



## **Temporary Off-road Access for Geotechnical Investigation Environmental Assessment Finding of No Significant Impact**

**September 2018**

This Finding of No Significant Impact (FONSI) documents the decision of the National Park Service (NPS) to adopt the preferred alternative in the Temporary Off-road Access for Geotechnical Investigation Environmental Assessment (EA). Alternative B, the Selected Alternative, includes the development of two off-road access paths, transporting equipment to and from the project site using temporary bridges and helicopters, and conducting a geotechnical investigation. This alternative was evaluated against alternative A (no action alternative). The alternatives were described and analyzed in the Temporary Off-road Access for Geotechnical Investigation Environmental Assessment.

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

### **Purpose and Need**

The purpose in taking action is to assess subsurface conditions of a potential relocation route for the Olympic Hot Springs Road. This action would determine the engineering feasibility of relocating a portion of the road outside of the floodplain. The analysis of a potential road relocation would occur in a subsequent EA that would address long-term planning for the Olympic Hot Springs Road.

### **Alternatives Analyzed**

The following alternatives were considered in the EA for temporary off-road access for geotechnical investigation:

- Alternative A – No Action: A geotechnical investigation would not be conducted and the subsequent environmental assessment would not analyze the potential relocation of the Olympic Hot Springs Road.
- Alternative B – A temporary off-road access path would be developed and a geotechnical investigation would be conducted within the potential Olympic Hot Springs Road relocation area.

### **Selected Alternative**

The NPS has selected alternative B as described and analyzed in the EA for implementation. A single change has been made to the description of alternative B. Based on information from the Federal Highway Administration (FHWA), alternative B was modified to remove support vehicles from the list of equipment that would have low ground pressure in areas with soft or wet ground.

## ***Description***

A geotechnical investigation would be conducted within the potential road relocation area and include approximately 22 off-road test borings and the excavation of two test pits. The work would be conducted outside of designated wilderness on a forested bench east of the Olympic Hot Springs Road. Monitoring instruments would be installed at the test boring sites to collect data on subsurface conditions. The data would be used to determine the engineering feasibility of relocating an approximately one-mile section of the Olympic Hot Springs Road out of the floodplain. The geotechnical drilling operation would occur over approximately one to three months. Monitoring of subsurface conditions would occur for about one year and may continue beyond the completion and implementation of the subsequent EA that will address long-term planning of the Olympic Hot Springs Road. It is expected that in less than one year the monitoring data would indicate the feasibility of a potential road relocation, however, long-term monitoring could be continued in order to help inform design details for potential alternatives in the subsequent EA.

The drilling equipment and support vehicles may be transported across the Olympic Hot Springs Road washouts using the existing temporary bridges. After the temporary bridges are removed in fall 2018, helicopters would be used to transport equipment such as a drill rig, excavator, pick-up truck, water truck, and trailer across the road washouts. A Type 1 helicopter (i.e., SkyCrane) would likely be used to transport large equipment and a Type 2 helicopter (i.e., K-MAX) would be used for smaller transport. Helicopter staging areas would include the Elwha maintenance yard, Sweets Field, the former amphitheater parking area, the Elwha Historic District, and the road corridor between Sweets Field and the Elwha Historic District. Equipment would not be transported over pedestrians, structures, vehicles, or sensitive resources. Approximately twenty roundtrip flights would be required to transport equipment to and from the staging areas over about six days. All flights would occur outside of designated wilderness.

### Off-road Access Path

Access to the test boring sites would require construction of a 6 to 10-foot wide, approximately 4,800-foot long path on the forested bench east of the Olympic Hot Springs Road. The path would start about 1,000 feet north of the Elwha Ranger Station and end about 800 feet north of the former Sanders Creek temporary bridge site. An approximately 300-foot long path may also be constructed on the north side of the former Sanders Creek temporary bridge site to gain access to the test boring sites. An excavator would be used to construct the approximately 4,800-foot and 300-foot (0.96 mile) access paths required to transport a drill rig and support vehicles to the boring sites.

A temporary embankment would be constructed adjacent to the water tank near the Elwha maintenance yard to widen the existing service road, allowing a drill rig to access the boring sites. Approximately 150 cubic yards of aggregate material would be used to construct the embankment. Upon completion of the geotechnical investigation, the temporary embankment would be removed.

Ground disturbance would be kept to the minimum footprint possible throughout the development of the access paths. However, up to 1.2 acres of vegetation could be compressed to

develop the access paths. Compressed or crushed vegetation along the paths would be left in place where practicable. Minor tree branch trimming would be required to construct the access paths and to raise the drilling tower at the test boring sites. Equipment used to develop the access paths would track or skid around standing trees, when feasible, to minimize tree removal. Trees 11-inches in diameter or less within the access paths may be removed if they cannot be avoided. The contractor would avoid removing large trees (trees with a diameter greater than 11-inches), with the exception of up to six trees that do not have characteristics of a marbled murrelet or northern spotted owl nest tree and do not provide cover to nest trees.

Trees felled to construct the access paths and drill pads would be left on site or used to transport equipment across drainages and water crossings. Steel plates, bridges, and downed logs may also be used to transport equipment over drainages, wetlands, and streams. The steel plates, bridges, or logs would be placed above the general flow of water at stream and wetland crossings. The steel plates would be removed after drilling operations are complete. Logs used to bridge crossings would be scattered following the completion of the geotechnical investigation to avoid potential erosion.

#### Off-road Geotechnical Investigation

Two six-foot deep test pits would be excavated and approximately 22 test borings would be drilled off-road to investigate subsurface conditions for a potential road relocation. Twelve initial borings would be drilled within the approximate areas identified in Figure 2. Ten additional test borings may be drilled if determined necessary to further investigate the subgrade surface in areas for potential infrastructure such as bridges, rock cuts, and walls. Test boring depths would range from a minimum of 20 feet to a maximum of 140 feet. Off-road drilling tools and methods are anticipated to include hollow-stem augers, casing advancer, and coring. A portable skid-mounted or track-mounted drill rig would be operated to conduct the test boring. A drill rig with low ground pressure (not to exceed 2.5 psi) would be used in areas with soft or wet ground. Areas inaccessible by an excavator would require skidding the drill rig in place. In areas accessible through only the use of a boom truck or crane, the drill rig would be lifted and placed onto the slope.

Equipment such as an 8.25-inch outer diameter hollow stem auger and a 4 or 5-inch outer diameter casing advancer system may be used to advance the holes through soil and rocky materials. Wireline coring systems with an approximately 4-inch outer diameter may be used when rock is encountered. Soil and rock samples would be taken, when possible, at regular depth intervals about every 2.5 to 5 feet. Soil samples would be collected using equipment such as a maximum 3-inch outer diameter split spoon sampler or 3-inch outer diameter Shelby tube sampler.

Well water from the Elwha developed area water system may be transported by truck to the test boring sites to advance the boreholes. An average of 1,200 gallons of water per boring would be used during the geotechnical drilling operation. Depending on the formation, the water would recirculate back up to the surface within the steel casing to be reused. If this is not feasible due to the type of formation, the water may dissipate through the rock fractures.

Vibrating wire piezometers and slope inclinometer casings would be installed at each test boring site to monitor and collect data including, but not limited to, slope stability and groundwater levels. Above ground metal casings, approximately 10 to 12 inches in diameter and up to about 3 feet above the ground, would be installed to protect the monitoring instruments.

The monitoring data may show, sooner than one year, whether or not a road relocation would be feasible. However, the instruments could be left in place for an indefinite period of time to provide long-term monitoring data as well as to inform the design of potential alternatives in a subsequent EA to facilitate long-term planning for the Olympic Hot Springs Road. Upon completion of the monitoring, the instruments and metal casings would be removed and the geotechnical borings would be backfilled. The test pits would also be backfilled after the drilling activities. Disturbed areas would be seeded with native plant species to help prevent establishment of invasive exotic plants from nearby areas.

#### Public Access

Olympic Hot Springs Road would continue to be open to foot and bicycle traffic. However, there may be multiple trail closures required for up to three days each during the one to three month timeframe in which drilling operations in the vicinity of the public access trail are being conducted. Areas surrounding the helicopter staging areas would not be closed unless the decision were made that staging activities could affect visitor safety. Temporary delays to foot and bicycle traffic may be required during helicopter operations.

#### **Other Alternatives Evaluated**

##### **Alternative A: No Action**

Under the no action alternative, a geotechnical investigation would not be conducted and the subsequent environmental assessment would not analyze the potential relocation of the Olympic Hot Springs Road.

##### **Preliminary Alternatives and Actions Considered But Dismissed**

Under the National Environmental Policy Act (NEPA) alternatives may be eliminated from detailed study based on the following reasons [40 CFR 1504.14 (a)]:

- Technical or economic infeasibility;
- Inability to meet project objectives or resolve need for the project;
- Duplication of other less environmentally damaging alternatives;
- Conflicts with an up-to-date valid plan, statement of purpose and significance, or other policy; and therefore, would require a major change in that plan or policy to implement; and
- Environmental impacts too great.

The Federal Highway Administration verified that no other alternatives are possible to conduct the geotechnical investigation and determine the engineering feasibility of relocating a portion of the road.

##### **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 considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. This finding is based on the following:

- The Selected Alternative has a wide range of beneficial and adverse effects (see Measures to Minimize Environmental Harm below).
- The finding of no significant environmental effects is not biased by the beneficial effects of the action.
- The Selected Alternative will not adversely affect public health or safety.
- 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 effects on the human environment are known, and there were no controversial impacts or aspects of the proposed project that surfaced during the environmental analysis process. There is no scientific controversy over the impacts of the project.
- The Selected Alternative will have *no adverse effect* on cultural resources.
- The Selected Alternative would either have *no effect* (bull trout, Chinook, and steelhead) or *may affect, but is not likely to adversely affect* (marbled murrelet and northern spotted owl) on species listed or proposed for listing as endangered or threatened or their critical habitat as determined under the Endangered Species Act of 1973.
- No significant cumulative effects and no highly uncertain, unique or unknown risks were identified during preparation of the EA or during the public review period. The Selected Alternative neither established an NPS precedent for future actions with significant effects, nor represents a decision in principle about a future consideration. The effects analysis shows that the effects are known, and do not involve unique or unknown risk.

The Selected Alternative will not violate federal, state, or local laws or requirements for the protection of the environment.

#### **Measures to Minimize Environmental Harm**

All mitigation measures will be implemented for the Selected Alternative at Olympic National Park to ensure resource protection, promote visitor enjoyment, and improve operational efficiency.

## Impact Mitigation Matrix

Resource	Selected Alternative Impacts	Measures to Avoid, Minimize or Mitigate Impacts	Responsibility
<b>Soils</b>	There would be direct and indirect, localized, short- and long-term adverse impacts to soil resources from the compaction, disturbance, and removal of soils. This alternative would contribute slightly to the short- and long-term adverse cumulative impacts to soils within the Elwha Valley.	<ul style="list-style-type: none"> <li>• Minimize soil disturbance to the greatest extent possible to reduce disturbance to native plants and minimize the potential for the introduction or spread of invasive non-native plant species.</li> <li>• Minimize the removal of standing trees and leave compressed and crushed vegetation in place as much as possible to prevent or minimize soil erosion.</li> <li>• Implement erosion control best management practices.</li> </ul>	Project Manager Chief Resources Management
<b>Vegetation</b>	There would be direct and indirect, localized, short- and long-term adverse impacts from the loss of and damage to native vegetation. The Selected Alternative would contribute to short- and long-term cumulative impacts to vegetation resources.	<ul style="list-style-type: none"> <li>• The contractor, National Park Service staff, and Federal Highway Administration staff would survey the approach to the respective drilling sites and determine an off-road route that minimizes the removal of vegetation.</li> <li>• A track-mounted drill rig would be used where practicable. This type of drill rig is designed to exert low surface pressure to minimize impacts to ground vegetation.</li> <li>• Equipment used at the site would be pressure cleaned and free of</li> </ul>	Project Manager Botanist

		<p>weeds, seed, debris, and mud to prevent the introduction and/or spread of exotic, invasive plants.</p> <ul style="list-style-type: none"> <li>• Branches would be cut close and parallel to the tree trunk, while preserving the “collar” ring of tissue that defines the junction of branch and trunk when trimming branches to avoid opportunities for pathogens to invade and to encourage healing.</li> <li>• All tools, boots, clothes and monitoring instruments would be cleaned to ensure that no exotic plant species are transported to the site.</li> <li>• Any fill used would be from the local area and free of exotic seed sources.</li> <li>• Native vegetation would be salvaged from areas that would be disturbed to be replanted after the geotechnical investigation is complete. Additional disturbed areas would be re-seeded with native plant seeds collected from the middle Elwha River Valley.</li> </ul>	
<b>Wetlands</b>	<p>There would be direct, localized, short- and long-term adverse impacts from the compaction and disturbance to less than 0.1 acres of wetlands. The Selected Alternative would contribute to short-</p>	<ul style="list-style-type: none"> <li>• The contractor, National Park Service staff, and Federal Highway Administration staff would survey the approach to the respective drilling sites and determine an off-</li> </ul>	<p>Project Manager Botanist</p>

	and long-term cumulative impacts to wetland resources.	<p>road route that minimizes impacts to wetland resources.</p> <ul style="list-style-type: none"> <li>• A track-mounted drill rig would be used where practicable. This type of drill rig is designed to exert low surface pressure to minimize impacts to wetland resources.</li> <li>• Fill would not be placed within wetlands.</li> </ul>	
<b>Wildlife</b>	There would be direct, localized, short- and long-term adverse impacts to wildlife from vegetation removal, and noise and visual disturbance. The Selected Alternative would contribute slightly to the short- and long-term adverse cumulative effects to wildlife.	<ul style="list-style-type: none"> <li>• The degree of wildlife habitat (vegetation) removal would be minimized by delineating construction limits.</li> <li>• Activities would occur outside of the nesting and denning season of most species.</li> <li>• Spill-prevention measures would be used to prevent inadvertent spills of fuel, oil, hydraulic fluid, antifreeze, and other toxic chemicals that could affect wildlife.</li> <li>• Construction personnel at work sites would be discouraged from providing a source of human food to wildlife, thereby avoiding habituation of wildlife and reducing human/wildlife conflicts.</li> </ul>	Project Manager Fisheries Biologist Wildlife Biologist
<b>Threatened and Endangered Species</b>	The proposed actions would occur outside of the April 1 through September 23 marbled murrelet nesting season. Minor habitat	<ul style="list-style-type: none"> <li>• No marbled murrelet or northern spotted owl nest trees (large, moss-covered conifer branches greater than or equal to 4" diameter located at</li> </ul>	Project Manager Fisheries Biologist Wildlife Biologist

	<p>modifications <i>may affect, but are not likely to adversely affect</i> marbled murrelets.</p> <p>Minor habitat modifications and noise disturbance within potential dispersal or foraging habitat <i>may affect, but are not likely to adversely affect</i> northern spotted owls.</p> <p>There would be <i>no effect</i> on bull trout, Chinook salmon, or steelhead trout.</p> <p>There would be <i>no effect</i> on designated critical habitat for bull trout or steelhead trout.</p>	<p>least 33' above ground with cover over the platforms), potential nest trees, or trees providing cover to potential nest trees would be damaged or removed.</p> <ul style="list-style-type: none"> <li>• Construction equipment (i.e. muffler) would be properly maintained to minimize unintended noise.</li> <li>• The contractor would maintain strict garbage control to prevent scavengers such as ravens and crows, which are predators on murrelet nests, from being attracted to the project area. No food scraps would be discarded or fed to wildlife.</li> <li>• In-water work would be avoided.</li> <li>• The contractor would be required to implement erosion control best management practices to prevent discharge of sediment overland or through tributaries into the Elwha River.</li> <li>• Work would occur outside of the marbled murrelet nesting season.</li> </ul>	
<b>Soundscapes</b>	<p>Direct, localized, short-term adverse impacts to soundscapes from the use of equipment such as helicopters, chainsaws, and drilling equipment. The proposed action would contribute slightly to the short-term adverse</p>	<ul style="list-style-type: none"> <li>• There would be no unattended motors/engines or idling of motors or engines for extended periods of time.</li> <li>• Best management practices would be used to minimize noise</li> </ul>	<p>Project Manager Chief of Interpretation</p>

	cumulative effects on soundscapes.	<p>disturbance to wildlife and visitors.</p> <ul style="list-style-type: none"> <li>• The smallest, quietest helicopters suitable to efficiently and safely accomplish the tasks would be used.</li> </ul>	
<b>Visitor Use and Experience</b>	<p>Direct, localized, short-term adverse impacts to visitor use and experience from temporary delays and short-term closures during helicopter and drilling operations. Potential indirect, localized, long-term beneficial impacts on visitor use and experience by determining the engineering feasibility of relocating a portion the road. This alternative would contribute slightly to the short- and long-term adverse and beneficial cumulative effects to visitor use and experience.</p>	<ul style="list-style-type: none"> <li>• Visitors would be informed of geotechnical investigation activities and trail closures from information provided at the visitor center, trailhead, or park website.</li> </ul>	<p>Project Manager Chief of Interpretation</p>
<p>Although cultural resources was dismissed as an impact topic because no significant resources were identified within the Area of Potential Effect (APE) for the geotechnical investigation, and there would be <i>no adverse effect</i> on cultural resources, the following mitigation measures will be implemented:</p> <p><u>Cultural Resources:</u></p> <ul style="list-style-type: none"> <li>• An archeologist would monitor initial ground disturbance during the geotechnical investigation.</li> <li>• If unknown archeological resources are discovered during project work, work in the immediate vicinity of the discovery would be halted until the resources could be identified, evaluated, and documented and an appropriate mitigation strategy could be developed, if necessary, in consultation with the State Historic Preservation Office and associated American Indian tribes.</li> </ul>			<p>Project Manager Archeologist</p>

## **Public Involvement**

A 17-day external (public) scoping period was initiated with a scoping newsletter to inform the public of the proposal to develop temporary off-road access paths for a geotechnical investigation and to generate input on the preparation of this Environmental Assessment. This public scoping occurred from March 16 to April 1, 2018.

An article about the proposed geotechnical investigation was published in *The Peninsula Daily News* on March 23, 2018. The press release was emailed to approximately 75 people on the park's mailing list as well as to various federal and state agencies, affiliated American Indian tribes, local governments, and non-profit organizations. Scoping information was also posted on the park's website. Although no public scoping meetings were held, the park received 34 written responses from individuals on the NPS Planning, Environment and Public Comment (PEPC) website ([www.parkplanning.nps.gov/olym](http://www.parkplanning.nps.gov/olym)). Park and FHWA staff held one informational session on May 15, 2018, after the scoping period closed. This meeting was to provide further clarification of the proposed action and to clear up misinformation.

Respondents provided useful information regarding how the work should be conducted while protecting park resources, including that:

- the park should mitigate for potential erosion and the introduction of nonnative plant species;
- the park should ensure the public is informed in advance of closures;

Comments outside the scope of the proposal included comments related to the subsequent environmental assessment for the long-term planning of the Olympic Hot Springs Road, such as whether or not to relocate the road, alternative modes of public transportation (i.e., trams, electric buses), and the possibility of developing new campgrounds in the area. Other comments included concerns over the Elwha Campground Kitchen Shelter (located adjacent to, but not within the project area) and questions about mitigation measures from the dam removal project.

The formal public review period for the EA was open for 31 days (August 1 – August 31, 2018). A press release was emailed to approximately 75 people on the park's mailing list as well as federal and state agencies, local governments, American Indian tribes, and non-profit organizations. During public review, a description of the proposal and the availability of the EA were noted in an article published in the *Peninsula Daily News* on August 7, 2018. No hardcopies were requested by individuals and none were distributed to local libraries. Twenty-five comment letters were entered into PEPC.

## **Agency Consultation**

### ***State Historic Preservation Office (SHPO)***

A letter was sent to the SHPO on November 17, 2017, describing the Area of Potential Effect (APE) and survey methods, and requesting comments and concurrence on the APE. The SHPO responded on November 29, 2017, expressing concurrence with the APE as described in the letter. Following the cultural resource survey, a letter was sent to the SHPO on September 4, 2018, requesting concurrence on the park's determination of no adverse effect on cultural

resources. The SHPO responded on September 5, 2018, concurring with the determination of effect.

#### ***U.S. Fish and Wildlife Service***

Federal agencies must consult with the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) to ensure their actions will not jeopardize the continued existence of any federally listed or proposed threatened or endangered species, or designated or proposed critical habitat [ESA, Sec. 7 (a)(2), 16 USC 1531 *et seq.*]. If listed species are present, the federal agency must determine if the action will have *no effect*, *may affect*, *[is] not likely to adversely affect* or *may affect*, *[is] likely to adversely affect* those species. The NPS made the determination of effect for the Selected Alternative following guidance outlined in the *Endangered Species Act Consultation Handbook: Procedures for Conducting Section 7 Consultations and Conferences* (USFWS and National Marine Fisheries Service 1998). The NPS has determined that the Selected Alternative may affect but is *not likely to adversely affect* any federally listed, candidate, or proposed species (marbled murrelets and northern spotted owls) or their designated critical habitat. A letter was sent to the USFWS on June 26, 2018, requesting concurrence with the effects determinations on marbled murrelets and northern spotted owls. The USFWS responded on July 18, 2018, concurring with the park's effects determinations. The Selected Alternative would have *no effect* on bull trout, Chinook, and steelhead, and *no effect* on designated critical habitat for these species. Although concurrence with a determination of *no effect* could be sought from the USFWS and NMFS, no additional consultation is required.

#### ***American Indian Tribes***

NPS consulted with culturally associated American Indian groups during the development of the *Temporary Off-road Access for Geotechnical Investigation Environmental Assessment*. A letter was sent to the Lower Elwha Klallam Tribe on November 17, 2017, describing the project area of potential effect and survey methods, and requesting comments and concurrence on the APE. The Lower Elwha Klallam Tribe responded on November 21, 2017, expressing concurrence with the APE as described in the letter. The Lower Elwha Klallam Tribe recommended that Olympic National Park review the Tribe's Monitoring and Inadvertent Discovery Plan and provide the Tribe with a current contact list for the proposed project.

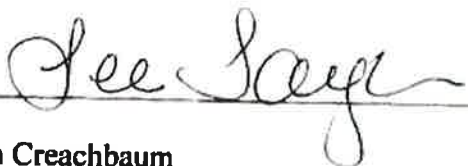
Following the cultural resource survey, a letter was sent to the Lower Elwha Klallam Tribe on September 4, 2018, requesting concurrence on the park's determination of *no adverse effect* on cultural resources. The Lower Elwha Klallam Tribe responded on September 5, 2018, concurring with the determination of effect.

#### **Finding**

On the basis of the information contained in the EA as summarized above, the NPS has determined that implementing the Selected Alternative is not a major federal action nor is it an action without precedent or similar to an action that normally requires an Environmental Impact Statement (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 unacceptable impacts. This determination also included due consideration of the minor nature of 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.

**Recommended:**

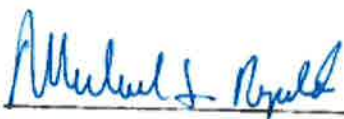


9/18/18

*FW* Sarah Creachbaum  
Superintendent  
Olympic National Park

Date

**Approved:**



9/20/18

*JS* Stan Austin  
Regional Director  
Pacific West Region

Date



## ATTACHMENT 1: ERRATA SHEET

The errata sheet documents minor edits to the text in the EA. These changes correct, clarify, or modify original text. There are no edits or corrections which modify the determination of potential effects or which substantively amend proposed actions.

Strikeout shows what has been removed and bold text indicates new text added. The following edits were made to the EA and have been changed in the FONSI:

1. On page 6 of the EA, modify the description of Alternative B as follows: “A drill rig ~~and support vehicles~~ with low ground pressure (not to exceed 2.5 psi) would be used in areas with soft or wet ground.”
2. On page 18, modify the impact comparison summary as follows: “The proposed action would occur outside of the April 1 through September **23 24** marbled murrelet nesting season.”
3. Although cultural resources was dismissed as an impact topic because no significant resources were identified within the Area of Potential Effect for the geotechnical investigation, and there would be *no adverse effect* on cultural resources, the following mitigation measures will be implemented:
  - An archeologist would monitor initial ground disturbance during the geotechnical investigation.
  - If unknown archeological resources are discovered during project work, work in the immediate vicinity of the discovery would be halted until the resources could be identified, evaluated, and documented and an appropriate mitigation strategy could be developed, if necessary, in consultation with the State Historic Preservation Office and associated American Indian tribes.



**Olympic National Park**  
**Temporary Off-road Access for Geotechnical Investigation**  
**Environmental Assessment**

**DETERMINATION OF NON-IMPAIRMENT**

**Introduction**

NPS *Management Policies 2006* (section 1.4) requires analysis of potential effects to determine whether or not the Selected Alternative would impair a park's resources and values. The fundamental purpose of the national park system, established by the *Organic Act* and reaffirmed by the *General Authorities Act*, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on park resources and values. However, the laws do give the NPS the management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of the park. That discretion is limited by the statutory requirement that the NPS must leave resources and values unimpaired unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values (NPS *Management Policies 2006*). Whether an impact meets this definition depends on the particular resources that would 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.

An impact on any park resource or value may, but does not necessarily, constitute impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated. Impairment may result from visitor activities; NPS administrative activities; or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park. The description of the park's purpose and significance is found below and is subject to the no-impairment standard.

## **Description of Park Purpose and Significance**

### ***Purpose of Olympic National Park***

Olympic National Park was “set apart as a public park for the benefit and enjoyment of the people” (35 Statute 2247, June 29, 1938). According to House Report 2247 (April 1938), the park purpose is to

preserve for the benefit, use, and enjoyment of the people, a large wilderness park containing the finest sample of primeval forests of Sitka spruce, western hemlock, Douglas fir, and western red cedar in the entire United States; to provide suitable winter range and permanent protection for the herds of native Roosevelt elk and other wildlife indigenous to the area; to conserve and render available to the people, for recreational use, this outstanding mountainous country, containing numerous glaciers and perpetual snow fields, and a portion of the surrounding verdant forests together with a narrow strip along the beautiful Washington coast.

### ***Significance of Olympic National Park***

- Olympic National Park protects several distinctly different and relatively pristine ecosystems that provide both ecological and scenic diversity to the Olympic Peninsula, ranging from wild Pacific coast and islands to densely forested lowlands to the glacier-crowned Olympic Mountains. Views of the mountain range define the landscape for great distances in all directions, and the rugged beauty of the coastline and verdant grandeur of the rain forest have inspired people for generations.
- The ecosystems protected within Olympic National Park contain a unique array of habitats and life forms, resulting from thousands of years of geographic isolation, along with extreme gradients of elevation, temperature, and precipitation. More than a dozen animals and plants on the Olympic Peninsula exist nowhere else in the world, and the park is key to maintaining the populations of these taxa.
- Olympic National Park contains some of the last remaining undisturbed, contiguous aquatic habitat throughout the range of several west coast fish species. The park protects 12 major river basins, more than 3,500 miles of rivers and streams, more than 300 high mountain lakes, and 2 large lowland lakes. As a consequence, the park is entrusted with the stewardship of numerous unique stocks of Pacific salmonids and other native freshwater fish species. Salmon are a keystone species of the park’s forest and aquatic ecosystems and are deeply woven into the cultural fabric of the Pacific Northwest.
- One of the largest wilderness areas in the contiguous United States is designated within Olympic National Park. By today’s wilderness quality scale, the Daniel J. Evans Wilderness is superb. Few, if any, National Park Service areas in the contiguous United States can approach or surpass its near-pristine nature, grandeur, immensity, and variety of resources, which include glacier-covered mountains, subalpine lakes and meadows, extensive river valleys, old-growth coniferous forests, and the tremendously diverse wild Pacific coastline. The wilderness character of these lands is of inestimable value and among the most precious of the region’s resources.
- Olympic National Park contains the finest remaining stands of old-growth temperate coniferous forest in the contiguous United States, including one of the finest remaining examples of temperate rain forest in the United States. These extensive forests of ancient and

immense trees provide important habitat for complex communities of plants and animals, including a number of imperiled species.

- The Olympic rocky intertidal community is considered to be one of the most complex and diverse shoreline communities in the United States. Olympic National Park includes about 1,400 square miles of intertidal, island, and shoreline habitat and contributes to a large protected landscape of coastal and ocean habitats, including approximately 64 miles of coastline, 52 of which are along designated or potential wilderness.
- Olympic National Park is home to the largest population of Roosevelt elk in its natural environment in the world. Decades of protection from human harvest and habitat manipulation not only have sustained high densities of elk, but also have preserved the natural composition, social structure, and dynamics of this unique western forestland subspecies of elk.
- Olympic National Park manages a variety of cultural resources, from ancient village sites to historic structures, which retain local, regional, or national significance. Eight federally recognized tribes (the Port Gamble S'Klallam Tribe, Skokomish Indian Tribe, Jamestown S'Klallam Tribe, Lower Elwha Klallam Tribe, Makah Tribe, Quileute Nation, Hoh Tribe, and Quinault Indian Nation) have, since time immemorial, sustained strong ties to the Olympic Peninsula and what is now the park. Hundreds of archeological and ethnographic sites attest to more than 12,000 years of continuous use and connection to the park landscape. Park resources continue to provide material, spiritual, and cultural sustenance to contemporary descendants as they have for millennia.
- The park serves as a recreational "backyard" for millions of people in the greater Puget Sound and Olympic Peninsula regions, in addition to attracting recreating visitors from across the nation and world.

### **Impairment Determinations for the Selected Alternative**

Impairment determinations are not necessary for visitor use and experience, soundscapes, and environmental justice, etc., because impairment findings relate back to park resources and values. These impact topics are not generally considered to be park resources or values according to the *Organic Act*, and cannot be impaired the same way that an action can impair park resources and values. After dismissing the above topics, topics remaining to be evaluated for impairment include soils, vegetation, wetlands, wildlife, and threatened and endangered species.

### ***Soils***

No official soil classification or mapping has been conducted in the project area, however, soil characteristics were based upon mapping and classification conducted by the Washington State Department of Natural Resources and the U.S. Department of Agriculture's Natural Resources Conservation Service. Three basic soil types were identified based on their parent materials, including soils developed in glaciated basaltic bedrock, soils formed in mass-wasting deposits, and soils formed in recent alluvium (AECOM 2017). Soils range from well-drained with predominately upland vegetation to poorly drained and coarse textured. Wetland soils vary from very cobbly or gravel sandy loam to silty clay and muck (AECOM 2017).

Soils would be affected over approximately 1.2 acres on the temporary off-road access paths. Equipment and workers would undertake actions that would remove, cover, and compact soils. Short- and long-term adverse impacts would occur from the development of the temporary off-road access paths, excavation and backfilling of test pits, geotechnical drilling, and the use of

heavy equipment on the access paths. Aggregate fill material used to develop a temporary embankment would be acquired from the local area and free of exotic seed sources. The fill would be removed following the completion of the geotechnical investigation. Mitigation measures would be in place to reduce or avoid the potential for erosion, minimize soil disturbance and vegetation removal, and to revegetate disturbed areas with native plants. The range of localized adverse effects on soils would not result in the impairment of soil resources.

### ***Vegetation***

Overall, the park is habitat for an estimated 1,195 species of vascular plants, including seven endemic species. The project area is within the Western Hemlock/Lowland Forest Zone, which is the most widespread zone in the park. Located inland and at higher elevations than the Sitka spruce zone, climate extremes are somewhat greater here. Western hemlock is the climax dominant; however, much of the area is populated by sub-climax Douglas fir. Common shrubs include salal (*Gaultheria shallon*), Oregon grape (*Mahonia nervosa*), and western serviceberry (*Amelanchier alnifolia*).

The development of the temporary off-road access paths and use of heavy equipment on the paths as described under the selected alternative would compress, remove, and disturb approximately 1.2 acres of vegetation. Trees 11-inches in diameter or less may be removed if they cannot be avoided, and up to six trees with a diameter greater than 11-inches may be removed if they do not have the characteristics of a marbled murrelet or northern spotted owl potential nest tree. The vegetation communities and natural processes that currently exist within the boundary of the access paths are common throughout much of the park. Although these vegetation communities are not rare or imperiled, they are considered important resources in the context of Olympic National Park, which is designated as a World Heritage Site and International Biosphere Reserve. Because of planned revegetation of disturbed areas with native plants and natural conditions that allow for vegetation to reestablish within approximately five years, the long-term effects of vegetation removal or disturbance would be minimal.

The Selected Alternative would have short- and long-term adverse impacts on vegetation. However, the NPS has determined that the impacts would not be significant because the effected vegetation communities within the temporary access paths are common throughout much of the park and are not imperiled or otherwise considered rare communities. In addition, the temporarily disturbed areas would continue to support a variety of native plants following the geotechnical investigation, and mitigation measures would be implemented to reduce the spread of non-native invasive plants.

### ***Wetlands***

Wetlands classified within the 49-acre study area included scrub-shrub, emergent, and to a lesser extent, forested wetlands. The wetland delineation identified less than 0.1 acres of wetlands within the project area. Although less than 0.1 acres of wetland soils and vegetation could be compacted, removed, or disturbed from the use of off-road equipment within the access paths, wetland resources would be avoided to the maximum extent possible. A track-mounted drill rig would be used to minimize impacts to wetland resources and the geotechnical drilling would not occur within wetlands. Mitigation measures would be implemented to reduce or avoid adverse impacts to wetland resources from unanticipated equipment leaks, and no fill would be placed within wetland resources. The range of short- and long-term, localized adverse effects on less

than 0.1 acres of wetlands from the Selected Alternative would not result in impairment of wetland resources.

### ***Wildlife***

A very diverse wildlife population exists in Olympic National Park. According to the NPSpecies database used by all national parks, there are an estimated 260 bird, 66 mammal, 13 amphibian, 4 reptile, and 93 fish (including 24 freshwater, 58 marine and 13 anadromous) species present and/or probably present in the park (<https://irma.nps.gov/App/Species/Search> NPS certified species list - park status view; accessed September, 2015). The number of invertebrate species is unknown, but likely to be very large (NPS 2008: 185). Wildlife species are abundant throughout the low-lying riparian or wetland habitat and upland habitats within the Elwha River watershed. Small mammal species, mammalian predators, bats, songbirds, raptors, and amphibian species are common to the project area.

Impacts to wildlife would primarily consist of temporary noise and visual disturbance from the development of the off-road access paths, geotechnical drilling, and transporting equipment to and from the project area. However, activities would occur outside the nesting and denning season of most species. Noise and human activity associated with work could temporarily disturb wildlife during the geotechnical investigation activities, but species are anticipated to return at night. There would be short- and long-term adverse effects from habitat modification and the localized loss of foraging and cover caused by vegetation removal. Understory vegetation, trees 11-inches in diameter or less, and up to six trees with a diameter greater than 11-inches would be removed within the 1.2 acre access paths if they cannot be avoided. Although there would be a range of localized adverse effects, there would be no impairment of wildlife from implementation of the Selected Alternative.

### ***Threatened and Endangered Species***

#### **Marbled Murrelets:**

Currently, no research on marbled murrelets is being conducted in Olympic National Park. However, Olympic National Park contains the largest continuous block of suitable nesting habitat remaining within the listed range of marbled murrelets in the lower 48 states. Although no critical habitat has been formally designated within Olympic National Park, much of the park contains high quality habitat that is considered important for the recovery of marbled murrelets and is protected by virtue of its location within the national park. Reconnaissance-level surveys conducted in the 1990s documented marbled murrelets using the Elwha Valley as a flight corridor between nesting sites and the marine environment (NPS 1996). The implementation of the Selected Alternative would occur outside of the April 1 through September 23 marbled murrelet nesting season. The development of 1.2 acres for temporary access paths would result in the removal of trees 11-inches in diameter or less and up to six trees with a diameter greater than 11-inches that do not have the characteristics of a potential nest tree and do not provide cover to potential nest trees.

#### **Northern Spotted Owls:**

The actions may overlap with the very end of the late season of spotted owl nesting (i.e., September 24-30) and the very beginning of the following early nesting season (March 1-31). Although structurally suitable habitat for northern spotted owls is found in immediate proximity of the project area, surveys conducted by the park indicate that the area is no longer used for

nesting by northern spotted owls. There is a potential for elevated noise levels and visual disturbance from the use of equipment to temporarily displace owls moving through their home range, however, dispersed individuals are likely to return to the area once the geotechnical investigation is complete. As described earlier, the development of 1.2 acres for temporary access paths would result in the removal of trees 11-inches in diameter or less and up to six trees with a diameter greater than 11-inches that do not have the characteristics of a potential nest tree and do not provide cover to potential nest trees.

Implementation of the Selected Alternative would occur outside of the April 1 through September 23 marbled murrelet nesting season and would not result in the loss or degradation of suitable marbled murrelet or spotted owl habitat. In addition, no marbled murrelet or northern spotted owl potential nest trees or trees providing cover to nest trees would be removed. The alteration of vegetation is minor and limited to a small area (approximately 1.2 acres). The U.S. Fish and Wildlife Service concurred that based on NPS monitoring data and the location of the project, the likelihood of a spotted owl pair nesting in close proximity to the project area would be so extremely low as to be considered discountable. The Selected Alternative may *affect, but would be unlikely to adversely affect* northern spotted owls and marbled murrelets.

### **Conclusion**

In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there will be no impairment of park resources and values from implementation of the Selected Alternative.

**Olympic National Park  
Temporary Off-road Access for Geotechnical Investigation  
Environmental Assessment**

**RESPONSE TO PUBLIC COMMENTS**

The Temporary Off-road Access for Geotechnical Investigation Environmental Assessment was released for a 31-day public review from August 1 to August 31, 2018. A total of 25 comments from individuals and organizations were received during the public review period. This section documents and summarizes substantive comments received during public review, and park responses.

**1) Why Is An EA Required for Test Borings (1 comment)**

Public Concern: The maintenance of full access via the Hot Springs Road either in its original condition or as a modified new road is guaranteed by the Elwha Act and its subsequent implementation plans. These are a matter of public record. By requiring an EA for the test borings and a second EA for the new road construction followed by the actual construction the availability of a suitable road is being delayed by 5-7 years. It appears that there is a deliberate attempt to slow-walk the project to detriment of the public. The perception is that is exactly what ONP administration wants, restrict access since this will have beneficial environmental results.

Response: The park is required by law to conduct an EA when the proposal has no given Categorical Exclusion; when it is unknown whether the proposal would result in significant adverse environmental impacts; and when an EA would assist with or inform agency planning and decision-making. There is no available Categorical Exclusion in NPS Director's Order-12 for the proposed action to occur in a previously undisturbed area. The potential extent of resource impacts that would occur from the use of drilling equipment and drilling the test bores was such that the action and its related impacts needed to be considered under an EA. The NPS and FHWA are looking to the proposed action to assist with and further inform agency planning and decision-making by revealing whether or not it would be feasible to consider an alternative for potential relocation of the road to the forested bench on the east side of the river.

**2) 1970's Geotechnical Investigation Documentation (1 comment)**

Public Concern: When is full disclosure of the following 1970 documentation going to become a part of the ongoing, temporary, investigation, and a part of the final solution?

Response: Available geotechnical data was referenced to help formulate an understanding of the overall geotechnical conditions. This included past investigations in the area that were completed. Although there was historic data available, it was determined that more current and specific data would be beneficial in determining the feasibility of a reroute alternative.

**3) Timing and the Monitoring and NEPA Processes (2 commenters)**

Public Concern: Commenter inquired about whether a previous survey had been conducted in the area by FHWA and why the need for this EA process. Commenter expressed concerns

about the amount of time the NEPA processes will take and that they don't trust that there will be a long-term solution in place for the road within their lifetime.

Response: Please see response #3 regarding the previous geotechnical investigation in the Elwha Valley. There was a geotechnical investigation conducted in the 1970's, but nothing was done more recently. Please see response #7 about the requirement for NEPA. Please see response #8 about speeding up the process. The project team is moving as quickly as possible to complete both NEPA processes. It may not take an entire year of monitoring for data to reveal whether a relocation of the road to the forested bench would be a feasible alternative. As soon as we know whether or not it would be feasible the subsequent NEPA process to analyze alternatives for a long-term solution for the Olympic Hot Springs Road will commence. The project team has already begun internal scoping for the subsequent EA and has already outlined potential alternatives, which are subject to change as monitoring data reveals the information being sought. The subsequent EA will begin prior to the end of the year of monitoring. Also, monitoring will likely continue until a long-term solution is decided and implemented. This additional monitoring would help inform design of potential alternatives in the subsequent EA.

**4) Why Can't the Park Speed Up the Project(s)? (3 comments)**

Public Concern: There must be a way to speed up the project by invoking emergency action procedures available to ONP management. What about a direct appeal to the Secretary of the Interior? What about a combined request from our Clallam County Commissioners, Port Angeles and Sequim city councils and Representative Kilmer?

Response: In order for an emergency action to be invoked, the damage has to occur during a declared emergency event (i.e. a documented storm that caused damage over a certain threshold). The steel bridge that is currently in place was done so as an emergency action and was placed after a declared emergency event. The subsequent damage to the roadway was not the result of a large storm event. In either case, the emergency declaration does not allow the road to be built outside of federal laws and permits. Even for the placement of the steel bridge, National Environmental Policy Act (NEPA) compliance was completed and permits were obtained. Here is a link to Emergency Relief for Federally Owned Roads (ERFO) guidance for further information: <https://flh.fhwa.dot.gov/programs/erfo/documents/erfo-2015.pdf#4>

**5) Consideration of a Range of Alternatives (1 comment)**

Public Concern: NEPA requires federal agencies to consider a range of alternatives and fully evaluate all reasonable alternatives that address the purpose and need for the action, including a no-action alternative. The commenter states that the emphasis is on "fully evaluate" and to consider suggested alternatives "reasonable."

Response: The only "reasonable" alternative to address this project's purpose and need is to conduct a geotechnical investigation for the potential relocation of the approximately 1-mile section of the Olympic Hot Springs Road that currently lies within the floodplain. This is a very specific purpose and need. There is no other reasonable alternative to conducting the geotechnical investigation to determine the feasibility of locating the road to this forested

bench. No other planning effort to address long-term public access can go forward until it the feasibility of a relocation of the road to this bench is feasible. If it is feasible, the relocation of the road to the bench will be one of multiple alternatives up for consideration in the subsequent EA. We cannot include an alternative for consideration if we don't know that it's feasible. As it currently stands, the no-action alternative is technically not a feasible alternative, however we are required to include it to provide a baseline for impact comparison against the action alternative.

**6) Additional Borings (1 comment)**

Public Concern: Commenter asked if any additional boring needs within the project area may be determined during implementation. Commenter suggests taking additional bore sites for the purpose of considering the river vulnerability of the current road at the "wall" north of the temporary bridge to the park boundary to ensure this section of road would not also need to be considered for potential relocation.

Response: The EA identifies approximately 22 off-road test borings that would be conducted. The use of the term "approximately" is used in the EA to provide some decision space if, once we begin drilling and monitoring operations, we realize that additional locations within the project area may be necessary to monitor. So long as the impacts as described in the EA remain unchanged, a few additional boring sites may be drilled, if necessary.

The current geotechnical investigation identified borings needed for repair of the existing roadway and feasibility of a reroute south the current bridge location. Any borings or investigation needed for river vulnerability or an additional reroute alternative are not currently planned. If an additional reroute becomes necessary, a contract for this work could be developed for collecting supplemental soils data with little or no efficiency lost when compared to completing the data collection in the current plan.

**7) The No Action Alternative and Additional Studies (1 comment)**

Public Concern: Commenter asked if the no-action alternative could be modified to include a better assessment of the river and what actions might be viable to address channel migration. Commenter feels that this is relevant to this EA's goal as it broadens the possibilities of where additional monitoring "studies" may occur.

Response: A modified no-action alternative to include other actions is effectively not a true no-action alternative and instead becomes what is called a "minimal management" alternative. If additional studies are needed for other areas of the Elwha Valley, those studies would occur. However, to attempt to make determinations as to where other studies may be needed that are not addressing the current road washout, would greatly delay this project and the subsequent EA to address long-term access to the valley. Currently, no other areas within the park boundary within the Elwha Valley are experiencing road washouts and a need for road relocation. Also, funding is provided on a project by project basis and funding requests are submitted 3-5 years in advance of project needs.

**8) Preference for the No Action Alternative (3 comments)**

Public Concern: Do nothing to the road at its current state. The impact of man in the Park should be left very minimal and build no new roads or re-routes of current road infrastructure. Please consider keeping the Olympic Hot Springs Road closed to all motorized vehicles. The Elwha and Valley should remain pristine, and access should be for walkers, hikers and bicycles only.

Response: This project is not analyzing whether the road should be relocated, it is focused on whether or not an alternative for the relocation of the road to the forested bench east of the river would be feasible for consideration. The park's 2008 General Management Plan/Final Environmental Impact Statement as well as the 2005 Elwha River Ecosystem Restoration Supplemental Environmental Impact Statement both state that the park would continue to provide road access within the Elwha Valley. Therefore, the subsequent planning effort will be analyzing various alternatives for providing continued road access.

**9) Electric Shuttle (1 comment)**

Public Concern: Public access is already allowed by foot and bicycle. NPS can utilize an electric shuttle to provide access for mobility impaired individuals. ONP does not need to spend more taxpayer funds on this project, please put the money to use restoring more habitat or maintaining trails.

Response: This EA is not making a determination as to whether or not the road will be repaired or remain in perpetuity. The subsequent EA to analyze long-term options for the Olympic Hot Springs Road will address long-term visitor use and experience and may include consideration of providing temporary shuttle access on the other side of the washouts until a permanent repair is in place. This action could be addressed independent of this EA or the subsequent long-term planning EA if a willing operator comes forward with a feasible proposal to provide temporary shuttle service. However, visitors cannot be shuttled in government vehicles due to liability constraints. Lastly, the park's 2008 General Management Plan/FEIS and the 2005 Elwha Ecosystem Restoration Supplemental EIS both state that the park would continue to provide road access within the Elwha Valley.

**10) Abandonment of the Olympic Hot Springs Road (4 comments)**

Public Concern: There is both fear and hope that the Olympic Hot Springs Road may be abandoned.

Response: The park's 2008 General Management Plan/FEIS and the 2005 Elwha Ecosystem Restoration Supplemental EIS both state that the park would continue to provide road access within the Elwha Valley, therefore, our long-term plan is to reinstate road access.

**11) Raising the Road and River Channel Modifications (1 comment)**

Public Concern: There would be less impact if the existing road alignment was used and the roadway grade was raised from the existing temporary bridge to the south for approximately 1000 feet. Some minor work in the old river bed channel may be needed, but this would be less intrusive than going up the hill and cutting and new alignment. Plus it would cost less than a roadway new alignment.

Response: As part of the subsequent EA to analyze long-term options for the Olympic Hot Springs Road cost, impacts, and ease of construction for each of the alternatives will be compared.

**12) Other Potential Road Relocations (2 comments)**

Public Concern: This EA should consider and address other “potential” road relocations and solutions.

Response: It is unclear whether this comment is meant to suggest that the park consider other areas to potentially relocate the Olympic Hot Springs Road, or if the commenter is asking the park to consider addressing other park roads that have recently and repeatedly been affected by flooding. As far as the Olympic Hot Springs Road goes, there is no other option for relocation of the road other than to the terrace to the east outside of the floodplain. While there may be a former historic road on the west side of the river, this area is designated wilderness. A new road cannot be built within designated wilderness. To do so would take an act of congress to modify the wilderness boundary. Addressing other park roads within this EA would be out of scope of this EA.

**13) Potential Road Relocation Caveats (1 comment)**

Public Concern: Commenter requested that the route of the potential road relocation being tested be of a scale consistent with the existing Hot Springs and Whiskey Bend roads regarding curving nature, width, and projected speed of travel.

Response: Context sensitive design principles will be used when developing alternatives for the roadway project. The subsequent EA to analyze long-term options for the Olympic Hot Springs Road will address the use of appropriate design guidelines.

**14) Delineation of the Off-road Test Boring Path (1 comment)**

Public Concern: Commenter asked how will the test bore access path be delineated to the public and what would the public expect to see when accessing the area.

Response: The public may be able to see the boring path while on portions of the bypass trail. There may also be flagging of the path or monitoring equipment for ease of locating the equipment. The boring path is not intended to be a “trail” for public use nor will public use of this temporary path be encouraged.

**15) Impacts to the Elwha Forest Loop Trail (1 comment)**

Public Concern: Commenter stated that the proposed project map indicates the drilling path will intersect the trail in two or three locations, and would like to see this addressed under “Visitor Use and Experience.”

Response: Page 35 of the EA addresses impacts on visitor use and experience from potential trail closures for up to three days each to facilitate drilling operations in the vicinity of the public access trail. Once the test bores have been drilled and the monitoring equipment installed, which would occur over the course of two months or less (we’re anticipating

conducting the operation over the course of an approximate five-week period so as to mobilize and demobilize the equipment before the temporary bridges are removed this fall), there would be no other impacts on visitor use and experience other than visual, which is also addressed in this section of the EA.

**16) Impacts of Non-wilderness Activities On Adjacent Wilderness Areas (1 comment)**

Public Concern: The commenter claims “there is abuse of not applying section 3 (administration) of the Wilderness Act regarding activities in non-wilderness having an impact on adjacent wilderness areas and that this abuse is in the selection of what is best available science in making sound decisions.”

Response: The concern is not clearly stated in the correspondence. Section 3 of the Wilderness Act does not address the effects of non-wilderness activities on adjacent designated wilderness areas. Wilderness land management agencies are not to create wilderness buffer zones, however, potential impacts that may occur outside yet immediately adjacent to wilderness areas should be disclosed if the impacts may be significant enough. While the project area is approximately 350-1,000 feet from the wilderness boundary and no project-related actions would take place within the adjacent wilderness area, there would be minimal effects on soundscapes and visitor use and experience within the wilderness area. Aside from the bypass trail, the Cascade Rock Trail is the only trail near the project area. It is an out and back trail that originates within the project area and traverses into the adjacent wilderness area. There is relatively low use on this trail and there are no campsites within this portion of the Daniel J. Evans Wilderness. Most visitors to the Elwha Valley spend the majority of their time at Madison Falls, on trails off of Whiskey Bend Road, at the Glines Canyon Spillway Overlook, or on trails that originate from the Boulder Creek Trailhead and parking area.

**17) Impacts on Visitor Access (2 comments)**

Public Concern: The EA minimizes the adverse impact of alternative B on tourist and local visitor access to trails in the Elwha Valley since this alternative requires long hikes on the existing roads that traditionally accessed these trailheads. This essentially eliminates access for older, but fit, hikers.

Response: This EA is not making a determination as to whether or not the road will be repaired or remain in perpetuity. The impact analysis conducted for alternative B focuses solely on the activities related to this alternative. These activities are those directly related to drilling the test bores, installing monitoring equipment, and conducting the monitoring. These activities are not anticipated to have significant impacts on visitor use and experience. The EA states that there may be closures of up to 3-days while the test bores are being drilled and the monitoring equipment installed, and there may be some impacts to the soundscape, otherwise this alternative does not modify current visitor access. The subsequent EA to analyze long-term options for the Olympic Hot Springs Road will address long-term visitor use and experience.

#### **18) Impacts on the Human Environment (1 comment)**

Public Concern: Commenter states, “Other than 3 day closures, and not establishing how many, I’m not seeing where in the process provided is the consideration in the EA for potential impacts on the HUMAN ENVIRONMENT.”

Response: Three day closures may be implemented when and where the drilling equipment would need to access areas within the proposed monitoring path intersects with the public bypass trail. The public will be notified of closures to the bypass trail as far in advance as possible. Considering that we are anticipating completing this action prior to bridge removals this fall, the number of potential 3-day closures may be very minimal and could occur over the course of 3-5 weeks. A helicopter would not be needed if we are able to mobilize and demobilize drilling equipment before the bridges are removed this fall.

The EA does address impacts on Visitor Use and Experience in Chapter 3. The scope of this EA is solely for conducting the geotechnical investigation in the forested bench to the east of the Elwha River, it is not considering long-term access, campgrounds, or other visitor services. Public perceptions are highly speculative and are not addressed in NEPA documents. Long-term access will be addressed in the subsequent EA, however, campgrounds and other visitor services may be addressed either within or independently of the subsequent EA.

The Council on Environmental Quality defines the term “human environment” under NEPA as follows. “Human environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with the environment.” (40 CFR 1508.14) The potential impacts on the natural and physical environment are included in Chapter 3.

#### **19) Floodplain (1 commenter)**

Public Concern: Commenter does not agree that, regardless of whether or not the monitoring data reveals that relocating the Olympic Hot Springs Road to the forested bench could be a feasible alternative for the subsequent EA, the consideration of the bench for the road would get the road out of the floodplain. The commenter notes that the “floodplain” is an anthropogenic affect by the removal of the dam and river aggradation.

Response: The anthropogenic effect on the floodplain was the construction of Glines Canyon Dam. Removal of the dam has allowed the river to access the historic floodplain by restoring natural ecosystem processes.

#### **20) Helicopter Use (1 comment)**

Public Concern: Comment inquired as to where helicopter staging would occur and what considerations have been made for public access and exposure.

Response: Given that the boring equipment has been deployed across the current temporary bridges to conduct the in-road boring, which is covered under the park’s Road Systems Programmatic Compliance, the intent is to also (once the FONSI is signed) conduct the boring and installation of monitoring equipment before the temporary bridges are removed

this fall. This was to help reduce or eliminate the need for helicopter use as well as to reduce project costs. If a helicopter becomes necessary to remove equipment, staging areas would include the Elwha maintenance yard, Sweets Field, the former amphitheater parking area, the Elwha Historic District, and the road corridor between Sweets Field and the Elwha Historic District. The public would be notified as far in advance as possible in the event of any closures during helicopter use.

**21) Disturbance (1 comment)**

Public Concern: It is not known if disturbance is a function of the 1 year monitoring component, with concern the sites will see additional disturbance if there is a plan to access and make modifications to the landscape during the year.

Response: The greatest amount of disturbance would occur during the development of the access path(s), transporting of equipment (if helicopters are needed), initial drilling of the test boring sites, and installation of the monitoring equipment. The monitoring sites would be accessed by foot and there would be no additional modifications to the landscape during the year. The contractor would implement erosion control best management practices.

**22) Tree Removal (1 comment)**

Public Concern: Comment requested that trees no larger than 24 inches in diameter be removed. The EA states that up to six larger trees may be removed, if necessary. Commenter requested that the size dimensions of these trees be provided.

Response: No specific trees have been identified for removal at this time. Inclusion of the potential for 6 large trees (trees with a diameter greater than 11”) to be removed was done to provide an accommodation for the drilling equipment only if absolutely necessary. All efforts would be made to avoid or minimize impacts to trees. No northern spotted owl or marbled murrelet potential nesting trees, trees that provide cover to potential nest trees, or historically-significant trees would be removed.

**23) Restoration (1 comment)**

Public Concern: After monitoring is complete will the area be restored?

Response: Upon completion of the monitoring, the instruments and metal casings would be removed and the geotechnical borings would be backfilled. The test pits would also be backfilled after the drilling activities. Disturbed areas would be seeded with native plant species to help prevent establishment of invasive exotic plants from nearby areas. The area would be allowed to revegetate naturally and is anticipated to revegetate within approximately five years following the geotechnical investigation, dependent on whether this area would be feasible for relocation of the road and if the subsequent EA selects that alternative.

**24) Tribal Consultation (1 comment)**

Public Concern: Commenter expressed concern as to why tribal consultation is being conducted on this EA with [assuming commenter meant “without” given the full context of

the comment] constitutional-based equal consultation afforded to other vested citizens of this country. The requirement for tribal consultation has not been specified to the public.

Response: Per 36 CFR Part 800, Subsection 800.2 provides detail regarding participants in the Section 106 process. Subsection 800.2(c)(2)(B)(ii) states, "Section 101(d)(6)(B) of the act *requires* [emphasis added] the agency official to consult with any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to historic properties that may be affected by an undertaking." Subsection 800.2(c)(5) "Additional consulting parties" states, "Certain individuals and organizations with a demonstrated interest in the undertaking *may* [emphasis added] participate as consulting parties due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties."

## **25) Private Property Owners (1 comment)**

Public Concern: Commenter noted that they had not received any contact or consultation as to their affected status and listed staff and other agency and tribal points of contact identified in Chapter 4 as individuals or entities afforded coordination. Commenter had requested NHPA Section 106 consulting party status.

Response: The list of staff and other agency and tribal staff in Chapter 4 are those individuals that are part of the interdisciplinary planning team as required by NEPA or were agencies or designated tribal entities contacted to conduct formal (or informal) government-to-government consultation processes as required by law. Also see response to #24.

In the National Historic Preservation Act's (NHPA) Section 106 process there are two types of consulting parties: 1) "By Right" which includes the State Historic Preservation Officer (SHPO), federally recognized Indian tribes (THPO), local governments; and applicants for federal assistance, permits, licenses, and/or other approvals. 2) "Invited Consulting Parties" which include those certain individuals and organizations with a demonstrated legal, economic, or historic preservation interest in an undertaking. This usually includes but is not limited to statewide, local, and sometimes national preservation advocacy groups. Local governments, environmental organizations, community development organizations, and nearby property owners are frequent participants. Ultimately, however, the participation of the individuals and organizations in the consultation process is subject to approval by the responsible federal agency.

Additionally, 36 CFR Part 800, Subpart B, Subsection 800.3 directs the agency official to determine whether the proposed action is an undertaking as defined in subsection 800.16(y). If so, the agency must state whether the action has the potential to cause effects on historic properties. If the undertaking does not have the potential to cause effects on historic properties, the agency official has no further obligations under section 106 or this part. The park's 106 Advisor/Archeologist worked with the SHPO's office and made a determination that no historic properties would be affected by the proposed action. Also, an archeological survey of the Area of Potential Effect had previously been conducted and therefore the determination was that the proposed action would have no adverse effect on known archeological resources. For that reason, the impact topic of cultural resources was

dismissed. The SHPO concurred with this determination. Additionally, the contract would include mitigation measure(s) in the event that there is an inadvertent discovery. The project would immediately be halted until the park's archeologist could evaluate, document, and conduct any other necessary actions for the inadvertent discovery. Project actions could continue only upon approval by the park's archeologist.

**26) External Scoping and Use of Comments (1 comment)**

Public Concern: The EA fails to address "external scoping" and how comments were or were not addressed.

Response: During scoping, the park received a total of 34 pieces of correspondence. The majority of the comments were out of scope of this project and more appropriate for the subsequent EA for long-term planning for the Olympic Hot Springs Road. Comments that were relative to the proposed action were either directly addressed in the EA or were not necessary to address in the EA as they have been or may be addressed outside of the EA or were more applicable to implementation needs. Please contact the park planner for details on how comments relative to the proposed action were addressed in the EA.

**27) Tentative Timeline and PEPC (1 comment)**

Public Concern: The request was to provide more information in PEPC under the "Plan Process" tab. Commenter specifically states, "For clear communication and for the public to feel their input is valued I suggest these steps be fully defined and transparent."

Response: This section in PEPC can be minimally modified and does not provide enough character space for definitions. Also, the purpose of the "Plan Process" page in PEPC is to provide a timeline for only the development of the respective NEPA document, not to discuss each step in full detail, nor to address the implementation timeline which comes after a FONSI or ROD is signed.

**28) Archeological Resources (2 comments)**

Public Concern: There is no mention of historic or archeological resources within the footprint or Area of Potential Effect (APE) of the project area. Commenter requested that a mitigation measure be added to the project that would have an archeologist on-site to monitor ground disturbance in the event an inadvertent discover occurs.

Response: Archeological resources do not address cultural use and dependency on an area, this falls under ethnographic resources. Cultural resource topics were dismissed from this evaluation as the area in which the geotechnical investigation would occur has been surveyed and the project would have no effect on any known cultural resources. The project includes mitigation measure(s) in the event that there is an inadvertent discovery: 1) an archeologist would monitor initial ground disturbance during the geotechnical investigation, and 2) if unknown archeological resources are discovered during project work, work in the immediate vicinity of the discovery would be halted until the resources could be identified, evaluated, and documented and an appropriate mitigation strategy could be developed, if necessary, in consultation with the State Historic Preservation Office and associated American Indian tribes.

## 29) Cumulative Effects (1 comment)

Public Concern: Commenter suggested that past and future related projects identified on pages 14-16 in the EA will determine whether or not the Elwha Campground Community Kitchen is preserved.

Response: The page range referenced in the comment refers to the cumulative impacts and the cumulative scenario. As stated in this section, “A cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions...” The proposed action would have no effect on the Elwha Campground Community Kitchen and would therefore have no adverse (or beneficial) increment on any previously identified effects on the structure.

The decision regarding this structure can and may be made outside of an EA process. The subsequent long-term planning for the Olympic Hot Springs Road may include alternatives that may or may not affect the Elwha Campground Community Kitchen. If it is determined that the proposed action in that EA will affect the kitchen, it will be addressed and analyzed in that document.

## 30) Elwha Campground Community Kitchen (2 comments)

Public Concern: The Elwha Campground Community Kitchen is not addressed in the EA. One commenter noted that threats to the kitchen were identifiable back in November 2015. The commenter also noted that the superintendent has been successful in defending the historical structures law against the wilderness laws, the same scenario exists for historic structures in contrast to the Endangered Species Act and Clean Water Act.

Response: The proposed action will have no effect on the Elwha Campground Community Kitchen and is therefore not addressed in this EA.

The 2005 Elwha River Ecosystem Restoration SEIS (page 109) states, “...structures would be able to withstand floods to the extent they can now. The only exceptions might be facilities inside Olympic National Park (e.g., the Altair and Elwha campgrounds, and the Elwha Ranger Station), which *would remain unmitigated* [emphasis added].”

The park’s 106 advisor/archeologist and now retired historic architect have been working with the State Historic Preservation Office (SHPO) to assess and address the structure. Consultation was initiated with the SHPO’s office (Dr. Allyson Brooks) via email on 11/28/17, just two days after initial damage to the structure from flooding when the river reoccupied its former channel. The email was followed up with a phone call with Dr. Brooks, on 11/30/17 to begin the development of a Memorandum of Agreement (MOA) for the structure. Also, a Historic American Buildings Survey (HABS) has also commenced for the structure.

Lastly, the historic structures lawsuit was not a defense of the NHPA against the Wilderness Act. It was a defense of the park’s authority to continue to conduct decision-making under all applicable laws and policies. The same scenario does not exist for historic structures in contrast to the ESA and CWA. Procedural laws, such as the NHPA and NEPA, provide

guidance on how to conduct processes, they specify practices and procedures. Substantive laws, such as the Wilderness Act, ESA, and CWA consist of statutory rights and obligations.

**31) Provisions for the Road in Dam Removal (1 comment)**

Public Concern: How were the dams removed without any thought or provision for preventing the subsequent destruction of the Olympic Hot Springs Road?

Response: The Elwha River Restoration Project FEIS included a proposal to raise Olympic Hot Springs Road both within and exterior to Olympic National Park, as well as the spur dike just upstream from the yurt. The Lower Elwha Klallam Tribe questioned the need for these actions. After discussing these proposed actions with Clallam County, the County and NPS agreed that the portion of Olympic Hot Springs Road under County jurisdiction (outside of the park) and the spur dike should not be raised. The County became concerned that a raised Olympic Hot Springs Road would not prevent flooding of the private property on the other side of the road, plus that water could take quite a while to recede. In addition, raising the spur dike could have adverse impacts to the opposite river bank. The decision was to instead monitor these areas. NPS did implement settlements with those potentially affected landowners to mitigate for future flood heights. In hindsight, these actions were both correct and appropriate.

NPS also took a closer look at Olympic Hot Springs Road within the park. While the sediment modelling did indeed indicate that essentially all park infrastructure within the new floodplain would be vulnerable to future flood events, neither modelling nor the team could identify when that might occur for each location. It could be the first year, it could be many years. In addition, it became clear that raising the Olympic Hot Springs Road as mitigation for the ecosystem restoration project would have faced tough hurdles from the regulatory agencies at that time, thereby threatening the entire project. The decision was made to monitor this area of the road as well and react when needed. Now that the dams have been removed and salmon stocks are penetrating the park where they hadn't for over 100 years, taking a fresh look at options for restoring vehicular access to the sub-district is appropriate.

**32) Protection of Drilling Equipment (1 comment)**

Public Concern: Will any of the measures promised in 2005 [from the Elwha River Ecosystem Restoration SEIS] now be implemented to protect drilling equipment from flooding during the geotechnical analysis?

Response: No mitigation measures identified within the 2005 Elwha River Ecosystem Restoration SEIS will apply to this project. The drilling equipment may be in place for 3-5 weeks to drill the test bores and install the monitoring equipment. Also, the monitoring equipment would be located on the forested bench east of the river and outside the floodplain, which is the point of conducting the geotechnical investigation in this area. It is to help determine if an alternative that relocates the road to this area out of the floodplain would be feasible.

**33) Mitigation Measures from the 2005 Elwha River Ecosystem Restoration SEIS (1 comment)**

Public Concern: The 2005 [from the Elwha River Ecosystem Restoration SEIS] measure to raise the Elwha Valley (Olympic Hot Springs) road was offered without any previous geotechnical analysis. Several quotes from the 2005 SEIS were included in the comment and are as follows:

- “Page 31-32 Table 3 of the 2005 document states ‘raise about 1 mile of low-elevation sections of the road in the park and 0.33 mile of road outside of park by 1’. Riprap select sections of road.”
- “Page 109 of the 2005 document states ‘raise about 1.0 mile of low-elevation road sections within the park, raise 0.3-0.6 mile of road outside the park, and armor select sections of the road. These actions would not alleviate all future flood risk, but would reduce the severity of floods;’” and
- “Appendix C of the 2005 SEIS states ‘Develop an approved contingency/protection plan that could include closing the (Elwha) campground during high flows, relocating it if suitable areas outside floodplain are available, or providing flood protection structures (e.g., bank stabilization, engineered logjams).’”

Response: Flooding in the Elwha Valley along the stretch of the Olympic Hot Springs Road within the immediate floodplain between Sanders Creek and the Ranger Station has been on an order of magnitude greater than the US Army Corps of Engineers’ recommended 1.5 foot raise in road elevation. Therefore, if this section of road had been raised prior to dam removal, it would still be experiencing the same level of damage and deterioration; taxpayer funds would’ve been expended on an action that has since been determined to not be a viable option in the long-term.

The quote provided by the commenter from Page 31-32, Table 3 of the SEIS is incomplete and further states, “(USACE 2003 report recommends monitoring to assess when or if a road segment needs to be raised.)”

Additionally, page 109 of the Elwha SEIS states, “For the most part mitigation measures described above and presented in Table 11 would provide the same level of protection as these structures and facilities have now, so there would be no impact to them resulting from higher flood stages or frequency after dam removal. In other words, structures would be able to withstand floods to the extent they can now. The only exceptions might be facilities inside Olympic National Park (e.g., the Altair and Elwha campgrounds, and the Elwha Ranger Station), which would remain unmitigated.” The park is currently exploring options to possibly relocate the 1-mile segment of the Olympic Hot Springs Road completely out of the floodplain which could potentially provide indefinite access that would not have occurred had the road been elevated by 1.5 feet. A subsequent EA for the long-term planning of the Olympic Hot Springs Road will likely include the analysis of an alternative that raises the road to an elevation greater than the original recommendation by the USACE.

The section the commenter referenced from Appendix C (page 306) of the 2005 SEIS, is specifically in regard to the Altair Campground, not the Olympic Hot Springs Road, nor the Elwha Campground. However, Appendix D of the SEIS explains, “Certain monitoring

activities will continue until it is determined that sediment impacts related to dam removal have been reduced to natural levels, such that no adaptive management actions would be required. The determination of when natural suspended sediment concentrations and turbidities are achieved, downstream from the dams, would be based on the results of monitoring data from river flow (upstream and downstream from the dams), monitoring data from the former reservoir areas, and from the results of a terrace bank stability assessment of the former reservoir areas. After dam removal, the width, longitudinal slope, and bank or terrace height of the main-erosion channels in the former reservoir area would be monitored once per quarter for an additional three years. River stage and channel geometry will also be continually monitored to detect any unanticipated flood potential and mitigate with flood protection measures if necessary." At present time, sediment impacts related to dam removal have not yet been reduced to natural levels. As we have learned, it would've been premature to take adaptive management actions on the road within the floodplain prior to dam removal. Monitoring continues and "flood protection measures" include examination of potentially relocating the Olympic Hot Springs Road out of the floodplain, if determined technically and economically feasible.