Chapter 4: Consultation and Coordination

Olympic National Park conducted public scoping for the Boulder Creek trail and campground rehabilitation project from February 5, 2009 to March 9, 2009. Project information was posted on the park website and on the NPS Planning, Environment and Public Comment (PEPC) website. A news release and letter soliciting public comments and describing the proposed action was sent to approximately 150 individuals, interest groups, government agencies, and area tribes on the park's mailing list.

An article providing project information and requesting public input was published in the February 8, 2009 Peninsula Daily News, National Parks Traveler website on February 6, 2009, and in the Tacoma News Tribune on February 12, 2009. A news announcement was aired on the local radio station, KNOP, on February 6, 2009. Respondents had the opportunity to provide written comments, fax comments, or input comments into the NPS compliance web system (PEPC). Eight individuals and three different organizations responded. Overall comments were supportive of the project. One respondent did not agree with the project. Respondents provided comments and useful information regarding how the project work should be conducted while protecting park resources. All comments were considered in the development of this environmental assessment.

Agencies and organizations contacted to assist in identifying issues and provide an opportunity to review or comment on this environmental assessment include, but are not limited to, the following:

Federal Agencies

Department of Agriculture
- U.S. Forest Service
- Olympic National Forest
  - Forest Supervisor
  - Recreation Manager

Department of Interior
- U.S. Fish and Wildlife Service
  - Western Washington Office
  - Dungeness National Wildlife Refuge
- National Park Service
  - Seattle Office
  - Office of Public Affairs

Depart Of Commerce
- National Oceanic and Atmospheric Administration
- Olympic Coast National Marine Sanctuary

Department of Transportation
- Federal Highways Administration, Western Federal Lands Highway Division

U.S. Army Corps of Engineers
U.S. Coast Guard
U.S. Environmental Protection Agency

State Agencies

State of Washington Representatives
Department of Archeology and Historic Preservation
Department of Ecology
Department of Fish and Wildlife Service
Department of Natural Resources
Department of Parks and Recreation

Local Agencies

City of Port Angeles
City of Forks
Clallam Bay and Sekiu Chamber of Commerce
Clallam County Commissioners
Clallam County Economic Development Council
Jefferson County Commissioners
Kitsap County Commissioners
Olympic Region Clean Air Agency
Port Angeles Chamber of Commerce

American Indian Tribes

Jamestown S'Klallam Tribe
Lower Elwha Klallam Tribe
Olympic Peninsula Intertribal Advisory Committee

Organizations and Businesses

Backcountry Horseman of Washington, Peninsula Chapter
Bicycle Alliance of Washington
Cascade Bicycle Club
Conservation Northwest
Friends of Lake Crescent, Friends of Olympic National Park
Green Crow Timber LLC
Jodesha Broadcasting
KNOP Radio
KXRO / KDUX Radio
National Audubon Society
National Parks Conservation Association
Olympic Forest Coalition
Olympic Park Associates & North Cascades Conservation Council
Olympic Peninsula Audubon Society
Outdoor Recreation Info Center (REI)
Peninsula News Network
Port Angeles, Victoria Visitor Bureau

Protect the Peninsula's Future
Rainier Evergreen, Inc.
Seattle Post Intelligencer
Sequim Gazette
Sierra Club, Cascade Chapter
Sunnydell Shooting Grounds
The Evergreen State College
The Wilderness Society
University of Washington, Olympic Natural Resource Center
Washington Environmental Council
Washington's National Parks Fund
Wilderness Watch

Area Libraries

Aberdeen Public Library
Amanda Park Public Library
Bremerton Public Library
Clallam Bay Public Library
Everett Public Library
Forks Public Library
Hoquiam Public Library
King County Library System - Documents Department
Kingston Public Library
Port Angeles Public Library
Port Townsend Public Library
Renton Public Library
Seattle Public Library
Sequim Public Library
Tacoma Public Library
University of Washington Libraries
Washington State University Holland Library

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APPENDICES

Mitigation Measures Common to All Action Alternatives
Draft Wilderness Minimum Requirements Worksheet
Cumulative Impacts Summary

Appendix A: Mitigation Measures Common to All Action Alternatives

Resource Area	Mitigation
General Considerations	Before the beginning of construction, construction limits would be surveyed and staked and may be marked with construction fencing, tape, flagging, snow fencing, or some similar material, as necessary. The construction limits identify and limit the area of construction activity. The contractor is responsible for ensuring that all work stays inside the construction limits. All protection measures would be clearly stated in the construction specifications and workers would be instructed to avoid conducting activities beyond the construction zone. Area staff would be notified when the project start date is known. Best management practices for drainage and sediment control would be implemented to prevent or reduce nonpoint pollution and minimize soul loss and sedimentation in drainage areas. Construction vehicle engines would not be allowed to idle for extended periods of time. All construction debris, including visible asphalt and metal culvert pieces, would be hauled from the Park to an appropriate disposal location. All tools, equipment, surplus materials, and rubbish would be removed from the project site upon project completion.
Vegetation	A revegetation plan would be developed to restore disturbed areas along the trail, former campground parking lot, and campground that include planting of native flora. Native species would be used in all revegetation. To maximize vegetation restoration efforts, the following measures would be implemented: • Salvage topsoil and incidental native vegetation (as feasible) from construction areas for reuse during restoration. • Monitor revegetation success and exotic plants for up to 3 years following construction, implementing remedial and control measures as needed. Temporary barriers would be provided to protect existing trees, plants, and root zones, Trees or other plants would not be removed, injured, or destroyed without prior approval from the park botanist. In effort to avoid introduction of non-native / noxious plant species, no imported hay/straw bales would be used during revegetation. On a case-by case basis, the following materials may be used for erosion control: pole peelings, wood straw, or other certified weed-free mulch products preapproved by Olympic National Park's chief botanist. Pressure wash hauling vehicles before entering the park for the first time; subsequent

	entries will not require pressure washing unless the vehicle shows signs of mud, plant material, or other substances that could harbor seeds or other parts of exotic plants. Ensure that tools and clothing are free of seeds or other parts of exotic plants before being used at the construction site. Cover all haul trucks bringing fill materials from outside the Park to prevent seed transport. (This may or may not be necessary depending on the timing of construction.) All fill, rock, and additional topsoil would be obtained from the project area, if possible. If not possible or if weeds are known to exist in the project area, then weed-free fill, rock, or additional topsoil would be obtained from sources outside the park. NPS personnel would certify that the source is weed-free. Areas which are disturbed by project activities will be revegetated using site-adapted native seed and/or plants, or sterile exotic plants
Water Quality and Soils	Use best management erosion-control practices for drainage and sediment control to prevent or reduce nonpoint source pollution and minimize soil loss and sedimentation in drainage areas. These practices may include but are not limited to, silt fencing, filter fabric, temporary sediment ponds, check dams of pea gravel-filled burlap bags or other material, and/or immediate mulching of exposed areas to minimize sedimentation and turbidity impacts as a result of construction activities. Silt fencing fabric would be inspected daily during project work and weekly after project completion, until removed. Accumulated sediments would be removed when the fabric is estimated to be approximately 75% full. Silt removal would be accomplished in such a way as to avoid introduction into any flowing water bodies. If weather conditions during project operations generate and transport sediment to the stream channels, operations would cease until weather conditions improve. The operation of ground-disturbing equipment during large precipitation events would increase the production of sediment that may be transported to flowing waters. This measure is designed to reduce the production of fine and course sediments, which may affect spawning gravels, substrate embeddedness, pool frequency/quality and the development of large pools if they reach the stream channel. In areas where drainages may cross multiple segments of the same trail, a drainage system will be established which supports the natural drainage pattern and the efficient removal of flowing water from the trail alignment. Stream banks would be properly sloped to an angle of stability (natural repose) when removing culverts. This measure can reduce sediment production from bank erosion, undercutting, and slumping as the stream channel reestablishes following culvert removal. A storm water site plan (SWSP) would be developed and approved by the park prior to commencing any near-water activities. Regular site inspections would be conducted to endure that erosion-control measures are properly installed and functioning effectively. Prior to starting work each day, all machinery would be in inspected for leaks (e.g.,

	fuel, oil, and hydraulic fluid) and all necessary repairs would be made before the commencement of work. This measure is designed to avoid/minimize the introduction of chemical contaminates associated with machinery used in project implementation. Delineate wetlands and apply protection measures during projects. Perform project activities in a cautious manner to prevent damage caused by equipment, erosion, siltation, etc. Any machinery maintenance involving potential contaminates (e.g., fuel, oil and hydraulic fluid) would occur outside the riparian area, defined as the entire channel migration zone or a distance greater than 150 feet from the stream edge. This measure is designed to avoid/minimize the introduction of chemical contaminants associated with machinery used in project implementation. Hazardous spill clean –up materials would be on-site at all times. This measure is designed to avoid/minimize the introduction of chemical contaminants associated with machinery used in project implementation. Chemicals may have a toxic effect on aquatic organisms, including salmonids.
Special Status Species	Since the project must be conducted during the breeding season for northern spotted owls and marbled murrelets, it shall occur as late in the breeding season as possible. Operating between August 6 and February 28 is preferable, to minimize disturbance effects to spotted and marbled murrelets. Conduct work between two hours after sunrise and two hours before sunset when such work includes the use of equipment which produces noise above 92 decibels (such as chainsaws, heavy equipment, and helicopters) and would occur between April 1 and September 15. No trees large enough to contain suitable habitat for spotted owls or murrelets would be cut. To avoid adverse impacts to breeding murrelets, any noise-producing construction activities above ambient noise levels within 35 yards of murrelet habitat would not begin until after August 6, during murrelet late breeding season (August 6 to September 15), and would be initiated as late as possible. This would ensure that heavy equipment operation would occur outside of the prime breeding season, yet provide a window for construction to be completed before winter weather. During the project work period between August 6 and September 15 within 35 yards of marbled murrelet habitat, no work that generates above ambient noise levels would take place at night or within 2 hours of sunrise and sunset, when murrelets are known to be most active. The park would maintain strict garbage control to prevent scavengers (e.g. corvids), which are predators on murrelet nests, from being attracted to the project area. No food scraps would be discarded or fed to wildlife.
Visitor Experience and Recreational Resources	Visitors would be informed in advance of construction activities. The trail would be closed to all visitors during construction activities. If a visitor inadvertently comes upon construction, they would be escorted through the

	construction zone and/or routed away from construction activities. The Wilderness Information Center would be notifies when the project start date is known so that they may inform wilderness users. The ONP Public Information Officer would be provided with the project schedule (as soon as it is known) and periodic update of project work to inform visitors of project status and access.
Cultural Resources	Should any archeological resources be uncovered during construction, work would be halted in the area and the park archeologist, Office of Archeology and Historic Preservation (OAHP), and appropriate Native American Tribes would be contacted for further consultation. Park cultural resources staff would be available during construction to advise or take appropriate actions should any archeological resources be uncovered during construction. In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) would be followed. The NPS would ensure that all contacts and subcontractors are informed of the penalties for illegally collecting artifacts or intentionally damaging archeological sites or historic properties. Contractors and subcontractors also would be instructed on procedures to follow in case previously unknown archeological resources are uncovered during construction. Equipment and material staging area would avoid known archeological resources.

Appendix B: Draft Minimum Requirement Worksheet

Olympic National Park Wilderness

April 5, 2006 Version

Complete Part 1 of ONP Project Proposal Form before proceeding

Issue or problem to be solved (provide attachments if necessary):

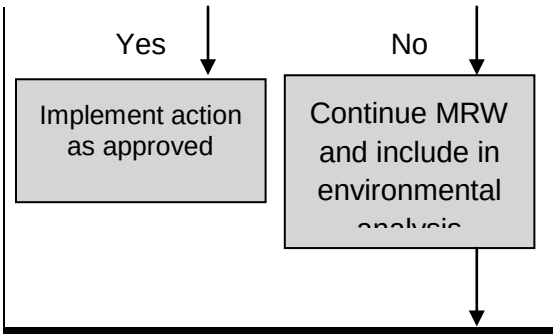
The Boulder Creek Campground was identified through the Washington Park Wilderness Act of 1988 as a potential wilderness addition. This area is currently being impacted by trampling and the collection of firewood, resulting in the loss of vegetation and the expansion of bare ground and compacted soil. Additionally, obsolete infrastructure (concrete foundations, failed culverts) from the former automobile campground has altered the area's natural topography, water flow patterns, and vegetation. This is not consistent with the protection of wilderness character, and detracts from visitor experience.

Project Initiator(s): Olympic National Park_____

MRW Preparer(s): Teri Tucker, Ruth Scott_____ **Date:** 12/16/09

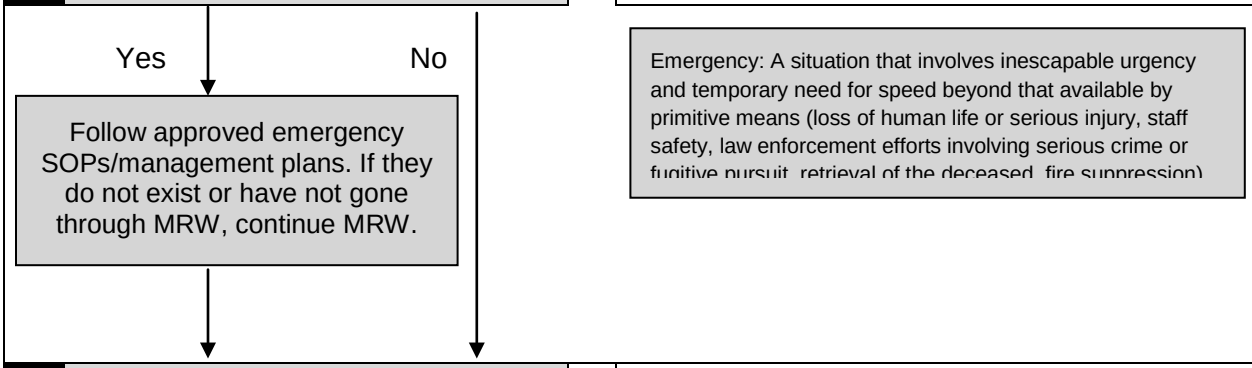
STEP ONE: Determine if action is necessary

1	Is the resolution of this issue covered by a Categorical Exclusion, Environmental Assessment/Finding of No Significant Impact, or an Environmental Impact Statement/Record of Decision that includes minimum requirement considerations?	Answer: Yes____ No__ X __

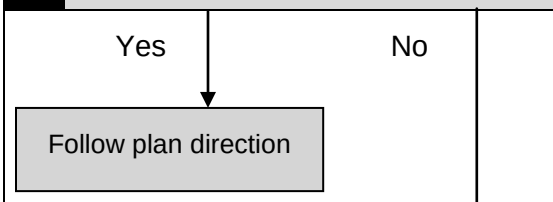


If "Yes" provide name of document and approval date:

2	Is this an emergency?	Answer: Yes____ No__ x __



3	Is resolution of this issue addressed in an approved Wilderness Plan? (or equivalent plan that included minimum requirement considerations?)	Answer: Yes____ No__ x __ Cite Wilderness Plan or equivalent plan section/page:



4	List guidance provided in law and policy for resolution of the issue	See Management Policies Chapter 6, Director's Order #41 and other applicable laws, policies and directives

LAWS:

NPS Organic Act (1916) (16 USC 1 et seq.)

The 1916 NPS Organic Act established the NPS and provided the definitive statement of the purpose of the parks, which is, "… to conserve the scenery and the natural and historic objects and the wild life

therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

National Parks Omnibus Management Act (1998) (Public Law 105-391)

The National Parks Omnibus Management Act requires the Secretary of Interior to continually improve NPS' ability to provide state-of-the-art management, protection, and interpretation of, and research on NPS resources. Additionally, this act requires the Secretary to assure the full and proper utilization of the results of scientific study for park management decisions.

National Environmental Policy Act of 1969, as amended (NEPA) (42 USC 4321 et seq.)

NEPA is our basic national charter for protection of the environment. The stated purpose of this act is "to declare a national policy which will encourage productive and enjoyable harmony between [humans] and [their] environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of [humans]; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality (CEQ)."

NEPA covers all federal agencies and all federal actions. The act requires a systematic analysis of major federal actions that includes a consideration of all reasonable alternatives as well as an analysis of short-term and long-term, direct, indirect, and cumulative impacts. Within NEPA the environment includes natural, historical, cultural, and human dimensions. The NPS emphasis is on minimizing negative impacts and preventing "impairment" of park resources as described and interpreted in the NPS Organic Act. The result of analyses conducted under NEPA are presented to the public, federal agencies, and public officials in document format (e.g. Environmental Assessments and Environmental Impact Statements) for consideration prior to taking official action or making official decisions.

Wilderness Act of 1964 (16 USC 1131 et seq.)

The Wilderness Act of 1964 (September 3, 1964, 16 USC 1131-1136) established a national wilderness preservation system to be composed of federally owned areas designated by Congress as wilderness. By law these wilderness areas, "…shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness." (16 USC 1131)

See below for specific references.

Washington Park Wilderness Act of 1988 officially designated Wilderness in Olympic National Park by Congress on November 16, 1988 (PL 100-668). A total of 876,669 acres, about 95 % of the park, was designated as the Olympic Wilderness, and another 378 acres was designated as potential wilderness. The Boulder Creek Campground was identified through the Act as a Potential Wilderness Addition.

Endangered Species Act of 1973 (ESA), as amended (16 USC 1531 et.seq.)

The purposes of the ESA include providing a means whereby the ecosystems upon which endangered and threatened species depend may be conserved. According to the ESA all federal agencies shall seek to conserve endangered and threatened species and shall ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered, threatened or proposed species or adversely modify designated or proposed critical habitat. The effects of any agency action that may affect endangered, threatened, or proposed species or their critical habitat must be evaluated in consultation or conference with either the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS), as appropriate.

Acts Related to Cultural Resources Management:

The National Historic Preservation Act of 1966 (1992, as amended) (NHPA), and other applicable laws and regulations including the NPS Organic Act (1916), the Antiquities Act of 1906, NEPA, the National Parks and Recreation Act of 1978, the Archeological Resources Protection Act of 1979, the Native American Graves Protection and Repatriation Act of 1990, and the Curation of Federally Owned and Administered Archeological Collections (1991), along with applicable agency policies provide direction for the protection, preservation and management of cultural resources on public lands. Further, these laws and policies establish what must be considered in general management planning and how cultural resources must be managed in future undertakings resulting from the approved plan, regardless of the final alternative chosen.

Section 106 of the NHPA directs federal agencies to take into account the effect of any undertaking (a federally funded or assisted project) on historic properties. A historic property is any district, building, structure, site, or object that is eligible for listing in the National Register of Historic Places (NRHP). Properties that have national, state, or local significance in American history, architecture, archeology, engineering, or culture may be eligible for listing in the NRHP.

Section 106 also provides the Advisory Council on Historic Preservation and the State Historic Preservation Officer (SHPO) an opportunity to comment on the anticipated effects of an undertaking.

Clean Water Act of 1972, as amended (33 USC 1251 et seq.)

The Clean Water Act, passed in 1972 as amendments to the Federal Water Pollution Control Act, and significantly amended in 1977 and 1987, was designed to restore and maintain the integrity of the nation's water. It furthers the objectives of restoring and maintaining the chemical, physical and biological integrity of the nation's waters and of eliminating the discharge of pollutants into navigable waters by 1985. It establishes effluent limitation for new and existing industrial discharge into U.S. waters; authorizes states to substitute their own water quality management plans developed under S208 of the act for federal controls; provides an enforcement procedure for water pollution abatement; and requires conformance to permit required under S404 for actions that may result in discharge of dredged or fill material into a tributary to, wetland, or associated water source for a navigable river.

1964 WILDERNESS ACT

Section 2.(A)

For this purpose there is hereby established a National Wilderness Preservation System to be composed of federally owned areas designated by the Congress as "wilderness areas," and these shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness; and no Federal lands shall be designated as "wilderness areas" except as provided for in this Act or by a subsequent Act.

Definition Of Wilderness Section 2.(C)

A wilderness, in contrast with those areas where man and his works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Use Of Wilderness Areas Section 4.(A)(3)(B)

Except as otherwise provided in this Act, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its wilderness character. Except as otherwise provided in this Act, wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical use.

Prohibition Of Certain Uses Section 4.(A)(3)(C)

Except as specifically provided for in this Act, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this Act and except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.

NPS MANAGEMENT POLICIES 2006

Chapter 4, Natural Resources Management

4.1.5 Restoration of Natural Systems

The Service will reestablish natural functions and processes in parks unless otherwise directed by Congress. Landscapes disturbed by natural phenomena, such as landslides, earthquakes, floods, hurricanes, tornadoes, and fires, will be allowed to recover naturally unless manipulation is necessary to protect other park resources, developments, or employee and public safety. Impacts on natural systems resulting from human disturbances include the introduction of exotic species; the contamination of air, water, and soil; changes to hydrologic patterns and sediment transport; the acceleration of erosion and sedimentation; and the disruption of natural processes. The Service will seek to return such disturbed areas to the natural conditions and processes characteristic of the ecological zone in which the damaged resources are situated. The Service will use the best available technology, within available resources, to restore the biological and physical components of these systems, accelerating both their recovery and the recovery of landscape and biological community structure and function. Efforts may include, for example

. removal of exotic species
. removal of contaminants and nonhistoric structures or facilities
. restoration of abandoned mineral lands, abandoned or unauthorized roads, areas overgrazed by domestic animals, or disrupted natural waterways and/or shoreline processes
. restoration of areas disturbed by NPS administrative, management, or development activities (such as hazard tree removal, construction, or sand and gravel extraction) or by public use
. restoration of natural soundscapes
. restoration of native plants and animals
. restoration of natural visibility

When park development/facilities are damaged or destroyed and replacement is necessary, the development will be replaced or relocated to promote the restoration of natural resources and processes.

4.4.2.4 Management of Natural Landscapes

Natural landscapes disturbed by natural phenomena, such as landslides, earthquakes, floods, hurricanes, tornadoes, and fires, will be allowed to recover naturally unless manipulation is necessary to (1) mitigate for excessive disturbance caused by past human effects, (2) preserve cultural and historic resources as appropriate based on park planning documents, or (3) protect park developments or the safety of people. Landscape and vegetation conditions altered by human activity may be manipulated where the park management plan provides for restoring the lands to a natural condition. Management activities to restore human-altered landscapes may include, but are not restricted to removing constructed features, restoring natural topographic gradients, and revegetating with native park species on acquired inholdings and on sites from which previous development is being removed; restoring natural processes and conditions to areas disturbed by human activities such as fire suppression; rehabilitating areas disturbed by visitor use or by the removal of hazard trees; and maintaining open areas and meadows in situations in which they were formerly maintained by natural processes that now are altered by human activities. Landscape revegetation efforts will use seeds, cuttings, or transplants representing species and gene pools native to the ecological portion of the park in which the restoration project is occurring. Where a natural area has become so degraded that restoration with gene pools native to the park has proven unsuccessful, improved varieties or closely related native species may be used.

Landscape restoration efforts will use geological materials and soils obtained in accordance with geological and soil resource Management Policies. Landscape restoration efforts may use, on a temporary basis, appropriate soil fertilizers or other soil amendments so long as that use does not unacceptably alter the physical, chemical, or biological characteristics of the soil and biological community and does not degrade surface or groundwater.

Chapter 6, Wilderness Preservation and Management

6.3.5 Minimum Requirement

All management decisions affecting wilderness must be consistent with the minimum requirement concept. This concept is a documented process used to determine if administrative actions, projects, or programs undertaken by the Service or its agents and affecting wilderness character, resources, or the visitor experience are necessary, and if

so how to minimize impacts. The minimum requirement concept will be applied as a two-step process that determines whether the proposed management action is appropriate or necessary for administration of the area as wilderness and does not cause a significant impact to wilderness resources and character, in accordance with the Wilderness Act; and the techniques and types of equipment needed to ensure that impacts on wilderness resources and character are minimized.

In accordance with this policy, superintendents will apply the minimum requirement concept in the context of wilderness stewardship planning, as well as to all other administrative practices, proposed special uses, scientific activities, and equipment use in wilderness. The only exception to the minimum requirement policy is for eligible areas that the Service has not proposed for wilderness designation. However, those lands will still be managed to preserve their eligibility.

When determining minimum requirements, the potential disruption of wilderness character and resources will be considered before, and given significantly more weight than, economic efficiency and convenience. If a compromise of wilderness resources or character is unavoidable, only those actions that preserve wilderness character and/or have localized, short-term adverse impacts will be acceptable.

Although park managers have flexibility in identifying the method used to determine minimum requirement, the method used must clearly weigh the benefits and impacts of the proposal, document the decision-making process, and be supported by an appropriate environmental compliance document. Parks must develop a process to determine minimum requirement until the plan is finally approved. Parks will complete a minimum requirement analysis on those administrative practices and equipment uses that have the potential to impact wilderness resources or values. The minimum requirement concept cannot be used to rationalize permanent roads or inappropriate or unlawful uses in wilderness.

Administrative use of motorized equipment or mechanical transport will be authorized only

- if determined by the superintendent to be the minimum requirement needed by management to achieve the purposes of the area, including the preservation of wilderness character and values, in accordance with the Wilderness Act; or
- in emergency situations (for example, search and rescue, homeland security, law enforcement) involving the health or safety of persons actually within the area.

Such management activities will also be conducted in accordance with all applicable regulations, policies, and guidelines and, where practicable, will be scheduled to avoid creating adverse resource impacts or conflicts with visitor use.

6.3.8 Cultural Resources

The Wilderness Act specifies that the designation of any area of the park system as wilderness "shall in no manner lower the standards evolved for the use and preservation of" such unit of the park system under the various laws applicable to that unit (16 USC 1133(a)(3)). Thus, the laws pertaining to historic preservation also remain applicable within wilderness but must generally be administered to preserve the area's wilderness character. The responsible decision-maker will include appropriate consideration of the application of these provisions of the Wilderness Act in analyses and decision-making concerning cultural resources.

Cultural resources that have been included within wilderness will be protected and maintained according to the pertinent laws and policies governing cultural resources using management methods that are consistent with the preservation of wilderness character and values. These laws include the Antiquities Act and the Historic Sites, Buildings and Antiquities Act, as well as subsequent historic preservation legislation, including the National Historic Preservation Act, the Archaeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act. The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation projects provide direction for protection and maintenance. Cemeteries or commemorative features, such as plaques or memorials, that have been included in wilderness may be retained (including approved access to these sites), but no new cemeteries or additions to existing cemeteries may be made unless specifically authorized by federal statute, existing reservations, or retained rights.

6.3.10 Management Facilities
Part of the definition of wilderness as provided by the Wilderness Act is "undeveloped federal land retaining its primeval character and influence, without permanent improvements." Accordingly, authorizations of NPS administrative facilities in wilderness will be limited to the types and minimum number essential to meet the minimum requirements for the administration of the wilderness area. A decision to construct, maintain, or remove an administrative facility will be based primarily on whether or not the facility is required to preserve wilderness character or values, not on considerations of administrative convenience, economic effect, or convenience to the public or park staff. Maintenance or the removal of historic structures will also comply with cultural resource protection and preservation policies and directives, and with the concept of minimum requirement management techniques for wilderness.

6.3.10.1 Administrative Facilities
Administrative facilities (for example, ranger stations and/or patrol cabins, fire lookouts, radio and/or cellular telephone antennas, radio repeater sites, associated storage or support structures, drift fences, and facilities supporting trail stock operations) may be allowed in wilderness only if they are determined to be the minimum requirement necessary to carry out wilderness management objectives and are specifically addressed within the park's wilderness management plan or other appropriate planning documents.

Permanent storage caches are prohibited in wilderness unless necessary for health and safety purposes or when such caches are determined necessary, justified, documented, and approved through a minimum requirements analysis.

6.3.10.2 Trails in Wilderness
Trails will be permitted within wilderness when they are determined to be necessary for resource protection and/or for providing for visitor use for the purposes of wilderness.
The identification and inventory of the wilderness trail system will be included as an integral part of the wilderness management plan or other appropriate planning document.

Trails will be maintained at levels and conditions identified within the approved wilderness management plan or other planning document. Trail maintenance structures (such as water bars, gabions) may be provided, under minimum requirement protocols, where they are essential for resource preservation or where significant safety hazards exist during normal use periods. Historic and/or prehistoric trails will be administered in keeping with approved cultural resource and wilderness management plan requirements.

6.3.10.3 Shelters and Campsites
Although the development of facilities to serve visitors will generally be avoided, campsites may be designated when essential for resource protection and preservation or to meet other specific wilderness management objectives. In keeping with the terms of the park's wilderness management plan, campsite facilities may include a site marker, fire rings, tent sites, food storage devices, and toilets if these are determined by the superintendent to be the minimum facilities necessary for the health and safety of wilderness users or for the preservation of wilderness resources and values. Toilets will be placed only in locations where their presence and use will resolve health and sanitation problems or prevent serious resource impacts, especially where reducing or dispersing visitor use is impractical or has failed to alleviate the problems.

Chapter 9, Park Facilities

9.1.3.2 Revegetation and Landscaping
The selection of plant materials and cultivation practices will be guided by the policies for management of plant materials in section 4.4 and the need for fire-resistant vegetation for defensible space. To the maximum extent possible, plantings will consist of species that are native to the park or that are historically appropriate for the period or event commemorated. The use of exotic plant species is restricted to situations that conform to the exotic species policy in section 4.4.4. Irrigation to maintain exotic plantings will be avoided, except when it is part of an approved management program essential to achieve park objectives and when adequate and dependable supplies of water are available. Low water use practices that measure soil moisture content and other technologies (such as drip irrigation and appropriate timing of water applications) should be employed.

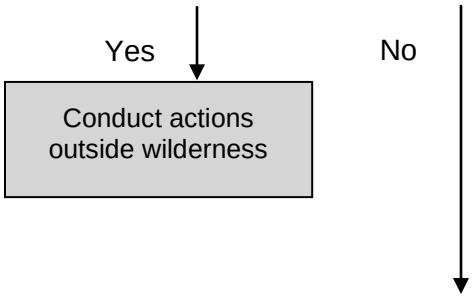
Prior to using soil fertilizers or other soil amendments in park natural or altered landscapes, parks must develop a prescription to ensure that the amendments will not unacceptably alter the physical, chemical, or biological characteristics of the soil, biological community, or surface or groundwater.

Wherever practicable, soils and plants affected by construction will be salvaged for use in site restoration. Any surplus soils and plants may be used, as appropriate, for the restoration of other degraded areas in the park. Surplus soils not used in this way should be stockpiled for future use. If additional soil and plants are needed to restore disturbed sites, they may be obtained from other sites in the park if it is determined that the use of an in-park source will not significantly affect cultural or natural resources or ecological processes. In any case, imported soils must (1) be compatible with existing soils, (2) be free of undesired seeds and organisms, and (3) fulfill the horticultural requirements of plants used for restoration.

9.3.2.2 Backcountry Campsites
Backcountry and wilderness campsites may be permitted, but only within the acceptable limits of use determined by the park's wilderness management plan, resource management plan, or other pertinent planning document.

5	Is resolution of this issue necessary or appropriate to meet wilderness management objectives or the requirements of other laws, policies and directives? Yes No Do not proceed with	Answer: Yes__X__ No____ Explain: The Washington Park Wilderness Act of 1988 officially designated Wilderness in Olympic National Park on November 16, 1988 (PL 100-668). A total of 876,669 acres, about 95 % of the park, was designated as the Olympic Wilderness, and another 378 acres was designated as potential wilderness. Areas that currently do not qualify for designation as wilderness due to temporary nonconforming or incompatible conditions may be authorized by Congress as "potential wilderness" for future wilderness designation. The Boulder Creek Campground was identified through the Act as potential wilderness. Potential wilderness becomes "designated wilderness" upon the Secretary of Interior's determination, published in the Federal Register, that they have met the qualifications for designation by the cessation or termination of the nonconforming use. The Act's identification of Boulder Creek Campground as potential wilderness indicates Congressional intent for rehabilitation of the area to a wilderness standard.

6	Can the issue be resolved through visitor education? Yes Carry out visitor education No	Answer: Yes____ No__ X __ Explain: Visitors receive education in leave no trace practices before they enter the wilderness (if they acquire their permits through the Wilderness Information Center), and on-site (if they are contacted by a wilderness ranger). Visitor education is essential to minimizing impacts, yet even with the most careful visitor use, deterioration of wilderness conditions still occurs in camp areas as a result of normal use. Boulder Creek Campground is currently being impacted by trampling and the collection of firewood, resulting in the loss of vegetation and the expansion of bare ground and compacted soil. Additionally, obsolete infrastructure (concrete foundations, failed culverts) from the former automobile campground has altered the area's natural topography, water flow patterns, and vegetation. This is not consistent with the protection of wilderness character, and detracts from visitor experience.
7	Can the issue be resolved through actions outside of wilderness?	Answer: Yes____ No__ X __ Explain:



The deterioration of conditions at backcountry/wilderness camp areas needs to be addressed at the camp areas themselves. Additional use restrictions, administered outside of wilderness, may have some positive effects but on-site intervention including campsite delineation and revegetation is required in some cases to ensure recovery of vegetation and halting of soil erosion.

At this point, if you have determined the action is necessary, contact the Planning and Compliance Office to schedule a presentation of your issue at a park Interdisciplinary Planning Team meeting

STEP TWO: Determine the minimum tools, techniques and actions that will effectively resolve the issue

8	Describe in detail alternative ways to resolve the issue (include use of primitive tools and skills) Note: Alternatives described in other compliance documents that address this issue may be referenced. If minimum	Questions to answer for each alternative: – What is proposed? – Would the project involve ground disturbance? – Where would the action take place? – When would the action take place? – What design and standards would apply? – What methods, tools and techniques would be used? – How long would it take to complete the action? – Why is it being proposed in this manner? – What mitigation would be taken to minimize action impacts on wilderness resources and character?

Alternative 1 – No Action (Continue Current Management, Routine Maintenance Only)

Under No Action, the National Park Service would not implement the actions identified for the Boulder Creek Trail and Campground in the 2008 General Management Plan. Only routine maintenance of existing structures would occur. No new infrastructure would be built. The current situation, as described in the "Rehabilitate Boulder Creek Trail and Campground Environmental Assessment", Chapter 2: Alternatives, Alternative 1would continue. See Chapter 3 (Affected Environment) for a more detailed profile of the current environmental situation in the project area.

Alternative 2 – Minimum Visitor Services Infrastructure, Extensive Restoration

Under Alternative 2, the National Park Service would implement the actions identified for the Boulder Creek Trail and Campground in the 2008 General Management Plan so as to create and maintain the minimum amount of infrastructure necessary to achieve project objectives.

See Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 2: Alternatives, Alternative 2 for details.

Alternative 3 – Provide Moderate Visitor Services, Active Revegetation

Under Alternative 3, the National Park Service would implement the actions identified for the Boulder Creek Trail and campground in the 2008 General Management Plan by taking actions necessary to achieve project objectives as identified in Alternative 2, while providing limited additional visitor services.

See Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 2: Alternatives, Alternative 3 for details.

Alternative 4 – Provide Enhanced Visitor Services, Active Revegetation (Management Preferred)

Under Alternative 4, the National Park Service would implement the actions identified for the Boulder Creek Trail and campground in the 2008 General Management Plan by taking actions necessary to achieve project objectives, while providing additional visitor services by further expanding the parking lot at the Boulder Creek trailhead, installing bridges at the Cougar Creek and Crystal Creek stream crossings to allow safe access at higher water levels, and by providing additional visitor services at the Boulder Creek campground for backpackers and pack stock users.

See Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 2: Alternatives, Alternative 4 for details.

9	Evaluate the impacts of each alternative	Potential impacts to evaluate under <u>each</u> alternative: – Wilderness character effects – Effects on natural resources – Cultural resources considerations – Social/recreational/experiential effects – Societal/political effects – Health/safety concerns – Economic/timing/sustainability considerations

Alternative 1 - No Action (Continue Current Management, Routine Maintenance Only)

Wilderness character effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Wilderness Values section**.

Effects on natural resources

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Physical Environment section and Biological Environment section.**

Cultural resources considerations

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Social/recreational/experiential effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Experiential Environment section.**

Societal/political effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Health/safety concerns

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural**

Environment section.

Economic/timing/sustainability considerations

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Alternative 2 – Minimum Visitor Services Infrastructure, Extensive Restoration

Wilderness character effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Wilderness Values section**.

Effects on natural resources

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Physical Environment section and Biological Environment section.**

Cultural resources considerations

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Social/recreational/experiential effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Experiential Environment section.**

Societal/political effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Health/safety concerns

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural**

Environment section.

Economic/timing/sustainability considerations

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Alternative 3 – Provide Moderate Visitor Services, Active Revegetation

Wilderness character effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Wilderness Values section**.

Effects on natural resources

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Physical Environment section and Biological Environment section.**

Cultural resources considerations

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Social/recreational/experiential effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Experiential Environment section.**

Societal/political effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Health/safety concerns

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural**

Environment section.

Economic/timing/sustainability considerations

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Alternative 4 – Provide Enhanced Visitor Services, Active Revegetation (Management Preferred)

Wilderness character effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Wilderness Values section**.

Effects on natural resources

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Physical Environment section and Biological Environment section.**

Cultural resources considerations

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Social/recreational/experiential effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Experiential Environment section.**

Societal/political effects

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

Health/safety concerns

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural**

Environment section.

Economic/timing/sustainability considerations

This topic is analyzed in the Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 3: Affected Environment & Environmental Consequences, **Social and Cultural Environment section.**

10	Select the alternative that will most effectively resolve the issue while having the <u>least</u> overall adverse impact on wilderness resources, character and the visitor experience		*Note:* When selecting the preferred alternative the potential disruption of wilderness character and resources will be considered before, and given significantly more weight than, economic efficiency and convenience. If a compromise of wilderness resources or character is unavoidable, only those actions that preserve wilderness character and/or have localized, short-term adverse impacts will be acceptable.

Preferred alternative: #_____4_____

Describe rationale for selecting this alternative including how it meets minimum requirement guidelines and how impacts to wilderness will be minimized, and mitigated (if needed):

Although all Action Alternatives meet the criteria listed above to varying degrees, it was determined that Alternative 4 is the Environmentally Preferred Alternative. This alternative provides safe access to pedestrians and stock users during the longest period of time with the least amount of impact to natural and cultural resources during construction and through ongoing maintenance. Each of the action alternatives results in the removal of asphalt from the trail, restoration of natural drainage patterns in the campground, and active revegetation outside of designated visitor use areas. Alternative 4 reduces the number of campsites from current levels, but provides adequate facilities to support both backpackers and people camping with pack stock. This determination was upheld during an interdisciplinary workshop that found Alternative 4 was superior to the other alternatives in terms of providing for visitor safety, sustainability, natural and cultural resource protection, and visitor experience. See Rehabilitate Boulder Creek Trail and Campground Environmental Assessment, Chapter 2: Alternatives, “The Environmentally Preferred Alternative” for details.

11	**After review by Division Chief, provide an electronic copy of MRW to the Planning and Compliance Office and the Wilderness Specialist to initiate park internal review and comment. Schedule a time to present findings at a park Interdisciplinary Planning Team meeting (held twice a month).**

Comments: Comments by: _____ Date_____
Comments: Comments by: _____ Date_____
Comments: Comments by: _____ Date_____
Comments: Comments by: _____ Date_____

Recommended by:

Division Chief	Date

Reviewed by:

Wilderness Specialist	Date

Approved by:

Superintendent	Date

Appendix C: Cumulative Impact Summary

	Past Actions	Current Actions (Alt 1)	Reasonably Foreseeable Future Actions	Alt 2: Limited Services, Extensive Restoration	Alt 3: Moderate Services, Active Revegetation	Alt 4: Enhanced Services, Active Revegetation
PHYSICAL ENVIRONMENT						
Geologic Features and Soils	Construction of the paved asphalt road to the Olympic Hot Springs Resort.	Degraded asphalt road to the Olympic Hot Springs in place	Continued soil compaction and erosion from asphalt road	Reduced soil compaction and erosion due to removal of asphalt road and soil decompaction along trail corridor and in the Boulder Creek Campground	Reduced soil compaction and erosion due to removal of asphalt road and soil decompaction along trail corridor and in the Boulder Creek Campground	Reduced soil compaction and erosion due to removal of asphalt road and soil decompaction along trail corridor and in the Boulder Creek Campground
	Construction of the trail system within Olympic National Park	Active maintenance of the trail system within Olympic National Park	Ongoing maintenance of the trail system within Olympic National Park	Ongoing maintenance of the trail system within Olympic National Park	Ongoing maintenance of the trail system within Olympic National Park	Ongoing maintenance of the trail system within Olympic National Park
	Construction of roads and trails on public and private lands outside the park	Active maintenance of roads and trails on public and private lands outside the park	Ongoing maintenance and expansion of roads and trails on public and private lands outside the park	Ongoing maintenance and expansion of roads and trails on public and private lands outside the park	Ongoing maintenance and expansion of roads and trails on public and private lands outside the park	Ongoing maintenance and expansion of roads and trails on public and private lands outside the park
	Removal of asphalt from Boulder Creek Campground	-	-	-	-	-
	Restoration of compacted soils through Olympic National Park Restoration Program	-	Continuing restoration of compacted soils through Olympic National Park Restoration Program as funding allows	Continuing restoration of compacted soils through Olympic National Park Restoration Program as funding allows, including within project area	Continuing restoration of compacted soils through Olympic National Park Restoration Program as funding allows, including within project area	Continuing restoration of compacted soils through Olympic National Park Restoration Program as funding allows, including within project area
	-	-	-	Impacts to soils in campground during excavation of buried utilities and culverts and blasting and excavation of bedrock, soils, and fill materials to install footlog at Crystal Creek.	Impacts to soils in campground during excavation of culverts and blasting and excavation of bedrock, soils, and fill materials to install 80' bridge at Crystal Creek.	Impacts to soils in campground during excavation of culverts and minor excavation to install 150' bridge at Crystal Creek
Hydrology and Water Quality	Construction of the Elwha and Glines Canyon dams altered hydrology of the Elwha Watershed. Boulder Creek is a tributary of the Elwha River.	The presence of the Elwha and Glines Canyon dams alters hydrology of the Elwha Watershed. Boulder Creek is a tributary of the Elwha River.	Removal of the Elwha and Glines Canyon dams will alter hydrology of the Elwha Watershed, with short term adverse effects and long term significant beneficial effects. Boulder Creek is a tributary of the Elwha River.	Removal of the Elwha and Glines Canyon dams will alter hydrology of the Elwha Watershed, with short term adverse effects and long term significant beneficial effects. Boulder Creek is a tributary of the Elwha River. Restoration of this project will result in additional beneficial impacts to hydrologic function and water quality.	Removal of the Elwha and Glines Canyon dams will alter hydrology of the Elwha Watershed, with short term adverse effects and long term significant beneficial effects. Boulder Creek is a tributary of the Elwha River. Restoration of this project will result in additional beneficial impacts to hydrologic function and water quality.	Removal of the Elwha and Glines Canyon dams will alter hydrology of the Elwha Watershed, with short term adverse effects and long term significant beneficial effects. Boulder Creek is a tributary of the Elwha River. Restoration of this project will result in additional beneficial impacts to hydrologic function and water quality.
	construction of roads and the associated placement of fill materials altered the flow of water through the project area.	existing roads and fill materials alter the flow of water through the project area.	-	Removal of remaining asphalt from 2.2 mile road segment, and regrading of trail to reduce erosion and fill materials will help restore the natural flow of water through the project area.	Removal of remaining asphalt from 2.2 mile road segment, and regrading of trail to reduce erosion and fill materials will help restore the natural flow of water through the project area.	Removal of remaining asphalt from 2.2 mile road segment, and regrading of trail to reduce erosion and fill materials will help restore the natural flow of water through the project area.
	High stream flow events have caused the failure of road and trail crossings in the project area, depositing large volumes of native and fill materials into Boulder Creek.	Slumping of the road cut and failure of culverts is resulting in accelerated erosion and the deposition of soil and fill materials into Boulder Creek.	High stream flow events will continue to erode materials at trail crossings in the project area, depositing native and fill materials into Boulder Creek.	High stream flow events will continue to erode materials at trail crossings in the project area, depositing native and fill materials into Boulder Creek.	High stream flow events will continue to erode materials at trail crossings in the project area, depositing native and fill materials into Boulder Creek.	High stream flow events will continue to erode materials at trail crossings in the project area, depositing native and fill materials into Boulder Creek.
	Visitor and Administrative use has resulted in increased sediment, nutrient, and contaminant loads in areas of development adjacent to surface waters.	Visitor and Administrative may result in increased sediment, nutrient, and contaminant loads in areas of development adjacent to surface waters.	Visitor and Administrative may continue to result in increased sediment, nutrient, and contaminant loads in areas of development adjacent to surface waters.	Sediment may be introduced to Crystal Creek and Boulder Creek during blasting and excavation to install a footlog and stock ford at Crystal Creek, and as a result of implementation of the asphalt removal and trail and campground rehabilitation project.	Sediment may be introduced to Crystal Creek and Boulder Creek during blasting and excavation to install an 80' bridge at Crystal Creek, and as a result of implementation of the asphalt removal and trail and campground rehabilitation project.	Sediment may be introduced to Crystal Creek and Boulder Creek during installation of a 150' bridge at Crystal Creek, and as a result of implementation of the asphalt removal and trail and campground rehabilitation project.
Air Quality	Vehicle emissions from visitor, administrative, residential, and industrial uses have affected regional air quality.	Vehicle emissions from visitor, administrative, residential, and industrial uses continue to influence regional air quality.	Vehicle emissions from visitor, administrative, residential, and industrial uses may continue to influence regional air quality.	Vehicle emissions from visitor, administrative, residential, and industrial uses may continue to influence regional air quality.	Vehicle emissions from visitor, administrative, residential, and industrial uses may continue to influence regional air quality.	Vehicle emissions from visitor, administrative, residential, and industrial uses may continue to influence regional air quality.
	-	-	Short-term impacts to air quality may result from the Elwha and Glines Canyon dam removal project	Short-term impacts to air quality may result from the Elwha and Glines Canyon dam removal project. Additional short term, site-specific impacts to air quality is anticipated due to the use of heavy equipment and vehicles during the implementation of this project.	Short-term impacts to air quality may result from the Elwha and Glines Canyon dam removal project. Additional short term, site-specific impacts to air quality is anticipated due to the use of heavy equipment and vehicles during the implementation of this project.	Short-term impacts to air quality may result from the Elwha and Glines Canyon dam removal project. Additional short term, site-specific impacts to air quality is anticipated due to the use of heavy equipment and vehicles during the implementation of this project.

BIOLOGICAL ENVIRONMENT						
Vegetation	Extensive logging and vegetation removal has reduced the amount of old growth forests on the Olympic Peninsula. Construction and maintenance of roads and trails within and outside of the park required the removal of mature trees and other vegetation.	Clearing of vegetation to maintain existing roads and trails is occurring throughout the project area, the park, and region.	Logging and vegetation removal will continue on the Olympic Peninsula. Clearing of vegetation to maintain existing roads and trails will continue throughout the project area, the park, and region.	Vegetation would be removed to expand the trailhead parking lot and turnaround area. Young trees and herbaceous plants would be removed during asphalt removal. Active revegetation would occur after asphalt removal to restore native species and plant communities along the trail corridor, in the campground, and in the former campground parking lot.	Vegetation would be removed to expand the trailhead parking lot and turnaround area. Young trees and herbaceous plants would be removed during asphalt removal. Active revegetation would occur after asphalt removal to restore native species and plant communities along the trail corridor, in the campground, and in the former campground parking lot.	Additional Vegetation would be removed to further expand the trailhead parking lot and turnaround area. Young trees and herbaceous plants would be removed during asphalt removal. Active revegetation would occur after asphalt removal to restore native species and plant communities along the trail corridor, in the campground, and in the former campground parking lot.
	Non-native plants have been intentionally and accidentally introduced to the region, and the project site.	Efforts to limit the spread of Non-native plants are taking place. Active treatment to reduce the extent of non-native plants is occurring in the project area, the park, and outside park boundaries.	Non-native plants will continue to be unintentionally spread both within and outside of park boundaries. Actions will continue to be taken to limit spread and reduce the extent of non-native plants in order to protect native plant communities and the functioning of the ecosystems of which they are a key component.	Best Management Practices would be implemented to avoid the unintentional introduction or spread of non-native plant materials as a result of project activities.	Best Management Practices would be implemented to avoid the unintentional introduction or spread of non-native plant materials as a result of project activities.	Best Management Practices would be implemented to avoid the unintentional introduction or spread of non-native plant materials as a result of project activities.
Wildlife and Wildlife Habitat	Human use and development both within and outside of the park has reduced the quantity and quality of wildlife habitat due to changes in species composition, habitat structure and ecosystem functions.	Human use and development both within and outside of the park continues to reduce the quantity and quality of wildlife habitat due to changes in species composition, habitat structure and ecosystem function in some areas. Active restoration of individual species of wildlife, such as the fisher at Olympic National park is also occurring. Efforts to restore both terrestrial and aquatic habitat is also occurring within the park and outside park boundaries.	Actions taken within and outside of the park will continue to impact wildlife and wildlife habitat. Short-term noise impacts due to the implementation of the Elwha dam removal project, and other projects in the region will likely harass animals located near construction activities. However, successful completion of projects like the Elwha dam removal project will result in long-term beneficial effects to wildlife through restoration of both terrestrial and aquatic habitat.	Implementation of the project would result in additional short-term impacts to wildlife due to noise from construction. Project would also result in improved habitat through the revegetation of the trail corridor and campground over the long-term.	Implementation of the project would result in additional short-term impacts to wildlife due to noise from construction. Project would also result in improved habitat through the revegetation of the trail corridor and campground over the long-term.	Implementation of the project would result in additional short-term impacts to wildlife due to noise from construction. Project would also result in improved habitat through the revegetation of the trail corridor and campground over the long-term.
Unique or Important Fish or Fish Habitat	Construction of the Elwha and Glines Canyon dams blocked passage to the upper Elwha watershed to anadromous fish species. Changes in human use patterns, including consumption of fish and alteration of fish habitat has reduced the distribution and abundance of native fish species.	Anadromous fish species below the dams are currently not able to reach the lower segments of Boulder Creek due to the presence of the Elwha and Glines Canyon dams. These dams also prevent resident fish from moving into the lower reaches of the Elwha River and out to sea. A natural fish barrier is located in Boulder Creek, preventing fish from entering the current project area.	Removal of the Elwha and Glines Canyon dams will have temporary adverse effects on fish and fish habitat, but will have significant long-term beneficial impacts on anadromous fish and river habitat. Removal of the Griff Creek fish barrier culvert will extend suitable habitat for bull trout and other resident fish of the Elwha River, providing refugia during dam removal.	Blasting and excavation to install a footlog and stock ford at Crystal Creek may introduce sediment into Crystal Creek, a tributary of Boulder Creek, which is a tributary of the Elwha River. Due to the presence of a fish barrier below the project area, it is unlikely that the amount of sediment generated at Crystal Creek would be detectable below the fish barrier 5.5 miles downstream.	Blasting and excavation to install an 80' bridge at Crystal Creek may introduce sediment into Crystal Creek, a tributary of Boulder Creek, which is a tributary of the Elwha River. Due to the presence of a fish barrier below the project area, it is unlikely that the amount of sediment generated at Crystal Creek would be detectable below the fish barrier 5.5 miles downstream.	Installation of a 150' bridge at Crystal Creek may introduce sediment into Crystal Creek, a tributary of Boulder Creek, which is a tributary of the Elwha River. Due to the presence of a fish barrier below the project area, it is unlikely that the amount of sediment generated at Crystal Creek would be detectable below the fish barrier 5.5 miles downstream.
Threatened and Endangered Species	Development for human use both within and outside of the park has reduced the extent of suitable habitat for threatened and endangered species, such as the northern spotted owl, marbled murrelet, and bull trout. These changes affected the composition, structure, and function of species populations and habitat. A programmatic Biological Opinion was prepared during the preparation of the Olympic National Park General Management Plan.	All actions taken in the park must take into account the potential to adversely affect listed species or habitat. Many ongoing activities, including road and trail construction and maintenance have the potential to adversely affect listed species and habitat. Best Management Practices are implemented to avoid or minimize the potential for adverse actions associated with park activities.	Removal of the Elwha and Glines Canyon dams has the potential to adversely affect listed species and habitat over the short-term, but will significantly improve habitat for threatened and endangered fish species over the long-term. Implementation of the fish-barrier culvert replacement project will also result in long-term beneficial effects to bull trout by expanding suitable habitat. Other activities taken both within and outside of the park will have the potential to adversely affect, or improve the quality of suitable habitat for threatened and endangered species.	All action alternatives considered in this plan were developed to avoid or minimize the potential for adverse effects to threatened and endangered species and habitat. Work with the potential to cause noise impacts would occur outside of the early nesting season to reduce the potential for adverse effects to nesting marbled murrelets and spotted owls. No actions are likely to harm individuals of any listed species. Bull trout are not present in the project area, and actions with the potential to affect water quality would occur miles from suitable habitat, making adverse effect to aquatic species unlikely.	All action alternatives considered in this plan were developed to avoid or minimize the potential for adverse effects to threatened and endangered species and habitat. Work with the potential to cause noise impacts would occur outside of the early nesting season to reduce the potential for adverse effects to nesting marbled murrelets and spotted owls. No actions are likely to harm individuals of any listed species. Bull trout are not present in the project area, and actions with the potential to affect water quality would occur miles from suitable habitat, making adverse effect to aquatic species unlikely.	All action alternatives considered in this plan were developed to avoid or minimize the potential for adverse effects to threatened and endangered species and habitat. Work with the potential to cause noise impacts would occur outside of the early nesting season to reduce the potential for adverse effects to nesting marbled murrelets and spotted owls. No actions are likely to harm individuals of any listed species. Bull trout are not present in the project area, and actions with the potential to affect water quality would occur miles from suitable habitat, making adverse effect to aquatic species unlikely.
Wetlands	Construction of the Boulder Creek campground and associated road resulted in the placement of fill materials that altered water flow, resulting in the development or expansion of wetland vegetation in an upland area. Development both within and outside of the park has resulted in the reduction of the extent and quality of wetland habitat in the region and across the country.	A small area within the Boulder Creek campground has become established with wetland vegetation and hydric soils. This small wetland area appears to be associated with altered surface flow due to the place of fill material during campground development.	No projects in the immediate project area have filling of wetlands as an objective. Projects outside of the park that have the potential to effect wetlands are subject to federal, state, and local regulations intended to avoid or minimize adverse effects to sensitive wetland areas.	Although the project does not involve filling any wetlands, the removal of fill materials from the Boulder Creek campground to restore natural topography and stream flow may result in the loss or diminishment of wetland vegetation and soils when abandoned infrastructure that is contributing to the presence of the wetlands is removed.	Although the project does not involve filling any wetlands, the removal of fill materials from the Boulder Creek campground to restore natural topography and stream flow may result in the loss or diminishment of wetland vegetation and soils when abandoned infrastructure that is contributing to the presence of the wetlands is removed.	Although the project does not involve filling any wetlands, the removal of fill materials from the Boulder Creek campground to restore natural topography and stream flow may result in the loss or diminishment of wetland vegetation and soils when abandoned infrastructure that is contributing to the presence of the wetlands is removed.

SOCIAL AND CULTURAL ENVIRONMENT						
Cultural Resources	Cultural resources, including: archeological resources, pre-historic and historic structures, cultural landscapes, and ethnographic resources have been adversely affected by past actions taken to restore natural conditions, to upgrade or replace old materials with new, and through unintentional impacts related to neglect or unplanned disturbance. Removal of historic structures associated with the Olympic Hot Springs Resort occurred over the last several decades. Deterioration of material remains of the CCC-era east loop of the Boulder Creek campground have occurred over time, through active removal and passive deterioration.	Archeological resources have been identified throughout the park, including the project area. NPS management actions are designed to avoid adverse effects to known archeological resources to the extent possible. No intact pre-historic or historic structures remain in the project area. Historic structures are maintained and adaptively re-used throughout other areas of the park and region. Cultural landscapes have been identified throughout the park and are managed to varying degrees to retain their defining elements. Ethnographic resources have been identified in many areas, and are managed to varying degrees.	Ongoing management for natural and cultural resource preservation and visitor use will have both beneficial and adverse effects on cultural resources within the park. Preservation maintenance and adaptive re-use will help protect many historic properties, although the potential for adverse effects will likely continue.	All action alternatives would remove remaining visible infrastructure associated with the former Olympic Hot Springs road and automobile campground. All ground disturbing activities would have the potential to impact previously unrecorded archeological resources. The delineation of seven campsites in the east (CCC) loop of the Boulder Creek Campground would help retain the historic use and site design of this cultural landscape. Evaluation of an abandoned dump site near Crystal Creek may result in the identification of cultural resources that have the potential to be adverse affected should the dump site need to be removed for environmental reasons.	All action alternatives would remove remaining visible infrastructure associated with the former Olympic Hot Springs road and automobile campground. All ground disturbing activities would have the potential to impact previously unrecorded archeological resources. The delineation of seven campsites in the east (CCC) loop of the Boulder Creek Campground would help retain the historic use and site design of this cultural landscape. Evaluation of an abandoned dump site near Crystal Creek may result in the identification of cultural resources that have the potential to be adverse affected should the dump site need to be removed for environmental reasons.	All action alternatives would remove remaining visible infrastructure associated with the former Olympic Hot Springs road and automobile campground. All ground disturbing activities would have the potential to impact previously unrecorded archeological resources. The delineation of seven campsites in the east (CCC) loop of the Boulder Creek Campground would help retain the historic use and site design of this cultural landscape. Evaluation of an abandoned dump site near Crystal Creek may result in the identification of cultural resources that have the potential to be adverse affected should the dump site need to be removed for environmental reasons.
Park Operations and Safety	Olympic National Park manages an extensive program of natural and cultural resource management while providing for visitor enjoyment. Many projects have occurred over the decades of the park's existence to improve park operations and safety. The Olympic Hot Spring Resort was closed due to operational needs. The current Boulder Creek Trail was constructed as a road to provide automobile access, but was closed when stream crossing washed out to protect visitor safety.	Boulder Creek Trail currently does not provide safe access during high water flows. The current trail is not safe for pack stock use beyond Crystal Creek. The Boulder Creek campground is currently sized too large for its current use as a hike-in backcountry campsite. The Boulder Creek trailhead provides insufficient parking to meet the current demand.	The operation of the Boulder Creek Trail and Campground is currently impeded by the presence of abandoned infrastructure and the lack of safe vehicular and stock access. This is unlikely to change without management action.	Actions proposed under Alternative 2 would improve park operations and visitor safety by removing the degraded asphalt surface from the trail, providing safe pedestrian and stock stream crossings during the dry season, and the reduced maintenance needs in the campground due to the limited number of retained campsites.	Actions proposed under Alternative 3 would improve park operations and visitor safety by removing the degraded asphalt surface from the trail, providing safe pedestrian and stock stream crossings during the a longer season, and the reduced maintenance needs in the campground due to the limited number of retained campsites. Placement of a bridge at Crystal Creek would reduce maintenance needs at this stream crossing since a stock ford would not need to be maintained and the bridge would be expected to last longer than a footlog.	Actions proposed under Alternative 4 would improve park operations and visitor safety by removing the degraded asphalt surface from the trail, providing safe pedestrian and stock stream crossings during a long season due to the installation of bridges at Cougar and Crystal Creeks, and the reduced maintenance needs in the campground due to fewer retained campsites. Placement of a bridge at Crystal and Cougar Creeks would reduce maintenance needs at these stream crossings since a stock ford would not need to be maintained and the bridges would be expected to last longer than footlogs.
EXPERIENTIAL ENVIRONMENT						
Wilderness Values	Olympic National Park is 95% designated Wilderness. Olympic National Forest also contains extensive lands within the Wilderness Preservation System. Application of the Minimum Requirements/Minimum Tool decision process has resulted in the installation and retention of various types of infrastructure and uses in the Olympic Park wilderness area.	The Boulder Creek Campground is located within a potential wilderness addition. The area adjacent to the Boulder Creek Trail is designated wilderness (~100 feet from centerline of the former road). Olympic Wilderness includes over 870,000 acres of superlative wilderness, attracting thousands of visitors from across the globe each year. Hundreds of miles of constructed trails, footlogs, bridges, designated campsites, ranger stations, and historic structures are also located within the wilderness. Helicopters are frequently used to manage areas within wilderness when other tools are not feasible.	A Wilderness Management Plan is proposed for Olympic National Park. It is anticipated that work on the plan will begin in 2010. There is also legislation pending that would designate The Boulder Creek Trail and surrounding area as wilderness, where it is not currently included in the Wilderness Preservation System.	Under Alternative 2 the wilderness areas adjacent to the Boulder Creek Trail and Campground would be impacted by noise from project implementation, including noise from blasting, heavy equipment, and helicopter use. However, this alternative would result in the greatest extent of restoration. All visible and buried infrastructures along the trail and in the campground would be removed. All areas outside of the newly constructed hiking and stock use trail, and newly delineated campsites within the east (CCC) loop of the campground would be restored through recontouring of the landscape and active revegetation. Although the trail area is not currently within wilderness, some visitors may view the installation of footlogs as inappropriate installations in a backcountry setting adjacent to wilderness. If the area is designated as wilderness in the future, the presence of footlogs, and the helicopter flights to install and replace them may be seen as non-conforming.	Under Alternative 3 the wilderness areas adjacent to the Boulder Creek Trail and Campground would be impacted by noise from project implementation, including noise from blasting, heavy equipment, and helicopter use. However, this alternative would result in considerable restoration. All visible infrastructure along the trail and in the campground would be removed. All areas outside of the newly constructed hiking and stock use trail, and newly delineated campsites within the east (CCC) loop and mid loop of the campground would be restored through recontouring of the landscape and active revegetation. There would be the potential for adverse impacts to wilderness character due to the installation of a bridge at Crystal Creek. Although this area is not currently within wilderness, some visitors may view the bridge at Crystal Creek and the footlogs and Hell and Cougar Creeks as inappropriate installations in a backcountry setting adjacent to wilderness. If the area is designated as wilderness in the future, the presence of the footlogs and metal bridge may be seen as non-conforming.	Under Alternative 4 the wilderness areas adjacent to the Boulder Creek Trail and Campground would be impacted by noise from project implementation, including noise from heavy equipment and helicopter use. However, this alternative would result in considerable restoration. All visible infrastructure along the trail and in the campground would be removed. All areas outside of the newly constructed hiking and stock use trail, and newly delineated campsites within the east (CCC) loop and mid loop of the campground would be restored through recontouring of the landscape and active revegetation. There would be the potential for adverse impacts to wilderness character due to the installation of bridges at Cougar and Crystal Creek. Although this area is not currently within wilderness, some visitors may view the bridges at Cougar and Crystal Creek and the footlog at Hell Creek as inappropriate installations in a backcountry setting adjacent to wilderness. If the area is designated as wilderness in the future, the presence of metal bridges and the footlog may be seen as non-conforming.

EXPERIENTIAL ENVIRONMENT						
Visitor Use and Experience	The Olympic Hot Springs Resort and automobile campground provided relatively easy access for area visitors and residents. Establishment of Olympic National Park created visitor expectations that may differ from what people might seek in National Forest areas, or from recreation opportunities on non-federal public lands. Closure of the Olympic Hot Springs Resort and loss of automobile access to the campground altered previous visitor use patterns in the area. Construction of extensive trail networks, such as the Olympic Discovery Trail, provided hikers, bicyclists, and equestrians with varying experiences on the northern Olympic Peninsula.	Public lands within Olympic National Park, Olympic National Forest, and other adjacent areas provide outstanding opportunities for outdoor recreation and visitor enjoyment. The Elwha area within Olympic National Park contains automobile and backpacker camping areas. Extensive trail networks provide opportunities for day trips and extended overnight journeys in backcountry wilderness areas. Front country areas provide accessible day use sites, picnic areas, and full-service resorts.	Continued construction of the Olympic Discovery Trail, both within and outside of park boundaries would expand non-motorized, multiple use trail options for hikers, bicyclists, and equestrians on the north Olympic Peninsula. Removal of the Elwha and Glines Canyon dams may have some adverse effect on visitor use for some, but will provide a unique visitor experience that others will seek out.	Alternative 2 would improve visitor experience for many due to the improvements to the Boulder Creek Trail that would remove deteriorated asphalt and restore safe pedestrian and pack stock access, particularly at stream crossings. Extensive revegetation along the trail corridor and in the campground would also improve visitor experience for many. Some visitor would be disappointed by the reduced number of campsites available, while other would enjoy a less expansive campground development in the backcountry. Some visitors will appreciate the expanded access for pack stock use, while others will not enjoy the mixed use of the trail and campground area. The work proposed under all Alternatives would likely coincide with the removal of Elwha and Glines Canyon dams. Curing this time the area would be closed to most visitor use. By implementing the project concurrent with the Elwha dam removal project, impacts to visitor use are reduced by getting the most work done during the shortest possible period of area closure.	Alternative 3 would improve visitor experience for many due to the improvements to the Boulder Creek Trail that would remove deteriorated asphalt and restore safe pedestrian and pack stock access, particularly at stream crossings. The installation of a bridge at Crystal Creek would be seen as a benefit by some, particularly due to the ease of the crossing for both pedestrians and stock users, and also due to the use of the crossing during slightly higher stream flows. Extensive revegetation along the trail corridor and in the campground would also improve visitor experience for many. Some visitors would be disappointed by the reduced number of campsites available, while other would enjoy a less expansive campground development in the backcountry. Some visitors will appreciate the expanded access for pack stock use, while others will not enjoy the mixed use of the trail and campground area. This alternative would result in the least density in the campground. The work proposed under all Alternatives would likely coincide with the removal of Elwha and Glines Canyon dams. Curing this time the area would be closed to most visitor use. By implementing the project concurrent with the Elwha dam removal project, impacts to visitor use are reduced by getting the most work done during the shortest possible period of area closure.	Alternative 4 would improve visitor experience for many due to the improvements to the Boulder Creek Trail that would remove deteriorated asphalt and restore safe pedestrian and pack stock access, particularly at stream crossings. The installation of bridges at Cougar and Crystal Creeks would be seen as a benefit by some, particularly due to the ease of the crossing for both pedestrians and stock users, and also due to the use of the crossing during higher stream flows. Extensive revegetation along the trail corridor and in the campground would also improve visitor experience for many. Some visitors would be disappointed by the reduced number of campsites available, while other would enjoy a less expansive campground development in the backcountry. Some visitors will appreciate the expanded access for pack stock use, while others will not enjoy the mixed use of the trail and campground area. This alternative would retain the highest number of campsites in the campground. The work proposed under all Alternatives would likely coincide with the removal of Elwha and Glines Canyon dams. Curing this time the area would be closed to most visitor use. By implementing the project concurrent with the Elwha dam removal project, impacts to visitor use are reduced by getting the most work done during the shortest possible period of area closure.

EXPERIENTIAL ENVIRONMENT						
Soundscapes	Natural soundscapes have been altered by the expansion of human use and development both within and outside of the park. The construction of roads and trails, visitor centers, resorts, residential and business areas have all added sounds to the acoustic environment that did not previously exist.	Noise from Highway 101, Olympic Hot Springs Road, adjacent campgrounds, day use areas, trails, vehicles, and ongoing maintenance and construction affect soundscapes near Boulder Creek and the surrounding area. Aircraft overflights are audible at many times throughout the area.	Noise related to the removal of the Elwha and Glines Canyon dams will be noticeable during project implementation. Noise from visitor use will be reduced during this time due to less access due to construction. Noise from aircraft outside the park will continue. Noise generated from park activities would also continue.	Construction-related noise impacts would occur outside the early nesting season for marbled murrelets and northern spotted owls to avoid adverse effects to these species. Noise related impacts to park visitors would be minimized due to the concurrent timing of this project with the Elwha dam removal project, when background noise levels will be elevated due to removal of the dams and closure of many adjacent areas to protect visitor safety.	Construction-related noise impacts would occur outside the early nesting season for marbled murrelets and northern spotted owls to avoid adverse effects to these species. Noise related impacts to park visitors would be minimized due to the concurrent timing of this project with the Elwha dam removal project, when background noise levels will be elevated due to removal of the dams and closure of many adjacent areas to protect visitor safety.	Construction-related noise impacts would occur outside the early nesting season for marbled murrelets and northern spotted owls to avoid adverse effects to these species. Noise related impacts to park visitors would be minimized due to the concurrent timing of this project with the Elwha dam removal project, when background noise levels will be elevated due to removal of the dams and closure of many adjacent areas to protect visitor safety.
Scenery and Visual Resources	Scenery and visual resources were impacted by the partial removal of infrastructure associated with the Olympic Hot Springs Resort and automobile campground. Damage to the Boulder Creek Trail due to the loss of the road surface at stream crossings has resulted in a deteriorated asphalt surface that is inconsistent with visitor expectations in a national park backcountry setting.	The Elwha watershed within Olympic National Park contains outstanding scenery and visual resources due to the magnificent views of mountainous terrain, mature forests, the river, tributary streams and native wildlife. Deteriorated asphalt trail at Boulder Creek is perceived by many as an eyesore. Denuded areas in the Boulder Creek campground from trampling and extensive gathering of woody material for campfires has resulted in a campground with unacceptable scenic impacts. The presence of an abandoned trash dump site, although not visible from the trail, is not a scenic or visual resource that most park visitors enjoy when they are aware of it.	Temporary impacts to scenery and visual resources may be expected during the removal of the Elwha and Glines Canyon dams, and the construction of other projects within the Boulder Creek and surrounding areas. Some visitors enjoy seeing construction activities, while others are distressed by the presence of heavy equipment in what is perceived by some as a pristine natural setting. Following the completion of the dam removal project, many visitors will enjoy witnessing the recovery of the Elwha River watershed, particularly the transformation of the former reservoirs into vegetated riparian and upland habitats.	Under All action alternatives there would be short term visual impacts during project implementation, followed by an improvement in visual resources due to the removal of deteriorated asphalt, abandoned concrete foundations, and clogged and eroded culverts from the Boulder Creek Trail and campground areas. Active restoration of natural topography and vegetation will also noticeably improve scenic resources in the project area.	Under All action alternatives there would be short term visual impacts during project implementation, followed by an improvement in visual resources due to the removal of deteriorated asphalt, abandoned concrete foundations, and clogged and eroded culverts from the Boulder Creek Trail and campground areas. Active restoration of natural topography and vegetation will also noticeably improve scenic resources in the project area. Some visitors may feel that the presence of an 80' long steel bridge at the Crystal Creek stream crossing is a visual intrusion in a backcountry setting. Others will likely enjoy both the sight of the bridge and the view from the bridge deck.	Under All action alternatives there would be short term visual impacts during project implementation, followed by an improvement in visual resources due to the removal of deteriorated asphalt, abandoned concrete foundations, and clogged and eroded culverts from the Boulder Creek Trail and campground areas. Active restoration of natural topography and vegetation will also noticeably improve scenic resources in the project area. Some visitors may feel that the presence of a 50' bridge at Cougar Creek and a 150' long steel bridge at the Crystal Creek stream crossings is a visual intrusion in a backcountry setting. Others will likely enjoy both the sight of the bridges and the views from the bridge decks.