation measures to reduce impacts to water resources will include the following:

- In-water work will be scheduled to occur during periods of low river flow that typically occur between June 15th-August 31st.
- Areas of in-water work will be isolated by the installation of measures such as the placement of a bulkbag cofferdams, filled of onsite gravel, around the work area to prevent flowing water from entering the excavation area.
- Dewatering systems will be installed to maintain a dry work area. Construction water will be discharged to upland areas for infiltration, or to an alternate system that prevents turbid water from re-entering the stream channel.
- Dewatering and rewatering rates will be monitored to minimize sediment disturbance and to prevent fish stranding.
- Erosion and sediment control BMPs will be installed according to TESC Plan.

The ELJ project, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal project and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration

projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; and the establishment of a new mining and processing area, this project will add a small increment to the short-term adverse cumulative impacts during construction but overall long-term cumulative beneficial impacts to water quality in the project area due to restoration of floodplain functions. The selected alternative will not result in impairment of water resources within or adjacent to the park because adverse impacts will be short-term and will be primarily associated with the construction of the ELJs.

Fish

Under the Selected Action, in-water work may lead to short-term adverse effects to water quality, specifically turbidity and sediment released during the re-wetting of isolated work areas. The Selected Action creates a risk of pollutant spills, which could in turn affect the quality of aquatic habitat and fish behavior in the area. Disruptions caused by construction will have short-term adverse effects on fish. Protocols to exclude fish from the in-water work areas involve capturing and handling fish before releasing them in safe areas. Fish removal will be conducted via netting and electrofishing per WSDOT fish moving protocol and permit conditions. While this activity is intended to reduce overall harm to fish within the area, this handling can lead to disturbance and injury to a small percentage of salvaged fish.

Mitigation measures to reduce impacts to fish resources include the following:

- In-water work activities will be restricted to the approved work windows during periods of low river flow that typically occur between June 15th -August 31st.
- Direct harm to fish will be minimized by isolating the in-water work areas and relocating fish according to the BMPs established by resource management agencies.
- Soil and erosion control BMPs will be implemented to eliminate sediment discharges into waterways and wetlands.
- Work areas will be maintained in a clean condition, with no unsecured food or trash that will attract corvids or other nuisance species.
- In-water equipment will be visually examined for aquatic invasive species.
- Conservation measures developed during consultation with the USFWS and NMFS will be applied.

The ELJ project, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; and the establishment of a new mining and processing area, this project will add a small increment to the short-term cumulative adverse impacts to fish and fish habitat in the project area from increase in sedimentation associated with installation and removal of work isolation areas, as well as from any vibratory sounds during construction. The project will add a small increment to the overall both the short-term adverse impacts to fish during construction activities, and long-

term beneficial impacts to fish and fish habitat in the project area by improving the quality of habitat for both adult and juvenile salmonids. The selected alternative will not result in impairment of fish within or adjacent to the park because adverse impacts will be short-term and will be primarily associated with the construction of the ELJs.

Wildlife and Wildlife Habitat

The Selected Action will have short-term adverse effects to terrestrial wildlife species. Construction activity and crews onsite will generate noise and visual disturbance in the area that could temporarily disrupt the distribution and behavior of wildlife. These activities will include the use of haul trucks, excavators, and pile drivers on the floodplain and periodic use of other construction equipment such as pumps and chainsaws. Vegetation clearing required for staging areas, access routes, and large wood structures will result in short- and long-term adverse effects to species that use those plant communities for habitat.

Wildlife habitat effected by temporary construction impacts will be restored through native tree and shrub plantings as described in the Vegetation section of this chapter. Portions of the vacated roadway will be similarly restored. Noise abatement that will mitigate impacts to wildlife during project construction is described in the Acoustic Environment section of the EA.

Mitigation measures to reduce impacts to wildlife and wildlife habitat include the following:

- Construction limits will be delineated to protect existing vegetation and minimize noise and visual disturbance to wildlife.
- Soil and erosion control BMPs will be implemented to eliminate sediment discharges into waterways and wetlands.
- Construction activities will be restricted to the approved work windows to minimize potential disturbance to marbled murrelets.
- Direct harm to fish will be minimized by isolating the in-water work areas and relocating fish according to the BMPs established by resource management agencies.
- Work areas will be maintained in a clean condition, with no unsecured food or trash that will attract corvids or other nuisance species.
- In-water equipment will be visually examined for aquatic invasive species.
- Conservation measures developed during consultation with the USFWS and NMFS will be applied.

The ELJ project, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; the establishment of a new mining and processing area; and noise from continued administrative, commercial, and military overflights, this project will add a small increment to the long- and short-term adverse cumulative impacts to wildlife and wildlife habitat in the project area due to noise and crew presence during construction and the loss of vegetation from clearing. However, the Selected Action will add a small increment to the overall long-term cumulative

beneficial impacts to the ecosystems and biological communities in the river by adding complexity to the system. The large wood structures will improve the quality of habitat for both adult and juvenile salmonids that wildlife prey on. The selected alternative will not result in impairment of wildlife or wildlife habitat within or adjacent to the park because adverse impacts will be mostly short-term and will be primarily associated with the construction of the ELJs.

Threatened and Endangered Species

Chinook salmon, steelhead trout, and bull trout

Under the Selected Action the project *may affect, is likely to adversely affect* Chinook salmon, steelhead trout, and bull trout due to the following actions:

- In-channel construction activities will likely create locally elevated levels of turbidity during construction within 1,800 feet of in-water construction activities.
- The ELJ construction will increase disturbance to benthic habitat by over 217,500 SF. This includes up to 27,000 SF for the placement of cofferdam supersacks on the bed for construction of the ELJs; 190,500 SF for the excavated riverbed alluvium for construction of up to 15 ELJs (only 12 of 15 sites, or 152,400 SF, will be constructed to final detail including de-watering and fish isolation converting the excavated river alluvium into the ELJ structure), any ELJ sites not constructed to final detail, up to 38,100 SF, will be restored to pre-project baseline conditions (i.e., ELJ pits will be backfilled, and the temporary access roads will be removed and graded to pre-project conditions-in-the-dry).
- Conversion of the bed and benthos from construction of the ELJ locations is likely to lower prey availability to juvenile Puget Sound Chinook and steelhead. The activity could temporarily reduce prey availability in the immediate vicinity of the ELJs by a total of 152,400 SF in the vicinity of the final 12 locations.
- Conversion of the bed and benthos on and immediately around of the ELJ locations will likely greatly alter forage for juvenile bull trout and bull trout prey for sub-adult and adult bull trout. The activity could temporarily reduce prey availability in the immediate vicinity of the ELJs by a total of 152,400 SF in the vicinity of the final 12 locations.
- Temporary in-channel features may create localized increases in stream velocities resulting in localized scour or deposition of streambed materials during construction.
- Construction activities will be occurring in a reach with documented spawning, potentially temporarily reducing the overall amount of available spawning habitat for Chinook salmon and steelhead trout during construction.
- Dewatering activities will include fish isolation, removal, and handling activities and may affect Chinook salmon, steelhead trout, and bull trout.
- Removal of 1.29 acres of riparian vegetation may indirectly affect habitat functions for Chinook salmon, steelhead trout, and bull trout such as riparian shading of the stream corridors, contributions of invertebrates to the aquatic food chain, and streambank protection.
- Chinook and steelhead juvenile, and bull trout may be present during installation of cofferdams. These cofferdams will isolate a substantial area and will require fish removal so that work can occur in the dry.

Steelhead and bull trout critical habitat

The Selected Action *may affect, is likely to adversely affect* steelhead and bull trout CH for the following reasons:

- Steelhead and bull trout CH includes the mainstem Elwha River, as well as Indian Creek and Little River that occur within the action area for the project.
- Steelhead freshwater spawning sites may be affected due to turbidity and scour during
 construction that may affect spawning habitat in the immediate vicinity of the project. These
 areas may also be temporarily reduced by construction access features, and potentially
 degraded by fine sediment deposition during in-water construction activities. Freshwater
 rearing sites may be affected due to increased in-stream turbidity during construction
 activities. Freshwater migration corridors may be affected due to increased in-stream
 velocities caused by construction access pads and cofferdams installed to isolate demolition
 areas.
- Juvenile steelhead occurring within the action area may be temporarily displaced or may avoid freshwater rearing habitat near in-water construction.
- The migration of juvenile and adult steelhead may be altered due to the placement of temporary construction access features and increased flow velocities within the project area.
- In-water construction areas will result in long-term alteration of steelhead CH in the area.
- For bull trout, migratory habitat may be affected due to increased in-stream velocities caused by construction access pads and cofferdams installed to isolate demolition areas. Also, inwater construction access features will result in the alteration of complex river, stream, and reservoir systems and processes in the action area; alterations to water quality and quantity although long-term reductions in the rate of pollutant loading from stormwater are expected to occur; and migration habitat will be altered due to the placement of temporary construction access features and increased flow velocities within the project area.

These factors, when taken together, will likely result in temporary, but unavoidable effects, on one or more steelhead and bull trout primary constituent elements (PCEs).

Chinook salmon and Eulachon CH

There will be *no effect* on Chinook salmon and eulachon CH as there is no CH for either of these species within the construction limits.

Northern Spotted Owl and Marbled Murrelet

The Selected Action *may affect, is not likely to adversely affect* northern spotted owls and marbled murrelets for the following reasons:

- While the nearest active spotted owl nesting territory is more than 5 miles from the project site, spotted owls may forage in or disperse through forested habitats near the project site. However, there are no potentially suitable nest trees present within 195 feet of the project site, meaning the potential for adverse effects is discountable. Also, the project site is at a low-elevation (approximately 240 feet), valley-bottom location, whereas sites where spotted owls persist on the Olympic Peninsula are in steep terrain at relatively high elevations (above 2,900 feet, on average). Also, the most suitable nesting habitat on the Olympic Peninsula has been taken over by barred owls, and evidence from monitoring studies suggests that spotted owls are unlikely to recolonize areas of suitable habitat outside of active territories on the Olympic Peninsula. As such, the potential for adverse effects on nesting spotted owls is discountable.
- Marbled murrelets are not known or expected to nest within 328 feet of areas where heavy equipment will be operated. The nearest known nest site is approximately 4.2 miles south of

the project site, and all locations where behaviors associated with nesting have been observed are more than 1 mile from the project site. No potentially suitable nest trees are present within 328 feet of areas where heavy equipment will be operated, meaning the potential for adverse effects on nesting murrelets is discountable. Results of surveys conducted in and near the project area indicate that marbled murrelets do not nest in the valley-bottom forest habitat in the project area.

- Forested habitats in the action area could provide suitable nesting/roosting habitat for spotted owls and marbled murrelets. Vegetation clearing for construction activities will remove approximately 3 acres of forest habitat. Also, project-related noise and human activities will cause a temporary increase in the level of disturbance to any spotted owls and marbled murrelets that may be present in the immediate construction area.
- No suitable nesting or roosting habitat for spotted owls will be removed by project activities, and no potentially suitable nest trees for marbled murrelets will be removed either, so project-related impacts on habitat will be insignificant. Vegetation clearing in the project action area will occur along existing road corridors and will not fragment cover or create new travel corridors for avian predators into suitable nesting, roosting, or foraging habitat for spotted owls or marbled murrelets. For the same reasons, project-related vegetation clearing will not reduce the capacity for forest habitat at the project site to function as dispersal habitat. As such, project-related effects on nesting, roosting, foraging, or dispersal habitat will be insignificant. Any effects that may occur will be minimal in scope and transitory in duration and will have no measurable effect on the long-term survival of northern spotted owls and marbled murrelets.

Northern Spotted Owl and Marbled Murrelet CH

The Selected Action will have *no effect* on designated CH for northern spotted owls and marbled murrelets. There is no designated CH within or adjacent to (i.e., within 150 feet) the project footprint; therefore, project activities will not affect any of the PCEs of spotted owl or marbled murrelet CH.

Streaked-horned Lark

The Selected Action will have *no effect* on Streaked-horned lark or designated CH. Breeding habitat for streaked horned larks in Washington consists of grasslands and sparsely vegetated areas at airports, sandy islands, and coastal spits. No such habitat is present in the action area. The nearest known breeding area is more than 60 miles from the action area. The nearest location where CH has been designated for the streaked horned lark is more than 80 miles from the project action area.

Yellow-billed Cuckoo

The Selected Action will have *no effect* on Yellow-billed Cuckoo or designated CH. No CH for the yellow-billed cuckoo has been designated in Washington.

Taylor's Checkerspot Butterfly

The project *may affect, is not likely to adversely affect* Taylor's checkerspot butterflies for the following reasons:

• Extant populations of Taylor's checkerspot butterflies have been documented approximately 1 mile from the project site, and plant species that may be suitable as hosts for larvae or

nectar sources for adults may be present within areas where ground-disturbing activities will occur. However, the project site lacks the features of suitable habitat for Taylor's checkerspot butterflies, so the potential for adverse effects is discountable. Also, no areas with high densities of larval host plants are present at the project site, further reducing the potential for adverse effects on this species.

• Adults are extremely unlikely to venture into the project area because dispersal of adults from occupied habitats occurs as only a random event, limited to few individuals, so the potential for adverse effects on adult butterflies is discountable, any project-related effects will be unsubstantial.

Taylor's Checkerspot Butterfly CH

The Selected Action will have *no effect* on designated CH for Taylor's checkerspot butterflies. There is no designated CH within or adjacent to (i.e., within 150 feet) the project footprint; therefore, project activities will not affect any of the PCEs of CH for the species.

Mitigation Measures

- Construction limits will be delineated to protect existing vegetation and minimize noise and visual disturbance to wildlife.
- Soil and erosion control BMPs will be implemented to eliminate sediment discharges into waterways and wetlands.
- Construction activities will be restricted to the approved work windows to minimize potential disturbance to marbled murrelets.
- Direct harm to fish will be minimized by isolating the in-water work areas and relocating fish according to the BMPs established by resource management agencies.
- Work areas will be maintained in a clean condition, with no unsecured food or trash that will attract corvids or other nuisance species.
- In-water equipment, such as the barge, will be visually examined for aquatic invasive species.
- Conservation measures developed during consultation with the USFWS and NMFS (see the
 decision document for the terms and conditions as provided by the USFWS and NMFS) will
 be implemented.
- Any areas disturbed on a temporary basis will be permanently stabilized and restored in a manner consistent with the WSDOT's Roadside Policy Manual (WSDOT 2015). The WSDOT will remove any temporary fills and till-compacted soils and restore woody and herbaceous vegetation according to an engineer-approved restoration or planting plan.
- A minimum 1-year plant establishment plan will be implemented to ensure survival, or replacement, of vegetation by stem count at the end of 1 year.
- Before, during, and immediately after isolation and dewatering of the in-water work area, fish from the isolated area will be captured and released using methods that minimize the risk of fish injury, and in accordance with the ESA consultation requirements, HPA permit conditions and WSDOT protocols for such activities (WSDOT 2012).

The Selected Action, in conjunction with past, present, and reasonably foreseeable future actions, including the nation's largest dam removal and second largest ecosystem and fisheries restoration project to date which removed two hydropower dams on the Elwha River both upstream and downstream of the project area and subsequent related research and restoration

projects; road washouts and emergency bank stabilization repairs for road protection; geotechnical investigations; the US 101 resurfacing, restoration, and rehabilitation project and continued maintenance of the US 101 roadway; the relocation of the US 101 Elwha River Bridge; the establishment of a new mining and processing area; and noise from continued administrative, commercial, and military overflights, this project will add a small increment to the long- and short-term adverse cumulative impacts to threatened and endangered species in the project area due to noise and crew presence during construction and the loss of vegetation from clearing. However, the Selected Action will add a small increment to the overall long-term cumulative beneficial impacts to the ecosystems and biological communities in the river by adding complexity to the system. The large wood structures will improve the quality of habitat for both adult and juvenile salmonids that wildlife prey on. The selected alternative will not result in impairment of threatened and endangered species or their Critical Habitat within or adjacent to the park because adverse impacts will be short-term and will be primarily associated with the construction of the ELJs.

Cultural Resources

Construction of ELJs will occur within the Indian Valley TCP. Construction of the structures will cause short-term adverse impacts on aesthetics within the TCP from construction equipment and soil disturbance. The ELJ structures will be a permanent feature in the river floodplain. As described in section 2.2 of the EA, the ELJs are timber construction and are built to mimic natural conditions.

The cultural resources survey that was conducted in 2022 for the proposed ELJs, water dispersion areas, and associated access roads did not result in identification of additional cultural resources. Although the 2022 survey area is in an area used by Native American groups, no material evidence of precontact activity was identified. All new project impacts associated with the ELJs are located on young landforms containing river gravels and have a low probability of containing buried cultural resources. In the event of an inadvertent discovery, all project work will stop immediately, ONP's archeologist will be contacted, and work will not begin until approval is provided, in writing, from the ONP Superintendent.

Activities associated with the ELJ construction, which occurs in the active river channel, will not impact previously identified eligible historic properties within the project area and will have no adverse effect on the Indian Valley TCP. This is due to newly added impacts located on active Elwha River channels and young deltaic landforms that are currently being naturally disturbed by river action, which will not compromise the overall historic integrity of the TCP. Restoration of disturbed areas will occur following completion of the construction. The State Historic Preservation Officer (SHPO) concurred with the finding that the ELJ work will have no adverse effect on historic properties in a letter to WSDOT dated August 23, 2022 (Appendix D of the EA). Therefore, the proposed action will add no additional impacts to the overall cumulative effects on cultural resources in the project area. The selected alternative will not result in impairment of cultural resources within or adjacent to the park because adverse impacts will be short-term, if any, and will be primarily associated with the construction of the ELJs.

CONCLUSION

Given the level of impacts on the resources within the affected area as described, the park has determined that there would be no impairment to park resources under this selected action.