

Chapter 1: Purpose of and Need for Action

Background and Introduction

The Spruce Railroad Trail (SRRT) is a popular year-round destination for day hikers, mountain bikers and equestrians. This unpaved, 3 ½ mile long, non-motorized, multiple-use trail begins near the outlet of Lake Crescent into the Lyre River. The SRRT trailhead is located in an unpaved parking lot reached via East Beach Road. The trail climbs a hill to bypass an area of private property located to the west of the parking lot on the shore of Lake Crescent. The trail descends the hill to connect with a section of the historic Spruce Railroad grade. The trail bypasses two historic railroad tunnels that are currently closed to visitor use and partially filled with rocky debris. The trail continues west along the railroad grade, providing access to a new 6 ½ mile long section of paved, non-motorized, multiple-use trail constructed in 2009 by Clallam County above Camp David Junior Road within Olympic National Park (ONP). This section of existing trail is referred to in this document as the Olympic Discovery Trail, Phase 1 (ODT Phase 1).

The National Park Service proposes to improve the existing SRRT described above. This action is identified in the park's 2008 General Management Plan (GMP) and 1998 Lake Crescent Management Plan (LCMP) as a goal for future management of the Lake Crescent area. Specific language from these two plans is referenced below. Some of these actions have been completed. A description of the existing visitor experience and resource conditions is included in Chapter 2, Alternative 1 – No Action.

The GMP states that,

- The existing frontcountry trail system at Lake Crescent will be retained and could be improved.
- A universally accessible frontcountry trail will be developed and maintained.
- The Spruce Railroad Trail will be extended west as part of planned improvements by Clallam County to make this trail part of the Olympic Discovery Trail (GMP Vol. 2, p 15).
- When complete, the Olympic Discovery Trail will lead from Port Townsend to Port Angeles and then west to the Pacific Coast.

The LCMP states that the NPS will, among other things,

- **Improve the Spruce Railroad grade to the western park boundary as a non-motorized, multi-purpose trail.** In the short-term, the Spruce Railroad grade would be leveled and cleared of debris to improve its use by mountain bikers, horseback riders and pedestrians. In the long-term, and as it is possible to resolve conflicting uses, the grade would be improved to provide a continuous trail from the Lyre River to the western park boundary for multiple uses, including some or all of the following: pedestrians, wheelchairs, bicycles, horses and rollerblades.

- **Improve the North Shore picnic area.** The park anticipates the increased use of the North Shore picnic area by visitors arriving via foot, bicycle, or boat. In its present condition, the beach area is overgrown with vegetation and few picnic sites are available. Access from the parking lot to the beach would be improved by installing stairs and accessible paths/trails, which would also prevent further erosion of the slope directly above the beach. In the parking area, individual spaces would be delineated with wheel stops. Accessible toilets (vault or composting) would replace existing toilets. Other improvements include interpretive signs and a kiosk showing connections to trails and other destinations.
- **Analyze parking needs and provide for modest expansion at the east and west ends of the Spruce Railroad trail.** As the Spruce Railroad trail is improved and possibly lengthened and developed for multiple uses, the need for parking must be accommodated. The park would analyze the need for modest expansion of the parking areas at the east and west ends of the Spruce Railroad trail.
- **Develop interpretive displays at each end of the Spruce Railroad trail.** The remaining Spruce Railroad grade would be improved to accommodate a full range of non-motorized uses (e.g., hiking, bicycling, and horseback riding). Interpretive displays would be developed to serve the users of this trail.
- **Install accessible toilets at each end of the Spruce Railroad trail.** In anticipation of increased use of the Spruce Railroad trail, accessible toilets (vault or composting) would be constructed at the east and west trailheads.
- **To improve safety and accommodate bicycles, investigate the feasibility of widening East Beach Road, Piedmont Road, and Lyre River Road to provide four-foot wide paved shoulders.** East Beach and Piedmont roads are difficult for bike passage because they are narrow. The park would explore the possibility, with Clallam County and the Washington State Department of Transportation, of widening these roads to provide four-foot wide paved shoulders. This would improve bicycle circulation around Lake Crescent and facilitate bike travel between Lake Crescent and Joyce along U.S. 112.
- **Concession option to provide bike rental service.** The Washington State Department of Transportation analyzed a variety of alternatives for improving bicycle access through the Lake Crescent area (WSDOT 1997a). The preferred alternative called for improving the Spruce Railroad grade as a safer and more enjoyable route for bicycle traffic than U.S. 101. The proximity of Fairholme and Log Cabin Resort to this trail presents an opportunity for establishing a bike rental service, which would be operated by a private concessioner.

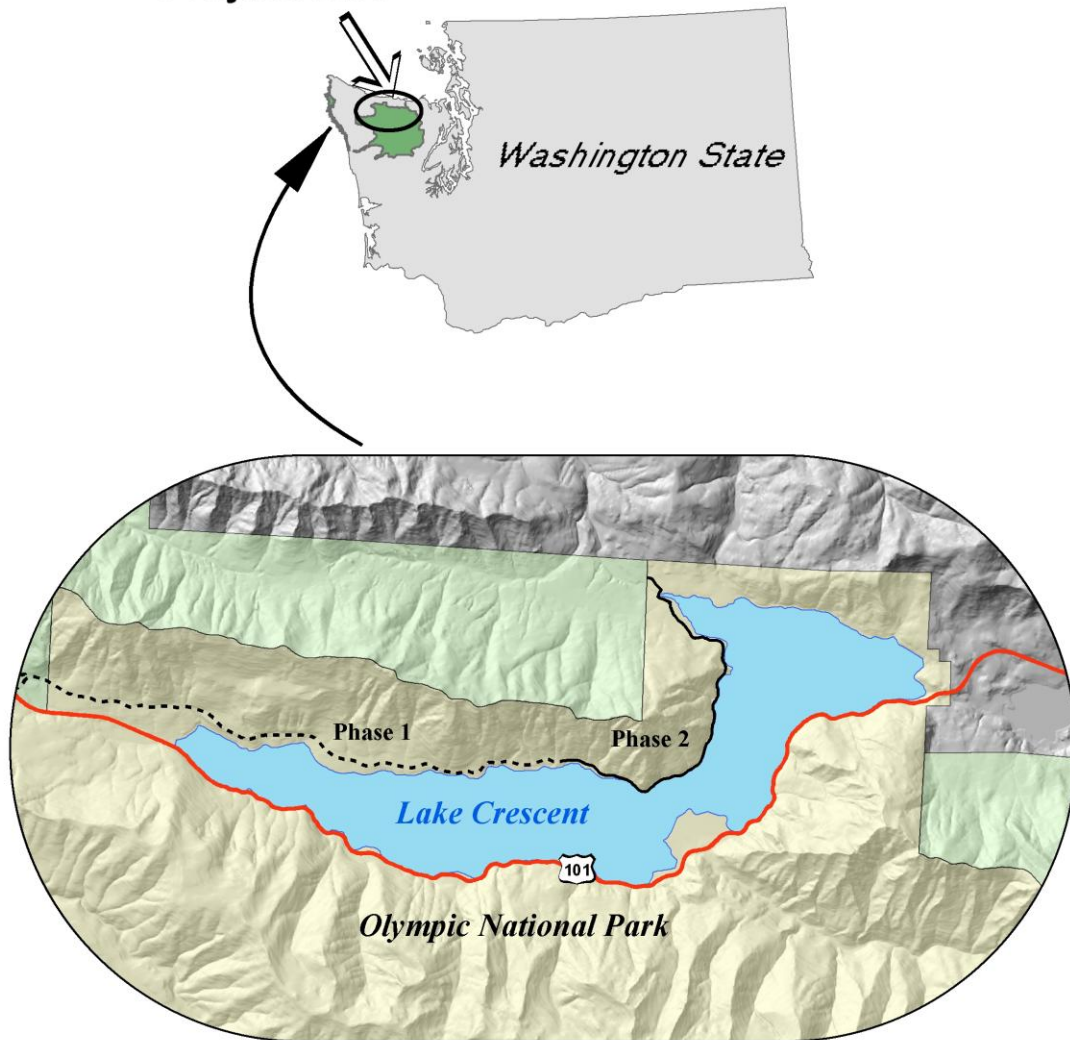
The LCMP Record of Decision (ROD) states that although the LCMP provides specific direction for future management decisions regarding resource protection and public use at Lake Crescent, it does not contain detailed site designs. As funding allows individual site plans for specific areas around the lake will be completed based on the recommendations in the LCMP. The site plans will address various aspects of site development including the location of roads, buildings and facilities, vehicle and pedestrian circulation, recreational facilities, and the protection of natural and cultural resources. In many cases, further environmental analysis will be completed for specific development and construction designs (LCMP ROD. 1998. pp. 2-3).

An environmental assessment that considered a range of development options for the Spruce Railroad Trail was released for public review and comment in 2011. Public comments received called into question the NPS Preferred Alternative. The primary visitor concerns related to the degree of accessibility for people with disabilities, the design standards used to develop the various trail alternatives, the relative safety associated with proposed trail design, and effects to visitor experience.

In response to public comments the NPS reconsidered the trail design and modified the alternatives to reflect a range of public concerns and suggestions. A new NPS preferred alternative was selected as a result of this process, and is described along with three other action alternatives and a no-action alternative in Chapter 2 of this environmental assessment. This analysis was completed in accordance with applicable laws and policies including the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), Endangered Species Act (ESA), the NPS Organic Act, and NPS Management Policies.

Spruce Railroad Trail at Olympic National Park

Project Site



Spruce Railroad Project Location



Figure 6. Vicinity Map

Purpose of and Need for Action

The purpose of this project is to improve the historic Spruce Railroad grade within Olympic National Park, as a non-motorized, multipurpose trail as identified in the GMP and LCMP. This includes the existing Spruce Railroad Trail at Lake Crescent.

The area proposed for development is zoned for day use in the GMP. Day use areas provide many opportunities to enjoy park scenery, have educational experiences, and participate in trail/water-based day use recreation. Trail classifications approved in the GMP include: nature, all-purpose, multipurpose bicycle, secondary foot, and primitive trails. The GMP also states that some trails will be universally accessible.

The development actions considered in this EA are consistent with the 2009 Draft Final Accessibility Guidelines for Outdoor Developed Areas. These guidelines apply to Federal land management agencies, including the U.S. Forest Service, National Park Service, Fish and Wildlife Service, Bureau of Land Management, Bureau of Reclamation, and Army Corps of Engineers. The draft final accessibility guidelines also apply to the following non-federal entities that construct or alter facilities on Federal lands on behalf of the Federal government:

- Private entities that construct or alter camping facilities, picnic facilities, or beach facilities on Federal lands pursuant to a concession contract or other arrangement with a Federal agency under which the Federal agency reviews or approves the design of the facility and has a property interest in the facility;
- State or local government entities that construct or alter camping facilities, picnic facilities, or beach facilities on Federal lands pursuant to an agreement with a Federal agency under which the Federal agency reviews or approves the design of the facility and has a property interest in the facility; and
- Non-profit organizations and State or local government entities that enter into partnerships with a Federal agency to construct or alter trails or viewing areas on Federal lands.

Architectural Barriers Act Accessibility Standards (ABAAS)/Outdoor Recreation Guidelines must be adhered to for any project or program built or operated that uses federal funding. Consistent with the LCMP, the NPS proposes to improve the historic Spruce Railroad grade to provide a continuous trail from the Lyre River to the western park boundary for multiple uses, including some or all of the following: pedestrians, wheelchairs, bicycles, horses, and rollerblades.

Management Goals and Objectives

The goals related to the development of the historic Spruce Railroad grade and the existing SRRT are based on federal legislation, NPS 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

Cultural Resource Management Objectives:

- Avoid or minimize the potential for adverse effects to historic properties.
- Maintain, preserve, and interpret the buildings and cultural landscape including, but not limited to the Spruce Railroad Grade.
- Protect contributing physical elements of historic Spruce Railroad grade.
- Protect Cultural Resources, including archeological resources.

Fisheries and Water Resource Management Objectives:

- Protect the pristine quality of the water and ecology of the Lake Crescent watershed.
- Protect critical spawning and rearing areas that are used by the lake's unique fish populations, and maintain natural terrestrial and aquatic communities upon which they depend.
- Maintain slope stability and provide appropriate drainage and sediment control along the trail to minimize erosion and protect water quality.
- Protect shoreline processes, including wood recruitment.
- Protect shoreline – minimize new impacts (bank armoring).
- Design stream crossings to accommodate high water flows and minimize adverse impacts to park resources.

Wildlife Management Objectives:

- Avoid or minimize adverse effects to Threatened and Endangered Species and suitable habitat.
- Minimize disturbance to wildlife during project implementation.
- Provide adequate facilities to avoid visitor use/wildlife conflicts (e.g., animal-resistant trashcans).

Vegetation Management Objectives:

- Retain and preserve old-growth forests and natural processes in the Lake Crescent watershed.
- Protect aquatic vegetation and habitat, including water lobelia (*Lobelia dortmanna*).
- Promote the reestablishment of locally native vegetation in the project area consistent with the surrounding plant community.
- Prevent introduction or spread of invasive exotic plants (from construction, maintenance, and operation of non-motorized, multipurpose trail).

Goal 2: Improve Visitor Experience

Resource Education and Interpretation Objectives:

- Improve interpretation of historic Spruce Railroad Grade.
- Interpret lake ecology and unique resources: plants, fish, water quality, geologic history.
- Improve visitor orientation, interpretation, and visitor services to better serve visitors traveling along the US 101 corridor.

Visitor Access Objectives:

- Provide safe pedestrian and bicycle access through the Lake Crescent area for visitors and the traveling public and reduce conflicts between non-motorized and motorized uses.
- Provide adequate parking and vehicle turnaround space at the Lyre River trailhead for safe pedestrian use.
- Provide all visitors, including those with disabilities, the opportunity to visit, learn about, and enjoy the unique natural and cultural resources of the area.

Visitor Experience Objectives:

- Provide opportunities for a variety of outdoor experiences and recreation uses that minimize conflicts between recreational users, and are compatible with the protection of park resources and values.
- Protect views from Lake Crescent and Highway 101.
- Provide appropriate facilities to support visitor use. This may include, but is not limited to: benches, picnic tables, comfort stations, trash receptacles, and a means for proper pet waste disposal.

Park Operational Objectives:

- Design the improvements to the historic Spruce Railroad grade and the existing SRRT to facilitate effective and sustainable ongoing management, maintenance, and visitor use.
- Protect the trail from future damage by including sustainable trail design measures at stream crossings and slide areas.

- Design trail to preclude unauthorized vehicular access.
- Provide for the continued use of private property within the Lake Crescent watershed while minimizing the impacts and effects of private development on the visitor experience, lake ecology, scenic and visual quality, and the historic setting.

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 legal mandate:

“... 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 Organic Act – along with other applicable laws, policies, and plans, directs management within ONP.

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.”

The impairment that is prohibited by the Organic Act is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that would otherwise be present for the enjoyment of those resources or values. Whether an impact meets this definition depends on the particular resources and values that would be affected; the severity, duration, and timing of the impact; and the cumulative effects of the impact in question and other impacts.

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

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

An impact would be less likely to constitute impairment if it is an unavoidable result of an action necessary to preserve or restore the integrity of park resources or values and it cannot be further mitigated.

An impact that may, but would not necessarily, lead to impairment may result from visitor activities; NPS administrative activities; or activities undertaken by concessioners, contractors, and others operating in the park. Impairment may also result from sources or activities outside the park (NPS, 2006). A written impairment determination for the proposed improvement of the Spruce Railroad Trail (SRRT) described in Alternative 4 (NPS Preferred Alternative) is included as Attachment C to this environmental assessment.

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 making official decisions or taking actions that have the potential to affect the human environment.

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.

Architectural Barriers Act and Architectural Barriers Act Accessibility Standards (ABAAS)

The Architectural Barriers Act Accessibility Standards (ABAAS) replaced the Uniform Federal Accessibility Standard (UFAS). Accessibility to all newly constructed and altered NPS buildings and facilities is required by the Architectural Barriers Act of 1968, and the Rehabilitation Act of 1973, as amended. Beginning in 1984 the required design and construction standards for compliance with these mandates were in the UFAS and the Americans with Disabilities Act (ADA) accessibility guidelines. The United States Access Board has worked to combine these documents, resulting in the Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines (ADAABAAG), published in 2004. The new standards went into effect on May 8, 2006.

Executive Orders

- Executive Order 13112 Invasive Species
- Executive Order 11988 Floodplain Management
- Executive Order 11990 Protection of Wetlands
- Executive Order 13195 Trails for America in the 21st Century
- Presidential Memorandum -- America's Great Outdoors

Management Policies

The NPS Management Policies 2006 (NPS 2006) provide guidance for management of all national park units. Several sections address various elements related to the alternatives considered in this document. For example, Section 9.2 addresses Transportation Systems and Alternative Transportation. This sections states that the location, type, and design of transportation systems and their components (e.g., roads, bridges, trails, and parking areas), and the use of alternative transportation systems, all strongly influence the quality of the visitor experience. These systems also affect, to a great degree, how and where park resources will be impacted. For these reasons, management decisions regarding transportation facilities require a full, interdisciplinary consideration of alternatives and a full understanding of their consequences.

Before a decision is made to design, construct, expand, or upgrade access to or within a park, non-construction alternatives, such as distributing visitors to alternative locations, must be fully explored. If non-construction alternatives will not achieve satisfactory results, then a development solution should consider whether the project:

- Is appropriate and necessary to meet park management needs or to provide for visitor use and enjoyment;
- Is designed with extreme care and sensitivity to the landscape through which it passes;
- Will not cause unacceptable impacts on natural and cultural resources and will minimize or mitigate those impacts that cannot be avoided;
- Will reduce traffic congestion, noise, air pollution, and adverse effects on park resources and values;
- Will not cause use in the areas it serves to exceed the areas' visitor carrying capacities;
- Will incorporate the principles of energy conservation and sustainability;
- Is able to demonstrate financial and operational sustainability;
- Will incorporate universal design principles to provide accessibility for all people, including those with disabilities;
- Will take maximum advantage of interpretive opportunities and scenic values;
- Will not violate federal, state, or local air pollution control plans or regulations;

- Is based on a comprehensive and multidisciplinary approach that is fully consistent with the park’s general management plan and asset management plan;
- Will enhance the visitor experience by offering new or improved interpretive or recreational opportunities, by simplifying travel within the park, or by making it easier or safer to see park features.

Other guidance may be found throughout NPS Management Policies, including

9.2.2 Trails and Walks

9.2.2.1 Cooperative Trail Planning

9.2.2.2 Hiking Trails

9.2.2.3 Equestrian Trails

9.2.2.4 Bicycle Trails

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. 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 Resource Management Planning
- DO-12 Environmental Impact Assessment
- DO-28 Cultural Resources
- DO-42 Accessibility
- Director's Order 50C Public Risk Management Program
- Director's Order 75A Civic Engagement and Public Involvement
- DO-77 Natural Resource Protection

Park Planning Documents Related to the Spruce Railroad Trail Development and Improvement 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 ONP and establishes broad direction for managing the Spruce

Railroad Trail and Lake Crescent area of the park. The SRRT EA guides implementation of the portions of the GMP that deal with the Spruce Railroad Trail.

Lake Crescent Management Plan (LCMP) and Environmental Impact Statement (1998)

The LCMP identified resource protection and visitor experience goals for the Lake Crescent area of the park. The SRRT EA guides implementation of the portions of the LCMP that deal with the Spruce Railroad Trail and historic Spruce Railroad grade.

Spruce Railroad Trail Expansion and Improvement (SRRT) Environmental Assessment (2011)

The SRRT EA considered a range of alternatives related to the development and extension of the Spruce Railroad Trail along the general route of the historic Spruce Railroad Grade. This EA did not result in an approved design. The alternatives considered in the 2011 SRRT EA were revised based on public input and are described and evaluated in the 2012 Spruce Railroad Trail Improvement EA (2012 SRRT EA).

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.

ONP 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 7 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. ONP 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 streams 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 two 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 – including the historic Spruce Railroad that is associated with World War I.

Decisions to be made

The 2012 Spruce Railroad Trail Improvement Environmental Assessment (2012 SRRT EA) analyzes the NPS preferred alternative, 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); NPS 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 2012 SRRT EA will be used to help the NPS make the following decisions:

- What changes to the alignment and design of the Spruce Railroad Trail would result in the greatest benefits to park visitors while protecting natural and cultural resources?
- How should the Lyre River and North Shore parking lots be improved to accommodate visitor use?
- Would the proposed development result in a significant impact to the environment?
- Would the proposed development result in an adverse effect to the historic Spruce Railroad, which is listed on the National Register of Historic Places?
- Would the proposed development be likely to adversely affect species protected by the Endangered Species Act?

Scoping, Issues, and Impact Topics

Scoping

NPS staff began conducting internal scoping for the project in 2009 in response to a proposal for trail development that was submitted by Clallam County. 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.

A 30-day public scoping for the Spruce Railroad Trail EA was initiated July 2, 2010. 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 July 8, 2010 Peninsula Daily News. Respondents had the opportunity to provide written comments, fax comments, or input comments into the NPS Planning, Environment, and Public Comment (PEPC) website.

A public scoping meeting was held on July 20, 2010 at the Clallam County Courthouse in the Commissioners' Meeting Room. Public comments were taken during the workshop.

A public site visit was conducted on July 24, 2010 at the existing Spruce Railroad Trail. Park staff was on site to meet with park visitors to discuss the proposed trail development and answer questions.

The public scoping period ended on August 6, 2010. The park received over 140 responses from individuals, representatives of recreation organizations, and local agencies. Comments received during the scoping period are available for review on the park's Planning, Environment, and Public Comment (PEPC) website at <http://parkplanning.nps.gov/olym>. Respondents provided useful information regarding how the work should be conducted, including:

- The EA should discuss what NPS management actions would be taken to stabilize and prevent future erosion of the trail.
- Consider the cumulative effects of this section of trail development with other park and regional trail systems.
- Design trail to be consistent with recognized standards and guidelines for developing multiple use trails, including accessibility standards and guidelines.
- Design trail construction to minimize/reduce future maintenance needs and accommodate use.
- Include attractive environmental education/interpretive/leave no trace signs at trailheads.
- Improve parking lots to provide additional parking, turnaround, and restroom facilities.
- Provide parking and turnaround for stock trailers at the trailhead.
- Provide for an accessible trail experience beyond the existing, short nature trails in the park.
- Avoid or minimize impacts to the forest, lake, and surrounding habitat.
- Consider the effects of new development on current users of the Spruce Railroad Trail.
- Consider the effects of new development on adjacent private lands.
- Consider re-opening the two historic railroad tunnels.

An additional public meeting was held on October 4, 2010 to present the range of preliminary alternatives that were developed in response to feedback provided during public scoping. Park staff shared key details of each alternative, including the proposed trail alignment, width, surface materials, access points, and associated visitor services. These alternatives were further refined and analyzed as described in the 2011 SRRT EA.

The 2011 SRRT EA was made available for public review and comment between September 21 and October 21, 2011. A public meeting to present the alternatives and answer questions was

held in Port Angeles at the Vern Burton Community Center on September 21, 2011. Many questions and concerns were voiced, particularly related to accessibility for people with disabilities and trail design standards and guidelines.

NPS policy for implementing the National Environmental Policy Act (NEPA) provides the following guidance related to the analysis of public comment on an environmental assessment (EA): screen EA comments for:

- **Important new issues**

For the 2011 SRRT EA public comments, the primary issues of concern were:

- Universal accessibility (applicable laws, design standards, visitor opportunities, personal values)
- Safety (adherence to established design standards, safe access (Hwy 101, East Beach Road, Fairholme Hill, Sol Duc), conflicts among users (passing widths, safe/unsafe speeds, surface (impacts to hikers, walkers, runners from asphalt))
- Visitor Experience (people expressed a wide range of preferences associated with the SRRT, ranging from those who would prefer the park make no changes to those who would prefer even more development than what was considered in the SRRT EA).

- **Reasonable alternatives**

For the SRRT EA new alternatives brought up in public comments included:

- Consideration of a revised proposal by Clallam County (as compared to Alternative 4 included in the 2011 SRRT EA)
- Consideration of an alternative that would provide accessibility to the historic railroad grade by making improvements to the current railroad tunnel bypass trails (while retaining the same trail surface and general design)
- Alternatives that provide for variations of the paved and unpaved trail widths to better accommodate various user groups, including:
 - 10 – 12 feet of paved trail width to meet AASHTO guidelines w/o exception to 8 feet minimum as considered in Alternative 4
 - Six feet asphalt with six feet of adjacent natural tread trail to provide passing width for horses, runners and mountain bikers the same as proposed for wheelchairs, pedestrians and road bicyclists.
 - Trail alignment as proposed in Alternative 3, but with asphalt width reduced to 36” as proposed in Alternative 2.
 - 8 feet asphalt with only 2 feet gravel for equestrian use, or eliminate equestrian use.
- Improve East Beach road to provide a safe bypass for cyclists around Lake Crescent for people arriving on Highway 101 corridor, not just for people arriving via Highway 112 via Water Line Road.
- Work with adjacent landowners to acquire access on historic railroad grade to avoid steep sections of trail (Segment D and Sol Duc)
- Develop a trail underpass to Highway 101 to avoid at-grade crossing proposed by Clallam County.

- Designate tunnel bypass trails for use by pedestrians only to provide an opportunity for people to experience the SRRT without asphalt and in the absence of potentially conflicting trail uses (bicycles, stock use).
- Develop alternative to rip rap for downslope bank stabilization along Lake Crescent shoreline to mitigate impacts to aquatic habitat, such as those developed in other areas of the park that incorporate large woody debris.

- **Mitigation measures**

In addition to alternatives/actions described above, there were comments related to trail surface that requested the park consider permeable alternatives to asphalt for the parking lot and trail surface to reduce impacts to trail runners, walkers, and hikers associated with asphalt paving.

- **Corrections or additions of information related to impact analysis and determination of significant impact**

- Several people provided information about trail design standards, primarily related to compliance with AASHTO guidelines to support safety for multiple use (shared use) trails.
- Multiple people commented about concerns related to visitor safety associated with trail width, trail grade, crossing of Highway 101 at Fairholme, presence of fast-moving bicycles on the trail with other users, trail surface, and trail access along East Beach Road.
- There were requests for additional information about current use of the SRRT, and also for more detailed information about the trail alignment on the east end (Lyre River/Segment D).
- There were several statements and questions regarding how the trail proposals are influenced by the features of the historic Spruce Railroad.
- Information was provided by some regarding the design standards of other segments of the Olympic Discovery Trail (ODT) outside of the park that are different from what was considered in the SRRT EA (specifically related to the use on non-asphalt surface materials and variable trail widths and user groups).

After considering public comments the NPS decided to revise and reissue the SRRT EA. The 2012 SRRT EA considers alternatives that were modified in response to public comments described above. The 2012 SRRT EA also describes why some actions proposed during the public review period were considered, but dismissed. This is described in greater detail in Chapter 2.

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.” The issues and impact topics addressed in the 2012 SRRT EA are the same as those identified in the 2011 SRRT EA.

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; Scoping comments included concerns related to erosion from trail development, 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 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>	Several comments were received regarding potential impacts to the forest and other native plants in the project area. 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>Wetlands</i>	Some alternatives considered may affect wetlands. Therefore, this topic is addressed in the environmental assessment.	<i>Executive Order (EO) 11990, NPS Management Policies 2006 and DO-77-I</i>
<i>Wildlife and Wildlife Habitat</i>	Public comments voiced concern about potential impacts to wildlife due to trail construction. Wildlife and wildlife habitat would be affected under all 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>Impact Topic</i>	<i>Reasons for Retaining Impact Topic</i>	<i>Relevant Laws, Regulations and Policies</i>
<i>Unique or Important Fish or Fish Habitat</i>	Lake Crescent is habitat for rare species of endemic fish. Actions proposed may have the potential to affect habitat quality. Therefore impacts to important fish and fish habitat are addressed in the environmental assessment.	<i>NPS Management Policies 2006</i>
<i>Threatened and Endangered Species</i>	There is suitable habitat for marbled murrelet and northern spotted owl in the project area. Threatened and endangered (T & E) species may be affected under all 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>Cultural Resources</i>	Several public comments expressed support for improving the condition of historic features, particularly the two railroad tunnels. The Spruce Railroad Trail includes segments of the historic Spruce Railroad grade that are eligible for inclusion on the National Register of Historic Places. 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>Visitor Use, Experience and Accessibility</i>	Many comments were received expressing support for improving the accessibility of the trail, and also for retaining the current condition of the trail. Visitor experience would be affected under all alternatives. A short section of the trail would not meet federal outdoor accessibility guidelines due to the steepness of the terrain and extent of adverse effects to other park resources to achieve an accessible grade; therefore, impacts to visitor experience and accessibility are addressed in the environmental assessment.	<i>NPS Organic Act; NPS Management Policies 2006; NPS-77; The Redwood Act, 1978; Draft Final Federal Outdoor Accessibility Guidelines, 2009</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>	<i>Reasons for Retaining Impact Topic</i>	<i>Relevant Laws, Regulations and Policies</i>
<i>Scenery and Visual Resources</i>	Public comments included some statements of concern regarding the impacts of new development on the north shore area of Lake Crescent. 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>
<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>Land Use</i>	The project area is adjacent to several privately owned parcels within ONP. Some land owners expressed concern regarding the impacts of trail development, maintenance and use on their private property. The alternatives considered would have variable effects on adjacent land use; therefore, impacts to land use are addressed in the environmental assessment.	<i>NPS Management Policies 2006</i>
<i>Socioeconomics</i>	Some comments were received related to the potential for trail development to support economic gains for local communities. 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>

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 Indians rights and advance their interests.

No lands comprising ONP are held in trust by the Secretary of Interior solely for the benefit of American Indians due to their status as American Indians. No Tribal concerns were voiced during the development of this environmental assessment. 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. 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.