

# Finding of No Significant Impact

## Rehabilitate Alder Camp Road Project

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### Redwood National and State Parks

#### Purpose and Need for Action

Alder Camp Road is a 2-lane roadway extending approximately 2 miles between Coastal Drive North and Klamath Beach Road in Redwood National and State Parks (the parks) near the town of Klamath in Del Norte County, California. Klamath is about 15 miles south of Crescent City and about 40 miles north of Eureka, California. The project area is located solely within Redwood National Park. The eastern area of Alder Camp Road is located within the Yurok Reservation boundary, on land owned by the federal government.

Alder Camp Road is an important park access road for park visitors to popular trails and picnic areas, and to personnel at the Alder Camp Conservation Center, which is operated by the California Department of Forestry and Fire Protection and Department of Corrections. Alder Camp Road used to function as U.S. Highway 101 until 1964, when the bridge across the Klamath River washed out. Subsequent to the bridge wash-out, U.S. Highway 101 was relocated inland, and Alder Camp Road became a Del Norte County road maintained by the County. When Redwood National Park was created in 1968, the National Park Service (NPS) assumed maintenance responsibilities. Alder Camp Road has received only minor maintenance since 1968.

The purpose of the Rehabilitate Alder Camp Road Project is to implement an action called for in the Redwood National and State Parks *Final General Management Plan / General Plan*, *Environmental Impact Statement / Environmental Impact Report* and its *Record of Decision*. The purpose of the project is to:

- Provide an improved park roadway for people who visit Redwood National and State Parks
- Improve traffic safety by repairing the surface of Alder Camp Road
- Improve culvert drainage by repairing and replacing drainage structures

The action is needed to provide comprehensive maintenance repairs to the deteriorated roadway surface and drainage structures of Alder Camp Road. The roadway surface is uneven, and is characterized by cracks, holes, and broken sections of pavement. The intersection of Alder Camp Road and Klamath Beach Road needs to be redesigned to improve traffic safety.

Drainage structure repair and replacement is needed to facilitate conveyance of water under the roadway in areas where the culverts are too small in diameter to convey storm water runoff or flood waters. In proposing this action, the National Park Service will prevent the possibility of

culvert failure, and resultant large-scale sediment delivery to Richardson Creek, which is hydrologically connected to the Klamath Wild and Scenic River.

## **Selected Action**

The National Park Service's selected action is the preferred alternative in the environmental assessment. A complete description of the selected action (the preferred alternative) is on pages II-5 through II-10 of the environmental assessment. Under the selected action, the National Park Service will undertake repair and rehabilitation of Alder Camp Road. The Federal Highway Administration will assist the National Park Service to implement the proposed road and culvert repairs.

### ***Roadway Rehabilitation***

The National Park Service will rehabilitate the surface of the entire 2-mile length of Alder Camp Road. The proposed roadway will consist of two 11-foot paved lanes with two 1-foot paved shoulders on either side for a total roadway width of 24 feet. The new road profile will match the existing profile. In some areas, the pavement width will be reduced to the new standard of 24 feet. Alder Camp Road will be painted with distinct center lines and edge lines. Minor adjustments will be made to the placement of the centerline along the route to improve sight distances and overall roadway conditions within the existing road width. All road work will occur within the existing disturbed roadway corridor.

Roadway surface rehabilitation will include pulverizing in-place the existing asphalt to an approximate depth of 4 inches. The roadway pavement will be recycled and then overlain with approximately 2 inches of hot asphalt concrete pavement to the 24-foot design width (including shoulders). Recycled asphalt pavement from surface rehabilitation will be used to rebuild the profile and superelevation in fill failure repair areas (see Fill Failure Repair, below). Excess recycled asphalt pavement (if any exists) will be removed from the parks and taken to an appropriate asphalt recycling facility.

Existing cut bank slopes along Alder Camp Road will not be disturbed. Existing debris rock-fall areas along the side of Alder Camp Road will be removed from the roadway prior to roadway rehabilitation.

### ***Fill Failure Repair***

Many areas along Alder Camp Road have experienced underlying roadbed fill failures. The fill failures along Alder Camp Road exhibit classic fill failure features with cracks extending in an arc across the roadway, beginning and ending in the fill slope. The portion of the roadway located within the arc has discernibly settled. Many of these areas have been previously patched.

The National Park Service proposes to repair fill failure areas on Alder Camp Road by excavating the surface asphalt and underlying concrete base to a depth of up to 3 feet, and rebuilding the roadway with fill composed of aggregate and/or recycled asphalt pavement. Above the base layer of the road, the fill failure repair areas will be overlain with recycled asphalt pavement and approximately 3 inches of hot asphalt concrete pavement to the 24-foot design width (including shoulders).

The total length of the fill failure areas is approximately a half-mile in dispersed areas along Alder Camp Road. The total fill failure repair area is approximately 15,000 square feet (0.3 acres).

### ***Drainage Structures***

The selected action will include the replacement, rehabilitation, or extension of drainage structures along Alder Camp Road. There will be 28 drainage structure crossings under the selected action, including 4 types of drainage structures: culverts, ditch relief pipes, drop inlet ditch relief pipes, and storm drain pipes. The selected action will include the addition of 2 new drainage structures, replacement of 11 drainage structures, extension (i.e., lengthening) of 3 drainage structures, replacing and extending 4 drainage structures, and rehabilitation of 8 culverts. Drainage structure improvements will include a total fill excavation of approximately 9,100 cubic yards. Riprap will be placed at the outlet end of all replaced drainage structures, extended culverts, and at several culverts left in place to avoid soil erosion at the drainage structure outlets.

Wetlands associated with Marshall Pond and Richardson Creek will be avoided during culvert rehabilitation activities by installing new culverts and riprap on the slope outside of these wetland areas. Existing culverts in Marshall Pond will be capped at the inlet and abandoned in place.

New and replaced culverts, which convey natural spring and drainage water, will be sized to convey 100-year flood flows. It is not necessary to size ditch relief structures and drop inlet/ditch relief structures to convey 100-year flood flows because these structures only convey surface water runoff from the roadway. Of 16 total culverts under the selected action, 10 culverts will be appropriately sized to convey 100-year flood flows and 6 culverts will not be replaced due to the extensive resource impacts and high cost to replace them.

### ***Paved Ditch Treatments***

Brush and debris will be removed from existing paved ditches as necessary. Additional paved ditches will be constructed in through-cuts and at other locations to control surface drainage. Existing unpaved roadside ditches also will be cleaned out as necessary.

### ***Intersection with Klamath Beach Road***

Alder Camp Road intersects Klamath Beach Road at the eastern end of the roadway near the Klamath River. The selected action will reconfigure this intersection, and the adjacent parking lot. Alder Camp Road will be realigned and straightened to intersect with Klamath Beach Road at an approximately 90 degree angle in front of the former Klamath bridge abutment site (i.e., back to its original location). The parking lot will be relocated east of the realigned Alder Camp Road. The new parking lot will provide seven automobile parking spaces and approximately two recreational vehicle parking spaces. All road and parking construction activity will occur within the existing disturbed parking area and roadway corridor. The National Park Service is coordinating with the County of Del Norte on the intersection reconfiguration.

### ***Intersection with Coastal Drive North***

Alder Camp Road intersects Coastal Drive North at the western end of the roadway. The intersection of Alder Camp Road and Coastal Drive North will be rehabilitated as described in

the Roadway Rehabilitation section above. The federal government owns and maintains Coastal Drive North.

### **Vegetation**

In areas where culverts require excavation and/or areas in which an access corridor is required for equipment to facilitate culvert extensions, riprap placement, or cleaning, the National Park Service will delineate vegetation clearing limits consistent with Section 201 of the Federal Highway Administration's Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects (FP-03). The construction contractor will remove vegetation above the culvert excavation area within the delineated vegetation clearing limit. Trees will be cut so that they fall within the clearing limits. During the course of excavating the trenches to place the proposed new drainage structures, a small number of alder, spruce, and small second-growth redwood trees would be removed. It is anticipated that less than 5 trees per drainage structure, or approximately 85 trees total, would be removed.

Branches that extend over the road surface will be trimmed to attain a clear height of 20 feet. The National Park Service will avoid damage to vegetation outside the vegetation clearing limits. Cuts or scarred surfaces of trees and shrubs will be treated with tree wound dressing. Slashed vegetation cleared to access the work sites will be spread on the sites as organic debris after completion of work in the area. Slashed vegetation will be crushed or chipped to naturalize the appearance of work sites and to provide erosion control.

### **Construction Schedule**

Alder Camp Road will be closed during project construction. Coastal Drive North will remain open to traffic during the construction period, except when construction is occurring on the Alder Camp Road and Coastal Drive North intersection. The construction schedule will occur during a non-breeding period (June 15 to October 31) beginning in summer 2005 at the earliest, depending upon funding appropriation. The construction schedule is limited by special-status species restrictions. Asphalt pulverization activities will occur between September 16 and October 31, outside of the marbled murrelet breeding season.

During the construction period, construction activity also will occur in accordance with the Limiting Operating Procedure for special-status species, which permits construction activities to begin two hours after sunrise and requires construction activities to end 2 hours before sunset between June 15 and September 15. The Limiting Operating Procedure is strictly adhered to on all park projects in or near special-status species habitat.

### **Other Alternatives Considered**

The no-action alternative (Alternative 1 in the environmental assessment) would not provide a reliable, safe roadway, improve poor pavement conditions, improve traffic safety, or rehabilitate deteriorated and inadequate drainage structures.

Under Alternative 1, Alder Camp Road would continue to be approximately 22 feet wide with variable surface (i.e., paved and unpaved) shoulders. Center line roadway striping would remain, and the road would continue to not have edge line striping. The road would continue to have

variable pavement widths. The alignment of Alder Camp Road at the intersection with Klamath Beach Road would remain unchanged. The intersection and adjacent unmarked parking area with approximately 12 parking spaces would continue to be confusing to motorists, and the intersection would continue to have poor sight distance to the east along Klamath Beach Road. The curbing would continue to be difficult to distinguish from the surrounding asphalt and the guardrail would continue to not be well-located to achieve its protective function.

The roadway would receive regular maintenance and repair when needed, associated with culvert plugging, culvert failure, and undermined competence of the roadway. Maintenance would include asphalt patches to repair holes or cracks in the road surface, repairing culverts, clearing clogged drainage ditches and culverts, removing any trees or large limbs that fall across the road, and cutting back vegetation that encroaches into the road corridor. Maintenance tasks (such as repairing the road and possibly replacing individual culverts) could require occasional road closures of approximately two to eight months. Alder Camp Road would continue to have 25 drainage structure crossings, including 15 culverts and 10 other drainage pipes or other drainage structures. Individual culverts would be replaced as needed. Of the 15 existing culverts, 4 would continue to be appropriately sized to convey 100-year flood flows and 11 would remain under-sized to convey 100-year flood flows.

## **Rationale for Selected Action**

The selected action meets the project purpose and need of providing an improved park roadway for people who visit Redwood National and State Parks, improved traffic safety by repairing the surface of Alder Camp Road, and improved culvert drainage by repairing and replacing drainage structures. The selected action will provide comprehensive maintenance repairs to the deteriorated roadway surface and drainage structures of Alder Camp Road. The intersection of Alder Camp Road and Klamath Beach Road will be redesigned to improve traffic safety. Drainage structures will be repaired and replaced to facilitate conveyance of water under the roadway in areas where the culverts are too small in diameter to convey storm water runoff or flood waters. By implementing the selected action, the National Park Service will substantially reduce the possibility of culvert failure, and resultant large-scale sediment delivery to Richardson Creek, which is hydrologically connected to the Klamath Wild and Scenic River.

As summarized in the following sections, the selected action (preferred alternative) also best meets the criteria in Section 101 of the National Environmental Policy Act (NEPA) for the environmentally preferred alternative; and, after consideration of effects described in the environmental assessment, there are no significant impacts to the human environment as defined by criteria in 40 Code of Federal Regulations (CFR) 1508.27.

## **Environmentally Preferred Alternative**

The environmentally preferable alternative is determined by applying criteria identified in Section 101 of NEPA to each alternative considered. The National Park Service considered the alternatives in this analysis in accordance with NEPA and Council on Environmental Quality regulations (Section 1505.2) and determined that the selected action (Alternative 2 [Preferred] in the environmental assessment) as presented in the Rehabilitate Alder Camp Road Project

Environmental Assessment will be environmentally preferable based on its furtherance of the following National Environmental Policy Act goals as evaluated below.

- **NEPA Section 101 Requirement 1.** “Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.”

The selected action will best fulfill the responsibilities of each generation as trustee of the environment for succeeding generations by rehabilitating the surface of Alder Camp Road, repairing fill failure areas, and improving the conveyance of water under Alder Camp Road. Alternative 1 (No Action) would not provide comprehensive improvements to the roadway and drainage structures, and will not fulfill the purpose of and need for the project.

- **NEPA Section 101 Requirement 2.** “Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.”

The selected action will best assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings by repairing extensive cracks, holes, and fill failures along Alder Camp Road and improving the Alder Camp Road and Klamath Beach Road intersection. Roadway repairs and redesign of the intersection will improve public safety on the roadway. Alternative 1 would not fulfill goal 2 because Alder Camp Road would receive only patch repairs for extensive roadway damage and the intersection with Klamath Beach Road would continue to be sub-optimally designed.

- **NEPA Section 101 Requirement 3.** “Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.”

The selected action will fulfill goal 3 by providing a range of beneficial uses of the environment without degradation or risk of health or safety through the rehabilitation of Alder Camp Road and its drainage structures. Repaired Alder Camp Road will provide a safe roadway for visitors to access this area of the parks, and drainage structure improvements will substantially reduce adverse flooding, erosion, and water quality effects as well as related adverse effects on aquatic species. Mitigation measures will be employed (see the Mitigation section, below) during construction activities to avoid, minimize, or mitigate potential adverse impacts to natural and cultural resources to the extent practicable. Alternative 1 would not fulfill goal 3 because it would not improve visitor safety through rehabilitation of the roadway and redesign of the intersection with Klamath Beach Road. Alternative 1 also would not improve the drainage structures along Alder Camp Road, and adverse flooding, erosion, and water quality impacts would continue as well as related adverse effects on aquatic species.

- **NEPA Section 101 Requirement 4.** “Preserve important historic, cultural, and natural aspects of our national heritage and maintaining, wherever possible, an environment that supports diversity and variety of individual choice.”

The selected action will fulfill goal 4 by remedying adverse flooding, erosion, and water quality effects and related adverse effects on aquatic species. The selected action will reduce the potential for a culvert failure and the resulting road damage, disruption to traffic, and sediment delivery to local waterways. The selected action will implement measures to reduce adverse effects on natural and cultural resources related to construction and operation of the roadway and drainage structures (see the Mitigation section, below), as required under goal 4 of the national environmental policy goals. Under the selected action, cultural resources will be managed in

accordance with National Park Service Director's Order 28 and Section 106 of the National Historic Preservation Act. The National Park Service will continue to maintain a government-to-government relationship with the Yurok Tribe and will continue to follow the stipulations of the 2003 General Agreement among the Yurok Tribe, the National Park Service, and the California Department of Parks and Recreation. Alternative 1 would not best fulfill goal 4 because existing natural resource impacts would not be remedied and continued degradation of the existing roadway and drainage structures could lead to unforeseen impacts to cultural resources in the event of a culvert failure or through increased erosion.

- **NEPA Section 101 Requirement 5.** "Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities."

The selected action will fulfill goal 5 by providing comprehensive improvements to the road and drainage structures. Rehabilitation of Alder Camp Road and its drainage structures will improve park visitors' experience on the roadway, and over the long-term will improve access to the Pacific Ocean, High Bluff Overlook, Flint Ridge Campground, and the World War II Radar Station. Drainage structure improvements will reduce adverse effects to water resources, soils, and aquatic species. Under Alternative 1, visitor experience and access would not be improved and adverse effects to water resources, soils, and aquatic species would not be remedied.

- **NEPA Section 101 Requirement 6.** "Enhance the quality of renewable resources and approaching the maximum attainable recycling of depletable resources."

The selected action will enhance the quality of renewable resources and approach maximum attainable recycling of depletable resources by implementing sustainable technologies designed to minimize impacts on natural resources, as required by the National Park Service's *Guiding Principles of Sustainable Design*. Sustainable principles incorporated into this alternative include use of recycled materials in the rehabilitation of Alder Camp Road and repair of fill failure areas. Alternative 1 would retain existing road and drainage infrastructure.

In conclusion, upon full consideration of the elements of Section 101 of NEPA, The selected action is the environmentally preferable alternative for the Rehabilitate Alder Camp Road Project. After review of potential natural and cultural resource impacts and effects on public safety and visitor access, the selected action will attain the widest range of beneficial uses of the environment achieving a balance between population and resource use, while minimizing environmental impacts on natural and cultural resources and assuring safe, healthful, productive, and aesthetically and culturally pleasing surroundings.

## Mitigation

Mitigation measures have been incorporated into the selected action (preferred alternative) to reduce impacts. Mitigation measures include construction scheduling to avoid impacts on special-status species; clearly defining construction zones; avoiding introduction of non-native species; using best management practices to minimize erosion, sedimentation, noise, and dust emissions; and minimizing new disturbance.

Mitigation measures for the rehabilitation of Alder Camp Road are included in the matrix below:

| Impact Topic                                     | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Responsibility            |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>Best Management Practices</b>                 | Prior to entry into the parks, clean heavy equipment to prevent importation of non-native plant species, tighten hydraulic fittings, ensure hydraulic hoses are in good condition and replace if damaged, and repair all petroleum leaks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Contractor                |
|                                                  | Inspect the project to ensure that impacts stay within the parameters of the project area and do not escalate beyond the scope of the environmental assessment, as well as to ensure that the project conforms with all applicable permits or project conditions. Store all construction equipment within the delineated work limits. Confine work areas within stream channels to the smallest area necessary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Contractor, FHWA, and NPS |
|                                                  | Implement compliance monitoring to ensure that the project remains within the parameters of National Environmental Policy Act and National Historic Preservation Act compliance documents, all applicable permits, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | FHWA and NPS              |
|                                                  | Provide a project orientation for all construction workers to increase their understanding and sensitivity to the challenges of the special environment in which they will be working.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | FHWA and NPS              |
|                                                  | Remove all tools, equipment, barricades, signs, surplus materials, and rubbish from the project work limits upon project completion. Remove all debris from the project site, including all visible concrete, timber, and metal pieces.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Contractor                |
| <b>Geology, Geologic Hazards, and Soils</b>      | Use approved siltation and sediment control devices in construction areas to reduce erosion and surface scouring.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Contractor                |
|                                                  | Use approved siltation and sediment control devices appropriate to the situation in grading areas to capture eroding soil before discharge to riparian channels.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Contractor                |
|                                                  | Use water bars in temporary access roads to control and reduce surface scouring.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Contractor                |
|                                                  | Conserve and salvage topsoil for reuse. Materials will be reused to the maximum extent possible.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Contractor                |
| <b>Hydrology, Floodplains, and Water Quality</b> | <p>Develop and implement a comprehensive stormwater pollution prevention plan for construction activities that complies with federal and state regulations and addresses all aspects of stormwater pollution prevention. The stormwater pollution prevention plan will be submitted to the National Park Service for review/approval prior to construction activities.</p> <p>The stormwater pollution prevention plan will include, but is not limited to the following measures:</p> <ul style="list-style-type: none"> <li>▪ Take measures to control erosion, sedimentation, and compaction, and thereby reduce water pollution and adverse water quality effects on Richardson Creek and the Klamath River. Use silt fences, sedimentation basins, etc. in construction areas to reduce erosion, surface scouring, and discharge to water bodies.</li> <li>▪ To the extent possible, schedule the use of mechanical equipment during periods of low precipitation to reduce the risk of accidental hydrocarbon leaks or spills. When mechanical equipment is necessary outside of low precipitation periods, use National Park Service-approved methods to protect soil and water from contaminants.</li> <li>▪ Dispose of volatile wastes and oils in approved containers for removal from construction sites to avoid contamination of soils, drainages, and watercourses.</li> <li>▪ Inspect equipment for hydraulic and oil leaks prior to use on construction sites, and implement inspection schedules to prevent contamination of soil and water.</li> <li>▪ Keep absorbent pads, booms, and other materials on site during projects that use heavy equipment to contain oil, hydraulic fluid, solvents, and hazardous material spills.</li> </ul> | Contractor and FHWA       |



| Impact Topic      | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Responsibility            |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>Vegetation</b> | Implement noxious weed control. Standard measures include the following elements: ensure construction-related equipment arrives on site free of mud or seed-bearing material, use weed-free mulch or straw materials to the extent feasible, identify and treat areas of noxious weeds prior to construction, and monitor the restored site to ensure absence of noxious weeds and successful vegetation establishment.                                                                                                                                                                                                                                                                                                                                                                                                                             | Contractor and NPS        |
|                   | Natural revegetation occurs quickly in the redwood region from the seed bank in the topsoil and recolonization from dense vegetation in adjacent areas. To avoid colonization by invasive exotic plants, disturbed soils will be covered with mulch derived from local vegetation cleared from other areas of the project, weed-free straw, or other material certified to be free of invasive weeds.                                                                                                                                                                                                                                                                                                                                                                                                                                               | Contractor and NPS        |
|                   | Install temporary barriers to protect natural surroundings (including trees, plants, and root zones) from damage. Avoid fastening ropes, cables, or fences to trees.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Contractor                |
|                   | Install fencing material to minimize use of highly sensitive sites such as creek edges and wetlands, and install signs as needed to direct use to more appropriate areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contractor                |
|                   | Avoid removal and damage to large trees as well as hardwood and riparian species, where possible. Primary priority will be placed on protecting old-growth redwood trees, and secondary priority on protecting other native species.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Contractor and NPS        |
|                   | All removed trees shall be identified on site prior to construction using visible markings within the vegetation clearing limit. Trees to remain on site (i.e., saved trees outside of the vegetation clearing limit) will be preserved. Prior to the start of any clearing, stockpiling, excavation, grading, compaction, paving, change in ground elevation, or construction, remaining trees that are immediately adjacent to or within the project construction corridor shall be clearly delineated by constructing short post and plank walls, or other protective fencing material, at the dripline of each tree to hold back fill. The delineation markers shall remain in place for the duration of all project work. Excavation adjacent to any trees, when permitted, will be in such a manner that will cause only minimal root damage. | Contractor and NPS        |
|                   | The following shall occur outside the vegetation clearing limits (protected area): parking; storage of vehicles, equipment, machinery, stockpiles of excavated soils, or construction materials; or dumping of oils or chemicals. No burning or use of equipment with an open flame shall occur near or within the dripline.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Contractor                |
| <b>Wetlands</b>   | Comply with Executive Order 11990 (Protection of Wetlands), the Clean Water Act, and Director's Order 77-1 (Wetland Protection).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Contractor, FHWA, and NPS |
|                   | Avoid disturbance to palustrine emergent wetlands (i.e., Marshall Pond).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Contractor, FHWA, and NPS |
|                   | No debris shall be deposited within any waterway.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Contractor                |
|                   | Provide proper and timely maintenance for vehicles and equipment used during construction to reduce the potential for mechanical breakdowns. Conduct maintenance and fueling in an area away from Marshall Pond and Richardson Creek and associated tributaries.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Contractor                |
|                   | Complete ground-disturbing activities in waterways and wetlands during periods of low flow (e.g., June 15 through October 15).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Contractor                |
|                   | Obtain full compliance with all permit conditions contained in the Section 404 Clean Water Act permit from the U.S. Army Corps of Engineers, and Section 401 water quality certification from the Regional Water Quality Control Board, U.S. Environmental Protection Agency, and Yurok Tribe.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Contractor, FHWA, and NPS |
|                   | Make every effort to avoid adversely affecting waterways and wetlands during construction activities to the extent feasible. Use silt fencing at waterways and wetlands to prevent construction materials from escaping work areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Contractor                |

| <b>Impact Topic</b>                                 | <b>Mitigation Measures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Responsibility</b> |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>Wetlands (cont.)</b>                             | National Park Service staff will be on-site periodically during construction to ensure protection of sensitive natural resources, such as wetlands.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | NPS                   |
| <b>Wildlife</b>                                     | Restrict construction activities between 2 hours post sunrise and 2 hours prior to sunset during the bird breeding season March through September 15.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Contractor and NPS    |
|                                                     | Provide adequate education and enforcement to limit construction worker activities that are destructive to wildlife and habitats.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | NPS                   |
|                                                     | Maintain routes of escape from excavated pits and trenches for animals that might become entrapped. Cover post holes, open pipe ends and other narrow pits at the end of each construction workday. During construction, maintain vigilance for animals caught in excavations and contact the National Park Service staff to free them.                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Contractor and NPS    |
| <b>Special-status Bird Species</b>                  | No concussive types of equipment or procedures (e.g., jackhammers, asphalt grinders) will be used June 15th through September 15th. If it is infeasible to restrict noise intensive construction activities (including roadway pulverizing, repaving, and parking lot reconstruction) that result in noise levels above the ambient conditions to after September 15, then the National Park Service will consult with the U.S. Fish and Wildlife Service for effects on marbled murrelet pursuant to the Memorandum of Understanding between National Park Service and California Department of Parks and Recreation and United States Fish and Wildlife Service (Arcata Fish and Wildlife Office) and NOAA Fisheries for streamlining consultation under Section 7 of the Endangered Species Act. | Contractor and NPS    |
|                                                     | All trash that may attract predators shall be contained and removed daily from the site(s).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Contractor            |
|                                                     | A qualified biological monitor will be on-site during various phases of construction to ensure protection of sensitive resources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | NPS                   |
|                                                     | To avoid disturbance to bird species protected under the Migratory Bird Treaty Act, the National Park Service will remove as much (not all) suitable nesting vegetation as possible from the project area in advance of the nesting season to encourage migratory birds to select nesting trees outside the project area. Nesting trees for migratory birds are abundant in the parks.                                                                                                                                                                                                                                                                                                                                                                                                              | NPS                   |
| <b>Special-status Fish Species</b>                  | Comply with measures stated in the Biological Opinion prepared by NOAA Fisheries (NOAA Fisheries 2003) for the Redwood National and State Parks Annual Routine and Non-Routine Maintenance Program to minimize effects on special-status fish. These measures include, but are not limited to, minimizing effects, monitoring, fish capture and relocation, constructing during the low flow season and dewatering measures.                                                                                                                                                                                                                                                                                                                                                                        | Contractor and NPS    |
|                                                     | Drainage structure and fill failure repair work will occur between June 15 and October 15.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Contractor            |
|                                                     | A qualified biological monitor will be on-site during various phases of construction to ensure protection of sensitive resources, including special-status species of fish.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | NPS                   |
| <b>Special-status Amphibian and Reptile Species</b> | Implementation of the Biological Opinion for special-status fish species as described above will also protect special-status amphibians and reptiles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Contractor and NPS    |
| <b>Air Quality</b>                                  | Cover truck beds to minimize blowing dust or loss of debris.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Contractor            |
|                                                     | Limit truck and related construction equipment speeds in active construction areas (e.g., exposed dirt surfaces) to a maximum of 25 miles per hour and strictly adhering to park regulations and posted speed limits in other areas while inside park boundaries.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Contractor            |
|                                                     | Maintain adequate dust suppression equipment and using clean water to control excess airborne particulates at staging areas, active construction zones, and unpaved roads leading to/from active construction areas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Contractor            |
| <b>Soundscape</b>                                   | Ensure that all construction equipment has functional exhaust/muffler systems.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Contractor            |

| <b>Impact Topic</b>                          | <b>Mitigation Measures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Responsibility</b>     |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| <b><i>Soundscape (cont.)</i></b>             | Submit a construction work plan/schedule that minimizes construction-related noise in noise-sensitive areas to the National Park Service for review/approval prior to commencement of construction activities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contractor and NPS        |
|                                              | Concussive equipment, including but not limited to jackhammers, impact hammers, breakers, rams, or other equipment that creates repetitive pounding will not be permitted from March 24 through September 15.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Contractor                |
|                                              | No pavement grinding or milling will be performed prior to September 16.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Contractor                |
|                                              | Use hydraulically or electrically powered construction equipment, when feasible.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Contractor                |
|                                              | Locate stationary noise sources as far from sensitive receptors (e.g., campgrounds) as possible.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Contractor                |
|                                              | Limit the idling of motors except as necessary (e.g., concrete mixing trucks).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contractor                |
| <b><i>Cultural Resources</i></b>             | Continue ongoing consultations with Native American contacts provided by the Native American Heritage Commission to avoid impacts to traditional cultural properties.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | NPS                       |
|                                              | Construction, maintenance, adaptive reuse, or improvements to Alder Camp Road and all associated features shall be conducted in conformance with the <i>Secretary of the Interior's Standards for the Treatment of Historic Properties</i> (36 CFR Part 68).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Contractor and NPS        |
|                                              | In the event unknown cultural resources are encountered within the parks during the course of construction; the findings shall be examined by a qualified archeologist. If the finding is determined to be an historical or unique archeological resource, avoidance measures or appropriate mitigation shall be implemented. Recommendations can then be made for any appropriate procedures to either further investigate or mitigate impacts to those cultural resources that have been encountered.                                                                                                                                                                                                                                                                                                                  | Contractor and NPS        |
|                                              | A qualified archeologist, as directed by the Secretary of the Interior and National Park Service standards, will periodically monitor construction activities, especially those that have a potential to affect cultural features.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NPS                       |
|                                              | If additional, previously unknown cultural resources are encountered during construction, temporarily suspend work in the immediate area to document discovered resources according to National Park Service standards (i.e., accidental find policies).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Contractor and NPS        |
| <b><i>Transportation</i></b>                 | Develop and implement a comprehensive traffic control and visitor protection measures for park review/approval that: <ul style="list-style-type: none"> <li>Complies with necessary U.S. Department of Transportation, Federal Highway Administration Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI-Traffic Control for Construction and Maintenance Operations, and California Department of Transportation Standard Specifications, Section 12.</li> <li>Provides procedures for preparing and submitting specific street closure, traffic control, and detour plans.</li> <li>Provides procedures for managing staging areas to restrict public access and maintain site safety.</li> <li>Ensures that visitors are safely and efficiently routed around construction areas.</li> </ul> | Contractor, FHWA, and NPS |
|                                              | Install appropriate traffic signs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Contractor                |
| <b><i>Visitor Experience</i></b>             | Provide protective fencing enclosures around construction areas, including trenches, to protect public health and safety.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Contractor                |
| <b><i>Park Operations and Facilities</i></b> | Avoid Verizon utility line during project construction to the extent possible.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contractor                |
| <b><i>Hazardous Materials</i></b>            | Store and use all hazardous materials in compliance with federal regulations. All applicable Materials Safety Data Sheets will be kept on site for inspection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contractor                |

| <b>Impact Topic</b>                | <b>Mitigation Measures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>Responsibility</b> |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>Hazardous Materials (cont.)</b> | Contractor will be required to have spill containment and clean-up materials on-site at all times.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Contractor            |
|                                    | Develop and implement a comprehensive spill prevention/ response plan that complies with federal and state regulations and addresses all aspects of spill prevention, notification, emergency spill response strategies for spills occurring on land and water, reporting requirements, monitoring requirements, personnel responsibilities, response equipment type and location, and drills and training requirements. The spill prevention/ response plan will be submitted to the National Park Service for review/approval prior to commencement of construction activities.                                                                                                                                                           | Contractor and NPS    |
|                                    | To minimize the possibility of hazardous materials seeping into soil or water, check equipment frequently to identify and repair any leaks. Standard measures include hazardous materials storage and handling procedures; spill containment, cleanup, and reporting procedures; and limitation of refueling and other hazardous activities to upland/nonsensitive sites. Provide an adequate hydrocarbon spill containment system (e.g., absorption materials, etc.) on site, in case of unexpected spills in the project area. Ensure equipment is equipped with a hazardous spill containment kit. Ensure that personnel trained in the use of hazardous spill containment kits are on site at all times during construction activities. | Contractor            |
| <b>Emergency Notification</b>      | Develop an emergency notification procedure that complies with park, federal, and state requirements and allows contractors to properly notify park, federal, and/or state personnel in the event of an emergency during construction activities. This will address notification requirements related to fire, personnel, and/or visitor injury, releases of spilled material, evacuation processes, etc. The emergency notification procedure will be submitted to the National Park Service for review/ approval prior to commencement of construction activities.                                                                                                                                                                        | Contractor and NPS    |
|                                    | Notify utilities prior to construction activities. Identify locations of existing utilities prior to removal activity to prevent damage to utilities. The Underground Services Alert and National Park Service maintenance staff will be informed 72 hours prior to any ground disturbance. Construction-related activities will not proceed until the process of locating existing utilities is completed (water, wastewater, electric, communications, and telephone lines).                                                                                                                                                                                                                                                              | Contractor and NPS    |

## Why the Selected Action (Preferred Alternative) Will Not Have a Significant Effect on the Human Environment

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

- **Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts which require analysis in an EIS.** No major adverse or beneficial impacts were identified in the environmental assessment that will require analysis in an environmental impact statement.

Overall, the selected action (preferred alternative) will have negligible, beneficial impacts on wetlands. The selected action will have minor, beneficial impacts on soils, water quality, transportation, and visitor experience. The effects of the selected action on floodplains and park operations and facilities would be moderate and beneficial. In the short-term, construction activities associated with the selected action will have minor, adverse effects on soils, water quality, wetlands, vegetation, wildlife, air quality, archeological and historic resources, transportation, scenic resources, visitor experience, and park operations and facilities. Construction activities will have a minor to moderate adverse effect on special-status species, and a moderate adverse effect on the soundscape. Overall, however, the improvements associated with the rehabilitation of Alder Camp Road will on balance be beneficial.

- **Degree of effect on public health or safety.** During construction, visitor experience will be adversely affected by noise, dust, fumes, delays, increased congestion, and construction vehicle traffic along this section of Alder Camp Road. Some visitors will be dissatisfied because they will be required to take an alternate and less-direct route to visit a particular feature due to road reconstruction actions and work on the parking lot. This will result in a short-term, minor, adverse impact. However, speeds will be reduced in construction zones, reducing the risk of vehicle accidents in the project area.

The selected action will improve road conditions and safety for motorized and non-motorized travel on Alder Camp Road. The intersection of Alder Camp Road with Klamath Beach Road will be improved, and the proposed parking area will be clearly delineated and offset from the road. A road of consistent width, with a smooth pavement surface and clearly delineated pavement striping will improve public safety. These roadway improvements will have a long-term, moderate, beneficial transportation impact.

- **Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.** As described in the environmental assessment, wilderness values and prime and unique farmlands will not be affected. There are no cultural landscape features, ethnographic resources, or ecologically critical areas identified in the project area that could be affected by the selected action. The selected action will not adversely affect the Klamath Wild and Scenic River.

The selected action could have a minor, adverse effect on archeological resources. Although no archeological sites have been identified within the area of potential effect for Alder Camp Road, alterations to portions of the historic roadway and culverts could result in the discovery of previously unidentified subsurface archeological resources (although this is unlikely). Implementation of cultural resource mitigation measures, as described in the mitigation matrix (above), ensure consistency with accidental discovery of archeological resources to offset these adverse impacts to cultural resources. The selected action will have a

minor, adverse effect on historic resources. Modifications to the historic roadway and culverts, however, will not substantially affect the historic integrity or character of these resources. Culvert extensions have been specifically designed to preserve visual accessibility to historic culvert headwalls. The National Park Service will continue to maintain a government-to-government relationship with the Yurok Tribe as per the stipulations under the 2003 General Agreement among the Yurok Tribe, the National Park Service, and the California Department of Parks and Recreation.

The selected action will have a negligible, beneficial impact on project area wetlands. Resized culverts will improve conveyance of flows to Richardson Creek and associated tributaries and reduce potential for erosion and sediment transport, offsetting adverse construction-related impacts.

- **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** In the environmental assessment, the National Park Service considered whether any past, present, or reasonably foreseeable future projects would cumulative contribute to the project impacts associated with the Rehabilitate Alder Camp Road Project. Of the potential projects considered, the National Park Service did not include cumulative projects because the potential cumulative projects identified were not spatially, temporally, or functionally related to the Alder Camp Road rehabilitation, and will not cumulatively contribute to the environmental impacts of the proposed action. Due to the absence of cumulative projects, the environmental assessment did not include a cumulative impact analysis. The selected action will not have individually insignificant but cumulative significant impacts.
- **Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.** Under the selected action, Alder Camp Road will be rehabilitated, fill failure areas will be repaired, and drainage structures will be added, replaced, and rehabilitated. However, the area of disturbance will be limited to the existing roadway and the fill materials along the alignment. The selected action could result in the disturbance of previously unidentified subsurface archeological resources during ground excavation activities, although this will be unlikely given the current level of disturbance to the ground surface from road construction and maintenance. However, should such previously unidentified subsurface archeological resources be identified during project construction, the selected action will have a moderate, adverse impact. Implementation of mitigation measures identified in the mitigation matrix (above) ensures consistency with accidental find policies to reduce this adverse impact to a minor intensity.

The selected action will entail culvert repair and roadway improvements. The selected action will include modification of the historic culverts that contribute to the National Register Eligibility of the Old Redwood Highway. The culvert modifications will be designed such that the nature of the culvert modifications will not diminish the historic integrity of the culverts. The historic headwalls will be visually accessible through a specifically designed manhole and grate. The features of the culverts that contribute to their eligibility are associated with the original logging roads and their continued function and use from that period of significance. The culvert modifications will not alter these historic aspects of the culverts. The selected action will have a minor, adverse effect on the historic integrity of resource. The selected action will not include substantive changes to Alder Camp Road. Because the surface material, width, and alignment of the road will not change, the visual and historic character of the road will not be adversely affected by this project. The road alterations will be consistent with repairs that have been conducted previously along this segment of road. The historic integrity or character of the road from its period of significance will not be affected.

Therefore, the selected action will have a minor, adverse impact to this significant historic resource.

- **Degree to which the action may adversely affect an endangered or threatened species or its critical habitat.** Proposed activities under the selected action will create noise and human disturbance within a quarter-mile of suitable breeding habitat for marbled murrelet, special-status raptors, and other special-status avian species (including yellow warbler, yellow-breasted chat, and migratory birds). Northern spotted owl is not present within the project area based on past survey results. Although noise and human disturbance during construction activities within this period will be continuous and greater than effects generated by vehicles typically using the road, the attenuation caused by dense vegetation will result in noise levels that roughly match those of passenger vehicles away from the noise source. Thus, noise and human disturbance under the selected action will be similar to the ambient levels generated under the No Action Alternative from June 15 to September 15. The U.S. Fish and Wildlife Service concurred with the National Park Service's determination that the project may affect but is not likely to adversely affect marbled murrelet and northern spotted owl.

Vegetation removal activities may unintentionally affect nesting migratory birds, which could result in the incidental loss of fertile eggs or nestlings, or lead to nest abandonment. To further reduce harassment to special-status species, less intense construction activities resulting in ambient noise levels beyond the existing conditions (i.e., greater than 60 dBA), will occur June 15 through September 15.

To protect breeding special-status bird species, the National Park Service will implement on-going program and new measures to reduce potential threats to listed special-status bird species as part of the *Conservation Strategy for Managing Threatened and Endangered Species in Redwood National and State Parks*, including but not limited to, noise reduction measures, stopping work if listed special-status bird species are encountered during project activities and implementing work restrictions in accordance with the limited operating procedures, which restricts work activities between two hours after sunrise to two hours before sunrise and avoids the sensitive nest switching/chick feeding periods. These actions will limit potential disturbance to special-status bird species, including marbled murrelet, during less intense construction activities.

Noise intensive construction activities, including roadway pulverizing, repaving, and parking lot reconstruction, resulting in ambient noise levels beyond the existing conditions will occur during the bird non-breeding season (i.e., after September 15). In the event that seasonal restrictions are infeasible, the National Park Service will consult with the U.S. Fish and Wildlife Service pursuant to the Memorandum of Understanding to streamline consultation pursuant to Section 7 of the federal Endangered Species Act.

To further mitigate adverse effects on special-status birds, implementation of mitigation measures, including biological construction monitoring, food and waste removal, and seasonal restrictions (see the mitigation matrix, above) will reduce the intensity of construction-related effects on special-status birds to minor to moderate adverse impacts.

Proposed activities under the selected action will potentially discharge sediments to Richardson Creek and associated tributaries during culvert replacement, rehabilitation, or extension, which could have moderate and adverse effects on associated special-status aquatic species, including western pond turtle, northern red-legged frog, foothill yellow-legged frog, and tailed frog, which are known to occur or are potentially present. Special-status amphibian species potentially migrate to the riparian forest between Alder Camp Road and the Richardson Creek tributary.

The Biological Opinion prepared by NOAA Fisheries for the Redwood National and State Parks Annual Routine and Non-Routine Maintenance Program (Roads Program) determined that the level of anticipated take for the Roads Program is not likely to result in jeopardy to Southern Oregon/Northern California coho salmon. Based on the size, nature, duration, location, and timing of the proposed action, the selected action will have no effect on Southern Oregon/Northern California coho salmon, their critical habitat, or Essential Fish Habitat. To reduce effects on special-status fish species, the National Park Service will comply with reasonable and prudent measures as indicated in the Biological Opinion for the Roads Program, including but not limited to, minimizing effects, monitoring, fish capture and relocation, constructing during the low flow season and dewatering measures. Major ground-disturbing activities will be limited to the period between June 15 and October 15. Implementation of mitigation measures, including biological monitoring (see the mitigation matrix, above) will reduce the intensity of construction-related effects on special-status amphibian species and reptile species to minor.

In the short-term terrestrial wildlife habitat will be adversely affected by construction activity. Over time, however, vegetation will begin to sprout or germinate in the rainy season during the year of construction, but may not provide habitat for a full range of wildlife species. Wildlife species that may have fled during construction will begin to re-occupy the site. Noise and human disturbance will return to existing levels. In the long-term, vegetation will re-establish and reduce habitat impacts. Special-status terrestrial wildlife species will use the site similar to existing conditions.

Resized culverts will improve conveyance of flows to Richardson Creek and associated tributaries and improve habitat for special-status aquatic species. The potential for erosion and sediment transport to Richardson Creek and associated tributaries will be reduced. As a result, these actions will improve passage for special-status aquatic species and the quality of their habitat.

- **Degree to which effects on the quality of the human environment are likely to be highly controversial, highly uncertain, involve unique or unknown risks, or establish a precedent for future actions with significant effects. Whether the action threatens a violation of federal, state, or local environmental protection law, or represents a decision in principle about a future consideration.** There were no highly controversial effects or highly uncertain, unique or unknown risks identified during either preparation of the environmental assessment or the public review period. The selected action (preferred alternative) does not establish a National Park Service precedent for future actions with significant effects, does not represent a decision in principle about a future consideration, and does not violate federal, state, or local environmental protection laws.

## Impairment of Park Resources or Values

In addition to reviewing the list of significance criteria, the National Park Service determined that implementation of the selected action (preferred alternative) will not constitute an impairment of park resources and values. This conclusion is based on a thorough analysis of the impacts described in the environmental assessment, the agency and public comments received, and the professional judgment of the decision-maker in accordance with the NPS Management Policies 2001 (December 27, 2000). As described in the environmental assessment, implementation of the selected action (preferred alternative) will not result in major adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of Redwood National and State Parks; (2) key to the natural or



cultural integrity of the park; or (3) identified as a goal in the park's General Management Plan or other relevant National Park Service planning documents.

## **Public Involvement and Agency Consultation**

The National Park Service conducted an internal and a public scoping process for the Rehabilitate Alder Camp Road Project. Internal scoping with park staff was conducted through a series of written discussions between March and August 2003, and through on-site visits with park resource management staff in March and October, 2003. The project was included in the August 19, 2003 quarterly meeting of park staff, U.S. Fish and Wildlife Service, and NOAA Fisheries to discuss parks projects that could potentially affect threatened or endangered species. An on-site reconnaissance was conducted with U.S. Fish and Wildlife Service and NOAA Fisheries staff on October 9, 2003. For the public scoping process, the National Park Service issued a public news release on November 25, 2003 announcing the parks' plans to repair Alder Camp Road and prepare an environmental assessment analyzing the environmental impacts of this action. No public or agency comment letters were received by the National Park Service at that time. The National Park Service toured the project area with representatives of the Yurok Tribe on November 30, 2003, and visited the project area with representatives from the U.S. Army Corps of Engineers on March 23, 2004.

The environmental assessment was made available for public review and comment during a 30-day period ending August 9, 2004. A press release announcing the document's availability was sent to the park's mailing list, and copies of the environmental assessment were made available at the park. Approximately 50 environmental assessments were distributed to individuals, agencies, and public libraries during the comment period. No public comment meetings were held regarding the project.

The National Park Service received three letters commenting on the environmental assessment: two were from a private citizen and one was from the County of Del Norte Board of Supervisors. The commentors generally supported the preferred alternative (Alternative 2). Substantive comments and technical corrections are included in the Errata Sheets to the environmental assessment. Substantive comments included a request for a description of coordination efforts with the County of Del Norte, suggestion that a 2-inch pavement overlay be used in lieu of pulverizing roadway asphalt, and concern regarding the feasibility of the project schedule.

### ***Advisory Council on Historic Preservation and California State Historic Preservation Officer and the Tribal Historic Preservation Officer***

The 1966 National Historic Preservation Act, as amended in 1992, requires federal agencies to consult with the Advisory Council on Historic Preservation and California State Historic Preservation Officer regarding undertakings that may affect historic properties. The National Park Service consults with the Yurok Tribal Historic Preservation Officer in lieu of the California State Historic Preservation Officer. Pursuant to Section 101(d)(2) of the National Historic Preservation Act, the Yurok Tribal Historic Preservation Officer has assumed the responsibilities of the State Historic Preservation Officer for Tribal lands, and accordingly the National Park Service consulted with the Yurok Tribal Historic Preservation Officer concerning cultural resources on tribal lands. Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their actions on properties that may be eligible for listing or are

listed in the National Register of Historic Places. The National Park Service commissioned the Yurok Tribe to conduct a cultural resources survey and inventory report within the area of potential effect for the Alder Camp Road project area to document the cultural resource effect determination for consideration by the State Historic Preservation Officer and the Yurok Tribal Historic Preservation Officer. The results of this study were incorporated into the environmental assessment and were used to identify potential effects on historic properties in consultation with the California Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the Yurok Tribal Historic Preservation Officer in the development of the Rehabilitate Alder Camp Road Environmental Assessment.

Compliance with Section 106 of the National Historic Preservation Act was completed through consultation with the Yurok Tribal Historic Preservation Officer. The Yurok Tribal Historic Preservation Officer and California State Historic Preservation Officer concurred with the National Park Service's finding that the selected action (preferred alternative) will have no adverse effect on identified cultural resources (letters from Yurok Tribal Historic Preservation Officer and California State Historic Preservation Officer signed on May 24, 2004 and June 23, 2004, respectively).

### ***American Indian Consultation***

The planning process for the Rehabilitate Alder Camp Road Project is being conducted in consultation with the Yurok Tribe, and is consistent with the government-to-government relationship established by the 2003 General Agreement among the Yurok Tribe, the National Park Service, and California Department of Parks and Recreation. From November 2003 through April 2004, several tribal consultations were conducted regarding the project. The National Park Service toured the project area with representatives of the Yurok Tribe on November 30, 2003. The Yurok Tribe Culture Committee conducted a cultural resources survey and inventory report for the Alder Camp Road project area. The findings of this report were incorporated into the environmental assessment. Tribal consultations will continue throughout the duration of project implementation.

On behalf of the National Park Service, the Federal Highway Administration will obtain a Clean Water Act Section 401 water quality certification from the Yurok Tribe for activities occurring on Yurok Reservation land through a joint application to the U.S. Environmental Protection Agency and the Yurok Tribe (also see discussion under North Coast Regional Water Quality Control Board and U.S. Environmental Protection Agency).

### ***California Coastal Commission***

Approximately half of Alder Camp Road is located within the Coastal Zone, including approximately a half-mile of the western end and three-quarters of a mile of the eastern end of Alder Camp Road. In a letter dated July 30, 2004, the California Coastal Commission concurred with the National Park Service's negative determination (pursuant to 15 CFR 930.35 of the NOAA implementing regulations) that the project will not adversely affect coastal zone resources.

### ***North Coast Regional Water Quality Control Board***

The National Park Service consulted with the North Coast Regional Water Quality Control Board to ensure compliance with Section 401 of the Clean Water Act (also see discussion under U.S.

Environmental Protection Agency and American Indian Consultation). On behalf of the National Park Service, the Federal Highway Administration will obtain the appropriate state permits (including Section 401 water quality certification, the National Pollutant Discharge Elimination System permit (if greater than one acre is disturbed) for stormwater discharge, and the state's groundwater protection program) as necessary. In compliance with the National Pollutant Discharge Elimination System permit (if necessary), the National Park Service will oversee development and implementation of a stormwater pollution prevention plan for construction activities to minimize pollutants and sediment in stormwater runoff originating from construction sites.

### ***U.S. Army Corps of Engineers***

The National Park Service consulted with U.S. Army Corps of Engineers to ensure compliance with Section 404 of the Clean Water Act. The Federal Highway Administration (on behalf of the National Park Service) will obtain Nationwide Permits 3, 14, and 33 for project activities within waters of the U.S., and will incorporate appropriate mitigation measures as necessary.

### ***U.S. Environmental Protection Agency***

On behalf of the National Park Service, the Federal Highway Administration will obtain a Clean Water Act Section 401 water quality certification from the U.S. Environmental Protection Agency for activities occurring on Yurok Reservation land through a joint application to the U.S. Environmental Protection Agency and the Yurok Tribe (also see discussion under North Coast Regional Water Quality Control Board and American Indian Consultation).

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

The National Park Service prepared a biological assessment on April 12, 2004 and conducted informal consultation with U.S. Fish and Wildlife Service pursuant to Section 7 of the federal Endangered Species Act on the potential effects of this project on listed and proposed threatened and endangered species. The U.S. Fish and Wildlife Service issued a letter of concurrence (AFWO [Arcata Fish and Wildlife Office] File Number 1-14-200402131) received by the National Park Service on July 14, 2004 concurring with the National Park Service's determination that the project may affect but is not likely to adversely affect marbled murrelet and northern spotted owl (see Appendix A, U.S. Fish and Wildlife Service Consultation Letter).

### ***NOAA Fisheries***

The National Park Service consulted with NOAA Fisheries on the Rehabilitate Alder Camp Road Project. The National Park Service and NOAA Fisheries visited the project site on October 9, 2003. Based on the size, nature, duration, location, and timing of the project, the National Park Service concluded in an email dated January 21, 2004 that the project will have no effect on Southern Oregon/Northern California coho salmon, their critical habitat, or Essential Fish Habitat.

### ***County of Del Norte***

The National Park Service is coordinating with the County of Del Norte on the Alder Camp Road/Klamath Beach Road intersection improvements pursuant to Chapter 12.02 of Del Norte


County Code, which establishes the process of consultation and environmental review for state and federal plans, programs, and projects. The National Park Service will obtain an encroachment permit from the County for the areas of the project within the County right-of-way along Klamath Beach Road, and will coordinate with County staff on the intersection improvements.

## Conclusion

The selected action (preferred alternative) does not constitute an action that normally requires preparation of an environmental impact statement. The selected action is not a major federal action that will have a significant effect on the quality of the human environment. Negative environmental impacts that could occur are negligible, minor, or moderate in intensity. Mitigation measures will be incorporated into the selected action to reduce or eliminate impacts. In general, the public supports the selected action. Substantive comments and technical corrections are included in the Errata Sheets. The Yurok Tribal Historic Preservation Officer and California State Historic Preservation Officer concurred with the National Park Service's finding that the selected action will have no adverse effect on identified cultural resources. The U.S. Fish and Wildlife Service concurred with the National Park Service's determination that the project may affect but is not likely to adversely affect marbled murrelet and northern spotted owl. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the selected action will not violate any federal, state, or local environmental protection laws.

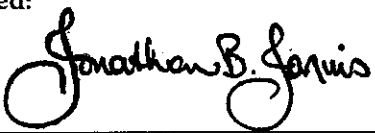
Based on the foregoing, it has been determined that an environmental impact statement is not required for this project and thus will not be prepared, and the work identified will be initiated and completed as soon as practicable.

### Recommended:

  
for Bill Pierce  
National Park Superintendent, Redwood National and State Parks

9/29/04  
Date

### Approved:

  
Jonathan B. Jarvis, Regional Director  
Pacific West Region, National Park Service

OCT 06 2003  
Date