

Olympic National Park

National Park Service
U.S. Department of the
Interior

Environmental Assessment

Rehabilitate Boulder Creek Trail and Campground

December 18, 2009



**U.S. Department of the Interior
National Park Service
Environmental Assessment
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Olympic National Park
Clallam County, Washington**

Summary

The National Park Service (NPS) proposes to rehabilitate a 2.2 mile stretch of the Boulder Creek Trail and the Boulder Creek Campground within Olympic National Park (ONP). These actions are identified in the park's 2008 General Management Plan (GMP) as goals for future management of the Elwha Area, and include:

- Retain road access to the Boulder Creek trailhead
- Improve the Boulder Creek trailhead and parking lot
- Rehabilitate the Boulder Creek Trail to provide access for hikers and pack stock users
- Maintain trail access that minimizes adverse effects on river processes and aquatic and riparian habitats to the extent possible
- Rehabilitate the historic Civilian Conservation Corps (CCC) campground [Boulder Creek Campground] at Olympic Hot Springs, with some sites removed and restored to natural conditions, and other sites retained to allow continued camping opportunities for backpackers

This environmental assessment describes and analyzes four alternatives for managing the Boulder Creek trail and campground: Alternative 1: no action; Alternative 2: minimum services, extensive restoration; Alternative 3: moderate services, active revegetation; and Alternative 4: enhanced services, active revegetation.

Notes to Reviewers and Respondents

This environmental assessment will be on public review for 20 days. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can request in your comment that your personal identifying information be withheld from public review, the National Park Service cannot guarantee that we would be able to do so. All submissions from organizations, businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses would be made available for public inspection in their entirety.

The public is invited to direct concerns or comments regarding this project to Superintendent online at <http://parkplanning.nps.gov/olym> or you may send comments to:

Superintendent – Boulder Creek EA
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362
Fax: 360-565-3015

CONTENTS

CHAPTER 1: PURPOSE OF AND NEED FOR ACTION	1
Background and Introduction	1
Purpose of and Need for Action	4
Management Goals and Objectives	4
Goal 1: Protect Natural & Cultural Resources	5
Goal 2: Protect and Restore Wilderness Character in Designated and Potential Wilderness	5
Goal 3: Improve Visitor Experience	5
Legislative, Policy, and Planning Context	6
Park Planning Documents Related to Boulder Creek EA	9
Park Purpose, Significance, and Mission	10
Park Purpose	10
Park Significance	11
Park Mission	11
Decisions to be Made	12
Scoping, Issues, and Impact Topics	12
Scoping	12
Issues and Impact Topics	13
Impact Topics Retained for Further Evaluation and Relevant Laws, Regulations, and Policies.	14
Impact Topics Dismissed from Further Analysis	16
CHAPTER 2: ALTERNATIVES	18
Introduction	18
Alternative 1 - No Action (Continue Current Management, Routine Maintenance Only)	19
Boulder Creek Trailhead	19
Boulder Creek Trail	20
Stream Crossings	22
Abandoned Dump Site	25
Boulder Creek Campground Infrastructure	25
Campground Management	26
Activities Common to All Action Alternatives	27
Boulder Creek Trailhead	27
Boulder Creek Trail	28
Temporary Large Vehicle Turnaround	30

Boulder Creek Trail Culvert Removal	31
Improve Trail Grade at Former Culvert Locations	31
Temporary Stream Crossings at Cougar and Hell Creeks	32
Hell Creek Stream Crossing	34
Abandoned Trash Dump Site	35
Crystal Creek Culvert Removal	36
Boulder Creek Campground Infrastructure	36
Campfire Ban	37
Campground Revegetation and Maintenance	37
Future Wilderness Designation	39
Mitigation Measures to Avoid or Reduce Impacts to Natural and Cultural Resources	39
Alternative 2 – Minimum Visitor Services Infrastructure, Extensive Restoration	40
Boulder Creek Trailhead	40
Boulder Creek Trail	41
Stream Crossings	42
Boulder Creek Campground	45
Alternative 3 – Provide Moderate Visitor Services, Active Revegetation	47
Boulder Creek Trailhead	47
Boulder Creek Trail	48
Stream Crossings	49
Boulder Creek Campground	51
Alternative 4 – Provide Enhanced Visitor Services, Active Revegetation (Management Preferred)	53
Boulder Creek Trailhead	53
Boulder Creek Trail	54
Stream Crossings	55
Boulder Creek Campground	57
Alternatives Considered but Dismissed	58
The Environmentally Preferred Alternative	59
CHAPTER 3: AFFECTED ENVIRONMENT & ENVIRONMENTAL CONSEQUENCES	65
Introduction	65
Physical Environment	69
<i>Geologic Features and Soils</i>	69
<i>Hydrology and Water Quality</i>	76
<i>Air Quality</i>	81
Biological Environment	83
<i>Vegetation</i>	83
<i>Wildlife and Wildlife Habitat</i>	88
<i>Unique or Important Fish or Fish Habitat</i>	92

<i>Threatened and Endangered Species</i>	94
<i>Wetlands</i>	103
Wilderness Values	107
Social and Cultural Environment	111
<i>Cultural Resources</i>	111
<i>Socioeconomics</i>	115
Experiential Environment	117
<i>Visitor Use and Experience</i>	117
<i>Soundscapes</i>	123
<i>Scenery and Visual Resources</i>	127
<i>Park Operations and Safety</i>	130
CHAPTER 4: CONSULTATION AND COORDINATION	134
LIST OF PREPARERS	137
REFERENCES	138
APPENDICES	140
Appendix A: Mitigation Measures Common to All Action Alternatives	141
Appendix B: Draft Minimum Requirement Worksheet	145
Appendix C: Cumulative Impact Summary	163

FIGURES

Figure 1: Context	Error! Bookmark not defined.
Figure 2: Project Location	3
Figure 3: No Action Alternative, Existing Trailhead and Parking	20
Figure 4: Existing Trail Structures and Conditions	21
Figure 5: No Action Alternative, Cougar Creek Crossing	22
Figure 6: No Action Alternative, Hell Creek Crossing	23
Figure 7: No Action Alternative, Crystal Creek Crossing Elevation	24
Figure 8: No Action Alternative, Crystal Creek Crossing	24
Figure 9: No Action Alternative, Campground Map	25
Figure 10: Temporary Large Vehicle Turnaround	30
Figure 11: Temporary Spanner Bridge at Cougar Creek and Hell Creek	33
Figure 12: Footlog and Stock Ford at Hell Creek	34
Figure 13: Alternative 2, Expanded Trailhead Parking Area	40
Figure 14: Alternative 2, Cougar Creek Footlog Crossing	43
Figure 15: Alternative 2, Crystal Creek Footlog Crossing	44
Figure 16: Alternative 3, Expanded Parking at Trailhead	48
Figure 17: Alternative 3, Crystal Creek 80' Span Bridge	50
Figure 18: Alternative 4, Expanded Parking Lot	53

Figure 19: Alternative 4, Crystal Creek 150' Span Bridge	56
Figure 20: Elwha Watershed	77
Figure 21: Hydrology	78
Figure 22: Wetland at Boulder Creek Campground	104
Figure 23: Wilderness Boundary	108

TABLES

Table 1: Impact Topics Retained for Further Evaluation and Relevant Laws, Regulations, and Policies	14
Table 2: Equipment Required for Constructing New Vehicle Turnaround at Trailhead Parking Lot	28
Table 3: Equipment Required for Removing Asphalt East of Crystal Creek Stream Crossing	29
Table 4: Equipment Required for Removing Asphalt West of Crystal Creek Stream Crossing	29
Table 5: Equipment Required for Constructing Temporary Large Vehicle Turnaround	31
Table 6: Equipment Required for Removing Culverts from Trail	31
Table 7: Equipment Required for Improving Trail Grade at Former Culvert Locations	32
Table 8: Equipment Required for Removing Collapsed Culvert and Installing Footlog and Stock Ford at Hell Creek	35
Table 9: Equipment Required for Blocking and Rehabilitating Route to Abandoned Trash Dump	36
Table 10: Equipment Required for Removing 60" Diameter Culvert and Concrete Headwall from Crystal Creek	36
Table 11: Equipment Required for Removing Culverts and Restoring Natural Grades at Campground, Removing Concrete Foundations, and Preparing Site for Revegetation	37
Table 12: Equipment Required for Campground Revegetation and Maintenance	38
Table 13: Equipment Required for Expanding Vehicle Parking at Trailhead on North Side (Compacted Gravel Surface)	41
Table 14: Equipment Required for Delivering and Installing Footlog at Cougar Creek	42
Table 15: Equipment Required for Delivering and Installing Footlog at Crystal Creek	44
Table 16: Equipment Required for Creating Stock Fords at Cougar Creek and Crystal Creek	45
Table 17: Equipment Required for Expanding Vehicle Parking at Trailhead on North Side (Permeable Non-asphalt Surface)	48
Table 18: Equipment Required for Delivering and Installing 80' Bridge at Crystal Creek	51
Table 19: Equipment Required for Expanding Vehicle Parking at Trailhead on North and South Side	54
Table 20: Equipment for Delivering and Installing 50' Bridge at Cougar Creek and 150' Bridge at Crystal Creek	57
Table 21: Summary Table of Environmental Consequences	63
Table 22: Geologic Features and Soils Impact and Intensity	72
Table 23: Hydrology and Water Quality Impact and Intensity	78
Table 24: Air Quality Impact and Intensity	82
Table 25: Vegetation Impact and Intensity	86
Table 26: Wildlife and Wildlife Habitat Impact and Intensity	90
Table 27: Unique or Important Fish or Fish Habitat Impact and Intensity	93
Table 28: Threatened and Endangered Species Impact and Intensity	98
Table 29: Wetlands Impact and Intensity	105
Table 30: Wilderness Values Impact and Intensity	109
Table 31: Cultural Resources Impact and Intensity	114
Table 32: Socioeconomics Impact and Intensity	116
Table 33: Visitor Use and Experience Impact and Intensity	121

Table 34: Soundscapes Impact and Intensity	125
Table 35: Scenery and Visual Resources Impact and Intensity	128
Table 36: Park Operations and Safety Impact and Intensity	131

Chapter 1: Purpose of and Need for Action

Background and Introduction

The National Park Service (NPS) proposes to rehabilitate a 2.2 mile stretch of the Boulder Creek Trail and the Boulder Creek Campground within Olympic National Park (ONP). These actions are identified in the park's 2008 General Management Plan (GMP) as goals for future management of the Elwha Area, and include:

- Retain road access to the Boulder Creek trailhead
- Improve the Boulder Creek trailhead and parking lot
- Rehabilitate the Boulder Creek Trail to provide access for hikers and pack stock users
- Maintain trail access that minimizes adverse effects on river processes and aquatic and riparian habitats to the extent possible
- Rehabilitate the historic Civilian Conservation Corps (CCC) campground [Boulder Creek Campground] at Olympic Hot Springs, with some sites removed and restored to natural conditions, and other sites retained to allow continued camping opportunities for backpackers

The Boulder Creek trailhead currently provides parking for approximately 15 vehicles, with additional use of the roadside as parking when existing spaces have filled. The park proposes to expand the parking lot to accommodate more vehicles and to provide adequate turnaround space for vehicles towing stock trailers.

The Boulder Creek Trail is a popular destination for day hikers and overnight users year-round, although automobile access to the trailhead is only provided during the snow-free season. The existing trail consists of remnants of a paved asphalt road that was closed to vehicle traffic in 1982 due to slope failure and serious erosion at stream crossings. The trail currently provides pedestrian access to the Boulder Creek Campground, Olympic Hot Springs, and an extensive wilderness trail system. Although the trail is designated for stock use, it cannot be used in its current condition by stock beyond the Crystal Creek stream crossing due to extensive erosion that has destroyed the trail in this location, resulting in a trail that is too steep for safe stock use, and a large amount of rock and woody debris in the stream channel that make it unsuitable for stock animals to ford the stream.

At present, the 2.2 mile stretch of asphalt trail crosses several drainages where high stream levels washed away sections of asphalt, washed out or plugged culverts, and deposited areas of gravel. The NPS proposes to rehabilitate the Boulder Creek Trail for use as a foot and stock trail by removing the deteriorating asphalt from the road surface, removing culverts, providing appropriate stream crossings for trail users, delineating a trail, and restoring native vegetation adjacent to the trail in areas where asphalt is removed.

The Boulder Creek Campground is located at the end of the trail in an area designated as potential wilderness. Prior to 1982 the campground was accessible by automobile, with approximately thirty campsites arranged in three drive-through loops. The east loop of the campground was originally built by the Civilian Conservation Corps (CCC) for use as a picnic

area, but has been managed for several decades to provide overnight camping. The campground is currently managed for backcountry use and is accessible only by foot. Current use of the area as a campground has resulted in extensive bare ground, trampled vegetation, and a lack of woody material on the forest floor due to extensive collecting and burning of wood for campfires. Camping currently occurs throughout the area, resulting in an increase in bare soil and loss of vegetation. Additionally, high levels of garbage are frequently found in the area.

The park proposes to rehabilitate the Boulder Creek Campground by designating campsites, removing old concrete foundations and culverts from the campground area, and revegetating the areas around campsites in an effort to better protect park resources while improving the quality of the visitor experience in this backcountry setting.

Figure 1: Context.

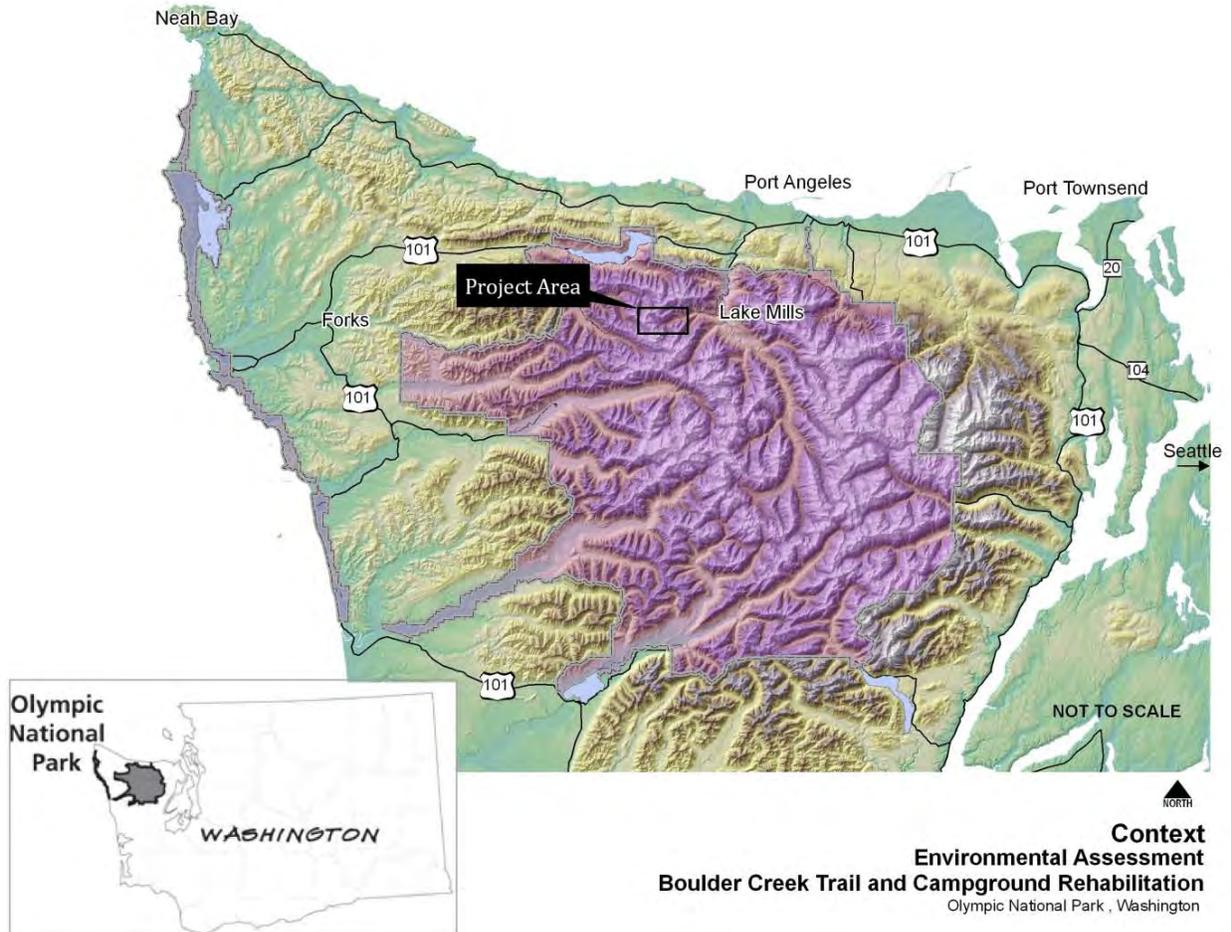
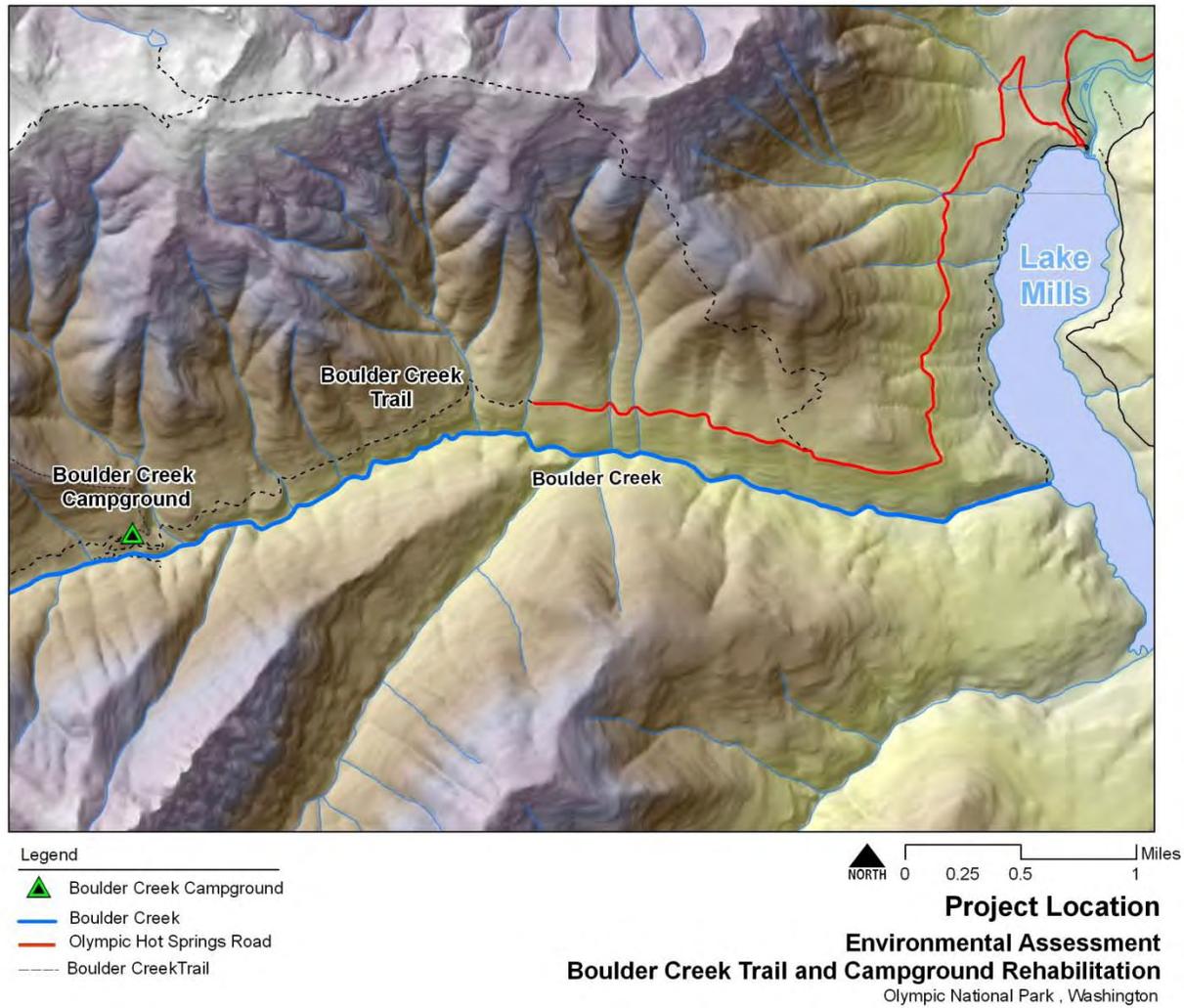


Figure 2: Project Location.



Purpose of and Need for Action

The purpose of the proposed action is to better protect park resources and provide for improved visitor access and enjoyment of the Boulder Creek Trail and campground in the Elwha Area of Olympic National Park as identified in the 2008 GMP.

This work is needed to address the following resource management and visitor experience concerns:

- The Boulder Creek trailhead does not provide adequate turnaround space for stock trailers or other large vehicles, nor does it provide adequate parking for visitors accessing the trail. This is resulting in impacts to the root systems of adjacent trees from visitors parking along the road shoulder after available parking spaces fill.
- The Boulder Creek Trail is designated as a hiking and stock use trail, but is currently not suitable for stock use due to the hardened asphalt trail surface and absence of an appropriate stock ford or crossing at Crystal Creek. Stock is unable to access the trail beyond Crystal Creek.
- The Boulder Creek Trail is located adjacent to designated wilderness (100 feet from centerline of the road). The current deteriorated asphalt trail surface is not consistent with the management of backcountry trails and detracts from visitor experience.
- 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.
- The formerly paved parking lot located adjacent to the Boulder Creek Campground at the end of the asphalt trail is no longer used by vehicles and is inconsistent with management of the area as backcountry. The presence of the leveled and compacted parking lot detracts from the visitor experience in this backcountry location, and prohibits the growth of native vegetation.
- The current trail and campground are not designed to meet visitor experience goals in a backcountry setting.

Management Goals and Objectives

The goals related to the rehabilitation of the Boulder Creek Trail and campground are based on federal legislation, National Park Service Management Policies, and park management plans. Each goal has a set of related management objectives. Goals describe what the park intends to accomplish by taking action. Management Objectives are specific statements of purpose that must be met to a large degree for proposed actions to be successful.

Goal 1: Protect Natural & Cultural Resources

Management Objectives:

- Avoid or minimize adverse effects to Threatened and Endangered Species.
- Provide appropriate drainage and sediment control along the trail to minimize erosion and protect water quality.
- Design stream crossings to accommodate high water flows and minimize adverse impacts to park resources.
- Promote the reestablishment of locally native vegetation in the project area consistent with the surrounding plant community.
- Minimize disturbance to wildlife during project implementation.
- Minimize the potential to introduce or spread non-native species.
- Minimize the potential for adverse effects to historic properties.
- Design the Boulder Creek trailhead, Boulder Creek Trail, Boulder Creek Campground and former automobile parking lot to minimize impacts to natural and cultural resources.

Goal 2: Protect and Restore Wilderness Character in Designated and Potential Wilderness

Management Objectives:

- Design and implement the project using methods that protect and minimize impacts to adjacent designated wilderness.
- Restore natural conditions within the Boulder Creek Campground Potential Wilderness Addition to meet Wilderness Act criteria for wilderness designation.
- Minimize impacts using wilderness minimum requirement guidelines during construction within potential wilderness (Boulder Creek Campground).
- Depending on the efficacy of restoration actions considered in the action alternatives, designation of the Boulder Creek Trail and Campground as Wilderness would be considered, following the removal of impediments and non-conforming elements.

Goal 3: Improve Visitor Experience

Management Objectives:

- Provide adequate parking and vehicle turnaround space at the trailhead for safe pedestrian use and vehicles towing stock trailers.
- Restore the Boulder Creek Trail (former road) to a safe hiking and stock-use trail.
- Provide safe and adequate stream crossings for pedestrians and stock users.
- Protect the trail from future damage by including sustainable trail design measures at stream crossings and slide areas.
- Rehabilitate the Boulder Creek Campground to provide a visitor experience consistent with visitor use in a wilderness area.

- Design the Boulder Creek area to facilitate effective and sustainable ongoing management, maintenance, and visitor use.

Legislative, Policy, and Planning Context

The NPS plans for one purpose—to ensure that the decisions it makes will carry out, as effectively and efficiently as possible, its mission:

“... 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.”

The NPS mission – along with applicable laws, policies, and plans, directs management within Olympic National Park.

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)

Each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such areas 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.

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.

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 waters. 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 agencies are required to obtain permits under S404 for actions that may result in discharge of dredged or fill material into a tributary, wetland, or associated water source connected to navigable waters.

Executive Orders

- Executive Order 13112 Invasive Species
- Executive Order 11988 Floodplain Management
- Executive Order 11990 Protection of Wetlands

Management Policies

The National Park Service Management Policies 2006 (NPS 2006) provide guidance for management of all national park units. Section 6.3.10.3 discusses campsites. This section states, "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." Road systems are addressed in Section 9.2.1 and 9.2.1.2, which states "When plans for meeting the transportation needs of these parks are updated, a determination must be made as to whether the road system should be maintained as is, reduced, expanded, reoriented, eliminated, or supplemented by other means of travel." Also, "many parks contain roads that were not constructed by the Park Service and may not be under NPS

jurisdiction...where practicable, and after concurrence of the entity with road jurisdiction, non-NPS roads that are no longer needed will be closed or removed, and the area will be restored to a natural condition. Section 9.2.2.2 discusses hiking trails. This section states, "Trail design will vary to accommodate a wide range of users and be appropriate to user patterns and site conditions. Wetlands will generally be avoided, and where possible they will be spanned by a boardwalk or other means, using sustainable materials that will not disturb hydrologic or ecological processes. Backcountry trails will offer visitors a primitive outdoor experience, and these trails will be unsurfaced and modest in character except where a more durable surface is needed. The use of nonnative materials is generally not permitted on backcountry trails." Section 9.2.4 discusses the use and design of parking areas: "Parking areas and overlooks will be located to not unacceptably intrude, by sight, sound, or other impact, on park resources or values. When parking areas are deemed necessary, they will be limited to the smallest size appropriate, and they will be designed to harmoniously accommodate motor vehicles and other appropriate users."

NPS Director's Orders

Directors Orders serve as a vehicle to clarify or supplement NPS Management Policies to meet the needs of park managers. Directors Orders with relevance to this project include:

- DO-2.1 Resource Management Planning
- DO-12 Environmental Impact Assessment
- DO-41 Wilderness Preservation & Management
- DO-77 Natural Resource Protection

Park Planning Documents Related to Boulder Creek EA

Olympic National Park Final General Management Plan (GMP) and Environmental Impact Statement (2008)

The GMP provides park managers with long-term direction for achieving the resource protection and visitor experience goals of Olympic National Park and establishes the direction for managing the Boulder Creek Trail and Boulder Creek Campground in the Elwha area of the park. This EA guides implementation of the portions of the GMP that deal with the Boulder Creek Trail and campground. The GMP states, "Road access would be retained to the Boulder Creek trailhead. Trailhead and parking would be improved and may be relocated nearby. The Boulder Creek Trail would be rehabilitated to provide access for hikers and horseback riders. Trail access would be retained, using methods that minimize adverse effects on river processes and aquatic and riparian habitats, to the extent possible."

The Backcountry Management Plan (1980, updated in 1992)

The Backcountry Management Plan provides interim guidance for managing the backcountry and wilderness of Olympic National Park. A Comprehensive Wilderness Management Plan is anticipated to commence in the near future. The Wilderness Management Plan will provide specific guidance for managing backcountry areas and designated and potential wilderness in accordance with applicable laws, policies, and other regulatory guidance.

Elwha River Ecosystem Restoration Final Environmental Impact Statement (Elwha FEIS, 1995), and Supplemental Environmental Impact Statement (SEIS, 2005)

The Elwha FEIS determined that the removal of Elwha and Glines Canyon dams has the potential to fully restore the ecosystem and Elwha native anadromous fish and fulfill the purpose of the congressional mandate for full restoration. The SEIS, 2005 identified and analyzed the potential impacts of a new set of water quality and supply-related mitigation measures. Boulder Creek is a tributary of the Elwha River currently entering the Lake Mills Reservoir. The actions identified in these documents are included in the cumulative effects analysis of the Boulder Creek EA.

Elwha Wild and Scenic River Eligibility Report, Final Draft (2004)

The Elwha Wild and Scenic River Eligibility Report evaluated the eligibility and classification of the Elwha River watershed as a component of the National Wild and Scenic Rivers System. The report concluded that following the restoration of the Elwha River watershed by the removal of the Elwha and Glines Canyon dams, that river and watershed segments would be eligible for wild and scenic river designation, either under a “recreational” or “wild” classification. No actions considered in the Boulder Creek EA have the potential to alter the eligibility or classification of the Elwha River for future inclusion in the Wild and Scenic Rivers System.

Park Purpose, Significance, and Mission

An essential part of the planning process is to understand the purpose and significance of the park for which an environmental assessment is being prepared.

Park Purpose

Park purpose statements are based on national park legislation, legislative history and NPS policies. The statements reaffirm the reasons for which the national park was set aside, and provide the foundation for national park management and use.

Olympic National Park protects 922,651 acres of three distinctly different ecosystems — rugged glacier-capped mountains, more than 70 miles of wild Pacific coast, and magnificent stands of old-growth and temperate rain forest. Olympic National Park encompasses and protects one of the largest wilderness areas in the contiguous United States — 95% of the park (876,669 acres) is designated wilderness, offering visitors a chance to experience the park’s amazing diversity in its natural and pristine state.

Olympic National Park was established by the House Report No. 2247 of April 28, 1938. This report established:

The purpose of Olympic National Park is to preserve for the benefit, use and enjoyment of the people, the finest sample of primeval forests of Sitka spruce, western hemlock, Douglas fir and western red cedar in the entire United States; to provide suitable winter range and permanent protection for the herds of native Roosevelt elk and other wildlife indigenous to the area; to conserve and render available to the people, for recreational use, this outstanding mountainous country, containing numerous glaciers and perpetual

snow fields, and a portion of the surrounding verdant forests together with a narrow strip along the beautiful Washington coast.

Park Significance

Park significance statements capture the essence of the national park's importance to the natural and cultural heritage of the United States of America. Significance statements do not inventory park resources; rather, they describe the park's distinctiveness and help place the park within the regional, national, and international context. Defining park significance helps park managers make decisions that preserve the resources and values necessary to accomplish the purpose of the national park.

Olympic National Park is significant because it protects several distinct and relatively pristine ecosystems, including more than 70 miles of wild Pacific coast and islands, densely forested lowlands and the glacier-crowned Olympic Mountains. The ecosystems protected within Olympic National Park contain a unique array of habitats and life forms, resulting from thousands of years of geographic isolation, and extreme gradients of elevation, temperature and precipitation. At least 16 kinds of animals and 8 kinds of plants on the Olympic Peninsula exist nowhere else in the world.

Olympic National Park protects the primeval character of one of the largest wilderness areas in the contiguous United States.

Olympic National Park protects some of the finest remaining stands of old-growth temperate rain forest in the United States. These forests of ancient and immense trees provide habitat for dozens of smaller plants and animals, including important habitat for a number of threatened species.

Olympic National Park contains some of the last remaining undisturbed, contiguous aquatic habitat throughout the range of several west coast fish species. The park protects 12 major river basins, more than 3,500 miles of rivers and stream within 11 watersheds, more than 300 high mountain lakes, and two large lowland lakes. The park also supports more than 70 unique stocks of Pacific salmonids, 29 native freshwater fish species, and one endemic fish species.

Olympic National Park protects the largest population of Roosevelt elk in its natural environment in the world. Decades of protection from human harvest and habitat manipulation have sustained not only high densities of elk, but have also preserved the natural composition, social structure and dynamics of this unique coastal form of elk as found nowhere else.

Olympic National Park protects important cultural resources with regional and national significance, including more than 650 archeological sites, hundreds of ethnographic sites, 31 cultural landscapes, and 128 historic structures that are on the List of Classified Structures.

Park Mission

Park mission statements describe conditions that exist when the legislative intent for the park is being met. The mission of Olympic National Park is,

To preserve and protect, unimpaired, the Park's diverse natural and cultural resources and provide for the enjoyment, education, and inspiration of present and future generations.

To fulfill this mission, Park staff must understand and protect the natural processes, habitats, and life forms found within the Park – from the glacier-capped Olympic Mountains, to the ancient forests, to the beaches and headlands of the wilderness coast. In addition, Park staff must protect the Park's cultural resources, which document 10,000 years of human occupation and reveal the region's history of discovery, exploration, homesteading, and community development.

Decisions to be Made

The Boulder Creek Trail and Campground Rehabilitation Environmental Assessment (Boulder Creek EA) analyzes the preferred alternative and other alternatives and their impacts on the environment. This environmental assessment has been prepared in accordance with the National Environmental Policy Act of 1969, as amended (NEPA), and regulations of the Council on Environmental Quality (40 CFR 1508.9); National Park Service Director's Order-12: *Conservation Planning, Environmental Impact Analysis, and Decision-making* (DO-12); Section 106 of the National Historic Preservation Act of 1966 (as amended); and implementing regulations 36 CFR Part 800.

The Boulder Creek EA will be used to help the National Park Service make the following decisions:

- What is the appropriate size, design and capacity of the Boulder Creek trailhead area and parking lot?
- How should the Boulder Creek Trail corridor and abandoned campground parking lot be rehabilitated and maintained?
- What level of infrastructure is appropriate at stream crossings, drainages, and washout areas along the Boulder Creek Trail?
- What is the appropriate design and capacity for the Boulder Creek Campground?
- How should the Boulder Creek Campground be rehabilitated and managed, recognizing its status as potential wilderness and an important historic site?

Scoping, Issues, and Impact Topics

Scoping

NPS staff began conducting internal scoping for the project in 2002. This included defining the draft purpose and need and project objectives, identifying potential actions to address the need, and determining what park resources would potentially be affected.

Public scoping for the Boulder Creek EA was initiated February 5, 2009. A press 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. A news release was published in the February 8, 2009 Peninsula Daily News. Respondents had the opportunity to provide written or faxed comments to the park, or electronically submit comments into the NPS Planning, Environment, and Public Comment (PEPC) website.

The public scoping period ended on March 9, 2009. The park received comments from eight individuals and three organizations. Several respondents provided useful information regarding how the work should be conducted while protecting park resources, including:

- The EA should discuss what NPS management actions would be taken to stabilize and prevent future erosion of the rehabilitated trail and stream crossings.
- Prepare a cumulative watershed effects analysis that discloses possible improvement and/or degradation of the Boulder Creek watershed, the level of disturbance contributed by the proposed action and proposed mitigation measures when project activities would cause degradation.
- Since Boulder Creek is a major tributary to the Elwha River, it is important that restoration and stabilization activities address ongoing and future erosion of fill into the creek prior to Elwha dam removal.
- The EA should look into the feasibility of air-lifting a small backhoe or other equipment capable of removing the old road surface. A helicopter can also be used to remove materials from this site.
- Full restoration, revegetation, and site delineation should take place at the campground.
- Consider minimum stream crossing structures such as simple footlogs and stock fords instead of bridges.
- Design trail reconstruction to minimize/reduce future maintenance needs and accommodate use.
- Include attractive environmental education/interpretive/leave no trace sign at trailhead.
- Reduce overall campground size and impacts, but develop some designated sites for use.
- Improve parking lot to provide additional parking, turnaround, and restroom facility.
- Provide parking and turnaround for stock trailers at the trailhead.
- Reopen the trail to stock use.
- Add educational signs acknowledging the history of the trail and the former Hot Springs Resort.

Issues and Impact Topics

Specific issues and impact topics were developed for discussion and to allow comparison of the environmental consequences of each alternative. The impact topics were identified based on internal and external scoping; federal laws, regulations, and executive orders; results of site visits; and park knowledge of potentially affected resources. A brief rationale for the selection of each impact topic and the relevant laws, regulations and policies is given in Table 1.

Scoping issues or impact topics that were considered, but not evaluated further, are discussed in "Impact Topics Eliminated from Further Consideration."

Table 1: Impact Topics Retained for Further Evaluation and Relevant Laws, Regulations, and Policies.

<i>Impact Topic</i>	<i>Reasons for Retaining Impact Topic</i>	<i>Relevant Laws, Regulations and Policies</i>
<i>Geologic Features and Soils</i>	Geologic resources would be affected under all Alternatives considered in this document; therefore, impacts to geologic resources are addressed in the environmental assessment.	<i>NPS Organic Act; NPS Management Policies 2006; NPS-77</i>
<i>Hydrology and Water Quality</i>	Water resources have the potential to be affected under all Alternatives considered in this document; therefore, impacts to hydrology and water quality are addressed in the environmental assessment.	<i>Clean Water Act; Executive Order 12088; NPS Management Policies 2006; NPS-77</i>
<i>Air Quality</i>	Air quality may be affected under all Action Alternatives considered in this document; therefore, impacts to air resources are addressed in the environmental assessment.	<i>NPS Management Policies 2006</i>
<i>Vegetation</i>	Vegetation would be affected under all Alternatives considered in this document; therefore, impacts to vegetation are addressed in the environmental assessment.	<i>NPS Organic Act; NPS Management Policies 2006; Resource Management Guidelines (NPS-77)</i>
<i>Wildlife and Wildlife Habitat</i>	Wildlife and wildlife habitat would be affected under all Action Alternatives considered in this document; therefore, impacts to wildlife are addressed in the environmental assessment.	<i>NPS Organic Act; NPS Management Policies 2006; NPS-77</i>
<i>Unique or Important Fish or Fish Habitat</i>	The Boulder Creek drainage is a major tributary to the Elwha River. The Elwha River is considered important habitat for threatened bull trout. Since Boulder Creek has the potential to be affected under all Alternatives considered in this document, impacts to unique or important fish and fish habitat are addressed in the environmental assessment.	<i>Endangered Species Act; NPS Management Policies 2006; 16 USC 1535 Section 7(a)(2)</i>
<i>Threatened and Endangered Species</i>	There is suitable habitat for marbled murrelet and northern spotted owl in the project area. The Boulder Creek drainage is a major tributary to the Elwha River, which is considered as important habitat for threatened bull trout; threatened and endangered (T & E) species may be affected under all Action Alternatives considered in this document. Therefore, impacts to T & E species are addressed in the environmental assessment.	<i>Endangered Species Act; NPS Management Policies 2006; 16 USC 1535 Section 7(a)(2)</i>

<i>Impact Topic</i>	<i>Reasons for Retaining Impact Topic</i>	<i>Relevant Laws, Regulations and Policies</i>
<i>Wetlands</i>	Natural hydrology would be restored through the removal of culverts in the Boulder Creek Campground; therefore, this topic is addressed in the environmental assessment.	<i>Executive Order (EO) II990, NPS Management Policies 2006 and DO-77-I</i>
<i>Cultural Resources</i>	Both prehistoric and historic cultural resources are known to exist in the project area; therefore, cultural resources will be further evaluated in the environmental assessment.	<i>National Historic Preservation Act (NHPA), NPS Management Policies 2006</i>
<i>Socioeconomics</i>	Implementation of any of the Action Alternatives is expected to have an effect on the local and regional economy; therefore, effects to the socioeconomic environment are addressed in the environmental assessment.	<i>NPS Management Policies 2006</i>
<i>Park Operations, Safety, and Sustainability</i>	Providing for visitor use requires operational support that ranges from the construction and maintenance of trails, campgrounds, bridges, and restrooms; to the provision of visitor safety and resource protection actions by park staff. The effects to park operations, safety, and sustainability vary across the alternatives, and are evaluated in the environmental assessment.	<i>NPS Management Policies 2006</i>
<i>Wilderness Values</i>	The Boulder Creek Trail (former road) is bordered by designated wilderness. The Boulder Creek Campground is a “Potential Wilderness Addition” area. Therefore, protection of wilderness values is addressed in the environmental assessment.	<i>Washington Park Wilderness Act of 1988, Wilderness Act of 1964, DO 41 “Wilderness Preservation and Management”</i>
<i>Visitor Use and Experience</i>	Visitor experience would be affected under all Alternatives; therefore, impacts to visitor experience are addressed in the environmental assessment.	<i>NPS Organic Act; NPS Management Policies 2006; NPS-77; The Redwood Act, 1978</i>
<i>Soundscapes</i>	Natural soundscapes would be affected under all Action Alternatives; therefore, impacts to natural soundscapes are addressed in the environmental assessment.	<i>NPS Management Policies 2006</i>

<i>Impact Topic</i>	Reasons for Retaining Impact Topic	Relevant Laws, Regulations and Policies
<i>Scenery and Visual Resources</i>	Scenery and visual resources would be affected under all Alternatives considered in this document; therefore, impacts to scenery and visual resources are addressed in the environmental assessment.	<i>NPS Management Policies 2006</i>

Impact Topics Dismissed from Further Analysis

The following topics were eliminated from detailed study because there would be no potential impacts or only negligible impacts expected.

Indian Trust Resources

Secretarial Order 3175 requires that any anticipated impacts to Indian Trust Resources from a proposed project or action by the Department of Interior agencies be explicitly addressed in environmental documents. The Federal Indian Trust responsibility is a legally enforceable fiduciary obligation on the part of the U.S. to protect tribal lands, assets, resources, and treaty rights; and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes.

The NPS does not manage or administer Indian trust assets; including trust lands and trust resources, however, activities carried out on park lands may sometimes affect tribal trust resources. Trust resources are those natural resources reserved by or for Indian tribes through treaties, statutes, judicial decisions, and executive orders, which are protected by a fiduciary obligation on the part of the U.S. While the overriding mandate for the NPS is to manage the park units in the national park system consistent with park laws and regulations, the federal government, including the NPS, has a trust responsibility to protect Indian rights and advance their interests.

No lands comprising Olympic National Park are held in trust by the Secretary of Interior solely for the benefit of American Indians due to their status as American Indians. Therefore, this topic was dismissed from further analysis.

Designated Critical Habitat, Ecologically Critical Areas, Wild and Scenic Rivers, Other Unique Natural Areas

The project area is not in a designated ecologically critical area or designated critical habitat. Boulder Creek is a tributary of the Elwha River. The Elwha Wild and Scenic River Eligibility Report concluded that following the restoration of the Elwha River watershed by the removal of the Elwha and Glines Canyon dams, that river and watershed segments would be eligible for wild and scenic river designation, either under a “recreational” or “wild” classification. No actions considered in the Boulder Creek EA have the potential to alter the eligibility or classification of the Elwha River for future inclusion in the wild and scenic rivers system. Olympic National Park is an important natural area, but the project would not threaten the associated qualities and resources that make the park unique. Therefore, designated critical

habitat, ecologically critical areas, wild and scenic rivers, and other unique natural features have been dismissed as impact topics in this environmental assessment.

Environmental Justice

Executive Order 12898 (General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations), requires all agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations or communities. No alternative under consideration would have disproportionate adverse effects on minorities or low-income populations. Therefore, environmental justice has been dismissed as an impact topic in this environmental assessment.

Prime Farmland

There are no prime or unique farmlands within the project area. Therefore, this topic is dismissed from further analysis.

Sacred Sites

There are no known Indian sacred sites in the project area.