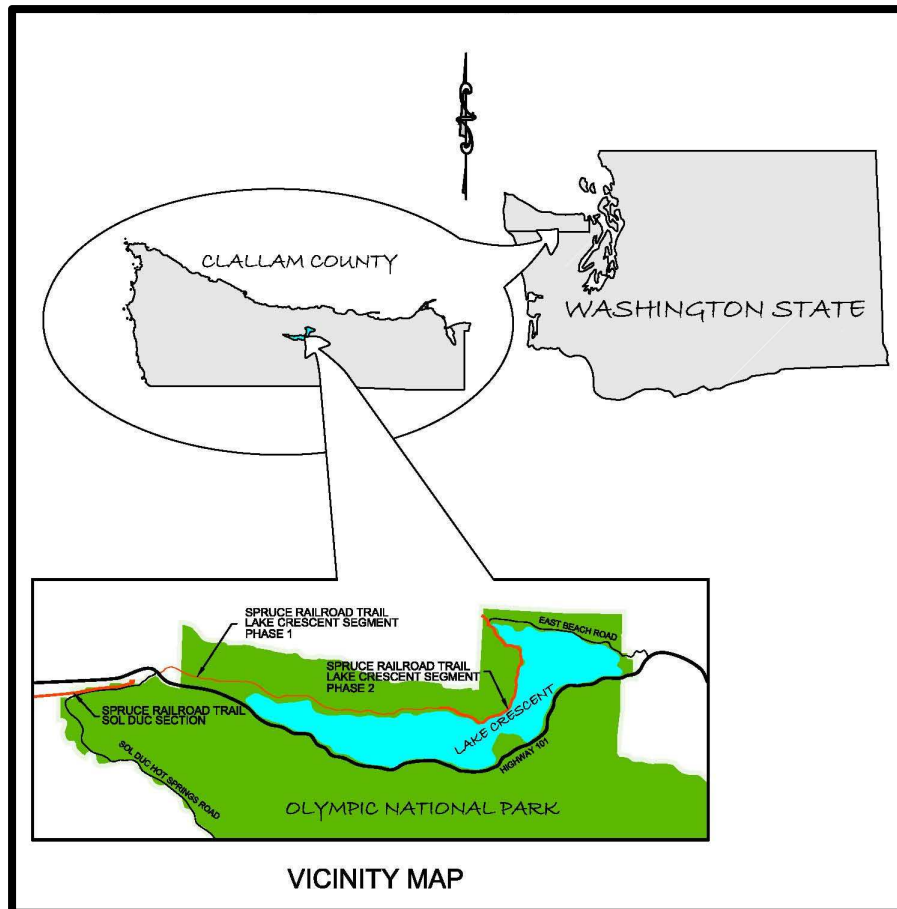


Spruce Railroad Trail Expansion and Improvement Environmental Assessment (SRRT EA)



U.S. Department of the Interior
National Park Service
Olympic National Park
September 15, 2011

The National Park Service (NPS) proposes to expand and improve the Spruce Railroad Trail in Olympic National Park in the general area of the historic Spruce Railroad to provide a non-motorized, multiuse, recreational trail that improves accessibility and accommodates hikers, bicyclists, and people traveling with stock. This environmental assessment was developed in accordance with the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), Endangered Species Act (ESA), the Architectural Barriers Act (ABA), and NPS Management Policies. Public review and comment is requested.

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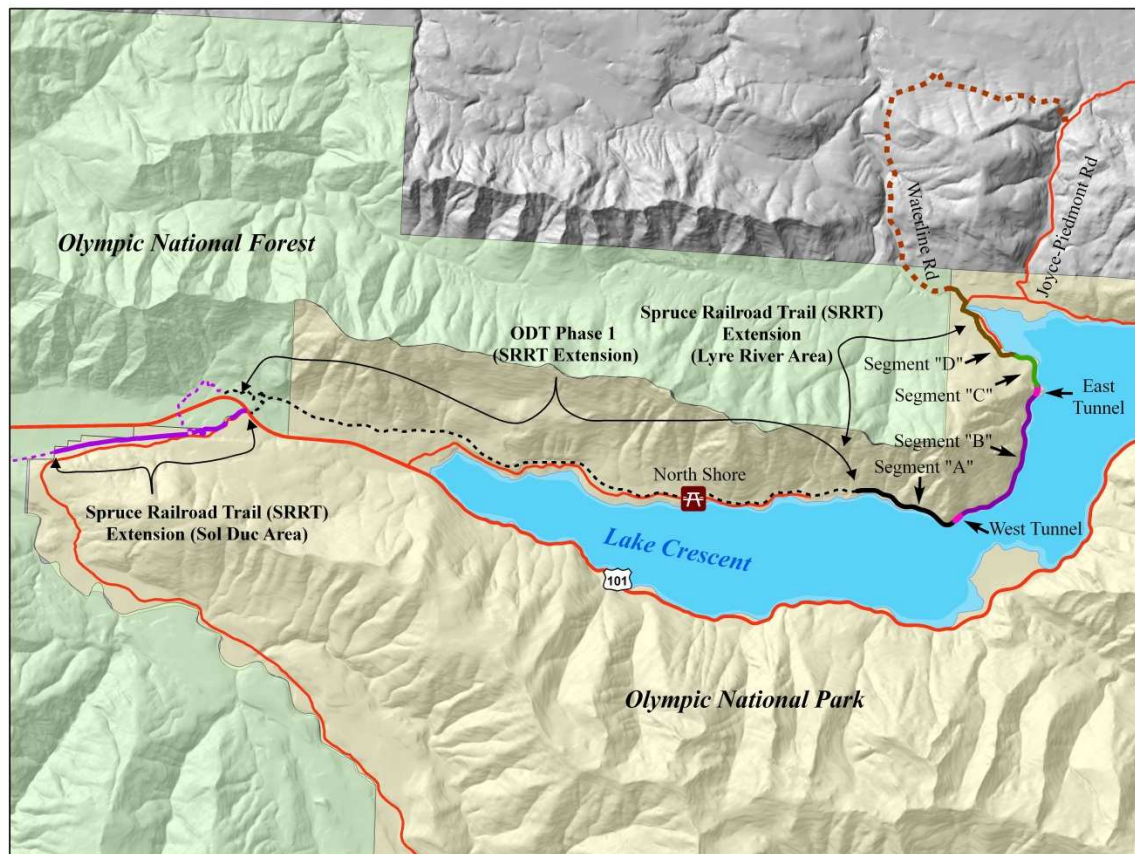
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Spruce Railroad Trail Environmental Assessment

Executive Summary

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 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 the park.



The National Park Service (NPS) proposes to improve the existing SRRT described above, and to develop new, non-motorized, multiple-use trail along the remaining historic Spruce Railroad grade within Olympic National Park (ONP). 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.

This environmental assessment considers specific development and construction designs related to improving the Spruce Railroad grade as identified above. This analysis is being completed in accordance with applicable laws and policies including the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), Endangered Species Act (ESA), and the National Park Service Organic Act and NPS Management Policies.

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, multiple purpose trail as identified in the GMP and LCMP. This includes the existing Spruce Railroad Trail.

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.

This project is being developed in accordance with the Draft Final Accessibility Guidelines for Outdoor Developed Areas. The 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 non-Federal entities that construct or alter facilities on Federal lands on behalf of the Federal government.

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

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, 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

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 and Sol Duc watersheds.
- 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 and Sol Duc watersheds.
- 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 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.

Public Scoping

In 2009, NPS staff began conducting internal scoping for the proposed improvement and expansion of the existing Spruce Railroad Trail (SRRT) addressed in this environmental assessment in response to a proposal submitted by Clallam County. Internal scoping to evaluate the new trail proposal began during the early stages of construction on what is now known as Phase I of the Olympic Discovery Trail (ODT). Internal scoping 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 public scoping meeting was held on July 20, 2010 at the Clallam County Courthouse in the Commissioners' Meeting Room. A public site visit was conducted on July 24, 2010 at the existing Spruce Railroad Trail. The public scoping period ended on August 6, 2010. The park received over 140 written 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 while protecting park resources, 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 sign at trailhead.
- Improve parking lot to provide additional parking, turnaround, and restroom facility.
- 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 proposed trail alignment, width, surface materials, access points, and associated visitor services.

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.

Impact topics carried forward for consideration in this EA include: geologic resources and soils, hydrology and water quality, air quality, vegetation, wetlands, wildlife and wildlife habitat, unique or important fish or fish habitat, Threatened and Endangered Species, cultural resources, the historic Spruce Railroad, visitor use and experience, soundscapes, scenic values, park operations and safety, and socioeconomics.

The following topics were eliminated from detailed study because there would be no potential impacts or only negligible impacts would be expected: Indian Trust Resources; Designated Critical Habitat, Ecologically Critical Areas, Wild and Scenic Rivers, Other Unique Natural Area; Environmental Justice; Prime Farmland, and Sacred Sites.

Alternatives

The Spruce Railroad Trail (SRRT) environmental assessment considers the environmental consequences of four alternatives, or approaches, to achieving the identified purpose and need while achieving management objectives related to resource protection and visitor use to the greatest extent possible.

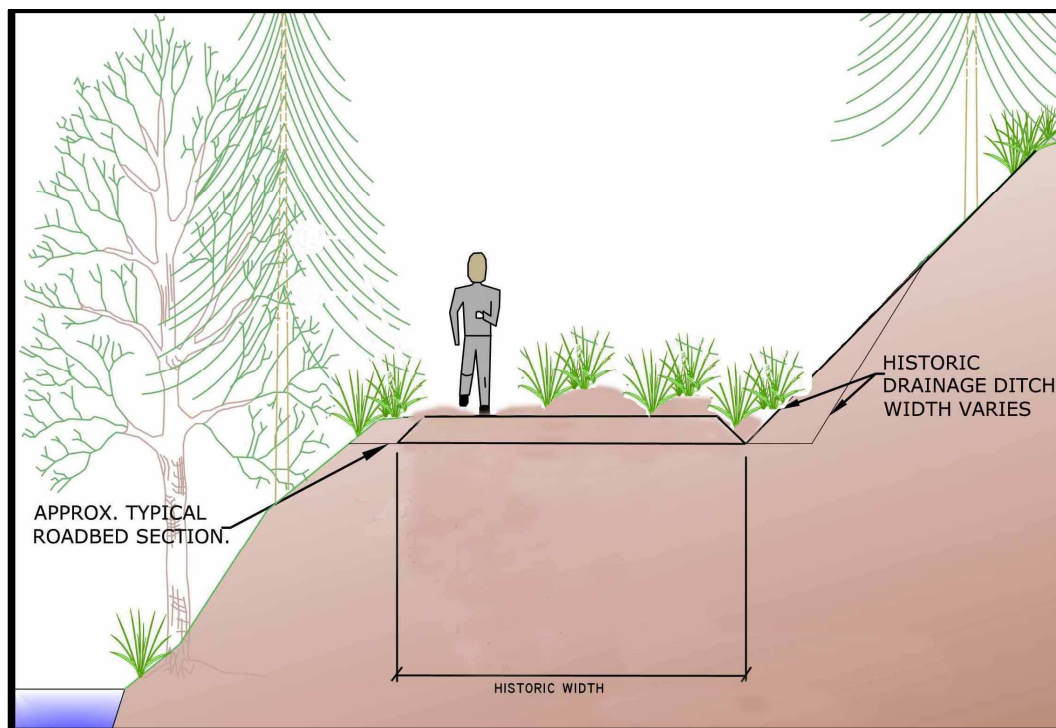


Figure 1. Trail profile (historic railroad sections) existing conditions

Alternative 1: No Action (Environmentally Preferred Alternative)

The “No Action” alternative would continue current management and is included to provide a baseline against which other alternatives may be considered. No new trail would be developed. The existing Spruce Railroad Trail (SRRT) would not be improved. The two historic railroad tunnels would not be opened. Parking would not be expanded or paved. No new access to the SRRT or ODT Phase 1 would be constructed.

Alternative 2: Recreation Trail Emphasis

Under this alternative 1.9 miles of new trail would be constructed in the Sol Duc area of the park, including 1.4 miles on the historic Spruce Railroad grade. This new trail would be constructed in accordance with the 2009 Federal Outdoor Accessibility Guidelines to meet minimum accessibility guidelines for new recreation trails on Federal lands. The trail would be 5 feet wide with a compacted gravel surface. The trail would be open to hikers and bicyclists, but not to stock use in order to maintain a firm and stable trail surface for wheelchairs that is consistent with the outdoor accessibility standards (Access Board 2009).

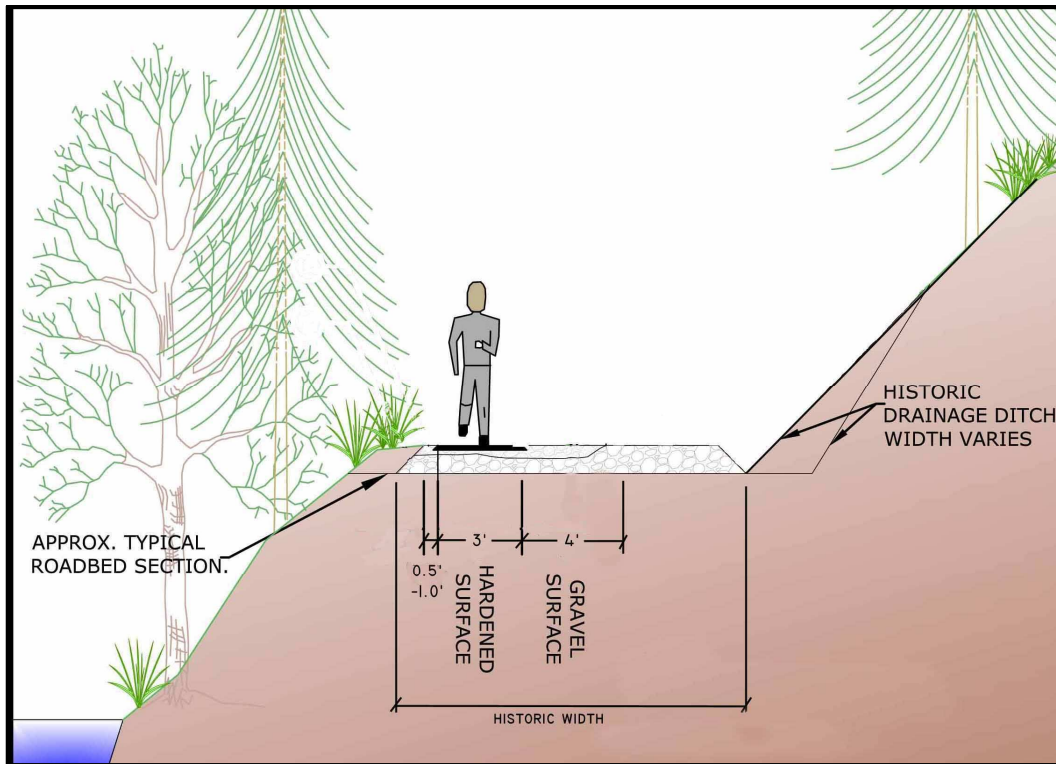


Figure 2. Trail profile (segment A) for Alternative 2

The existing SRRT would be widened and paved in Segment A, between Phase 1 of the Olympic Discovery Trail (ODT Phase 1), constructed above Camp David Junior Road (CDJR) in 2009, and the west (short) railroad tunnel. The paved trail would be three feet wide with widened passing areas every 1000 feet. A four foot wide gravel shoulder would be maintained upslope of the asphalt trail to accommodate equestrian use. The two historic railroad tunnels would not be opened for trail use.

The remaining sections of the SRRT would remain essentially unchanged, although gravel surfacing would be added as necessary to improve the trail surface and reduce the extent of muddy areas.

Two accessible parking spaces would be developed on CDJR adjacent to the existing North Shore Picnic Area parking lot. A universally accessible trail from the new parking spaces to the ODT Phase 1 would be constructed. The existing SRRT parking lot near the Lyre River would be expanded once a NPS owned vacant property is removed. The area between the expanded parking lot and the shoreline would be rehabilitated.

Improved interpretation would be provided at trailheads and along the trail to increase visitor understanding and enjoyment of the natural and cultural history of the area. Trash receptacles and pet waste disposal stations would also be installed.

Alternative 3: NPS Preferred Alternative

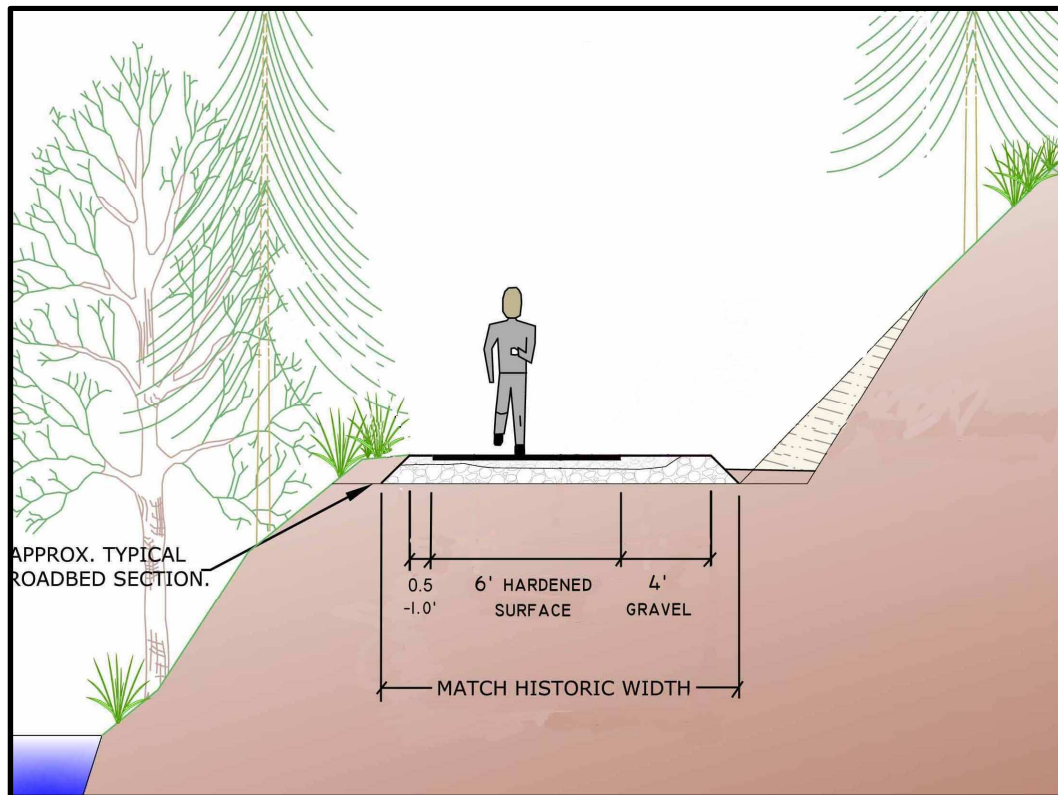


Figure 3. Trail profile (historic railroad sections) for Alternative 3

Under this alternative two miles of new trail would be constructed in the Sol Duc area of the park, including 1.4 miles on the historic Spruce Railroad grade. This new trail would meet and exceed the minimum outdoor accessibility standards (Access Board 2009, 2011). The trail would be 6 feet wide paved asphalt with a 4 foot wide gravel shoulder on the railroad grade and on a short spur trail that would connect to new trail planned on U.S. Forest Service lands adjacent to the park. The trail would be open to hikers, bicyclists, and equestrians. Trail between the existing Sol Duc kiosk parking lot and the historic railroad grade would be built as well. This trail would also be six feet wide and asphalt paved, but would not include a gravel shoulder for equestrian use. Access with stock would be provided via the spur trail connecting to the USFS trail outside of the park.

The existing SRRT on Lake Crescent would be widened and paved to meet and exceed outdoor accessibility standards (Access Board 2009, 2011) on Segments A, B, and C. The paved trail would be six feet wide with a four foot wide gravel shoulder upslope of the asphalt trail to accommodate equestrian use. The trail would rehabilitate the historic profile and ditches to the average width identified by NPS archeological staff of 10.5 to 11 feet. The two historic railroad tunnels would be opened for trail use.

Segment D of the SRRT would be widened and paved to a width of six feet, but would not be developed to create an accessible grade due to the steepness of the terrain in this area of the park. A gravel shoulder would be provided for equestrian use, but would vary in width to avoid disturbance to mature trees and intact soils to the greatest extent possible. The trail would be routed to avoid adjacent private property, including the realignment of a short section of existing trail that is located on a corner of private property.

Two accessible parking spaces would be developed on CDJR adjacent to the existing North Shore Picnic Area parking lot. A universally accessible trail from the new parking spaces to the ODT Phase 1 would be constructed. The existing SRRT parking lot near the Lyre River would be expanded and paved once a NPS owned vacant property is removed. The area between the expanded parking lot and the shoreline would be rehabilitated. The road between the parking lot and the Lyre River Bridge would be paved and a bike lane would be striped. The Water Line Road within the park would be paved, as would the existing North Shore Picnic Area parking lot.

Improved interpretation would be provided at trailheads and along the trail to increase visitor understanding and enjoyment of the natural and cultural history of the area. Trash receptacles and pet waste disposal stations would also be installed.

Alternative 4: Clallam County Proposal

Clallam County is proposing to construct trail within Olympic National Park that would develop an additional portion of the proposed Olympic Discovery Trail (ODT) route. Under this alternative 1.5 miles of new trail would be constructed in the Sol Duc area of the park, with NPS approval and oversight, including 1.4 miles on the historic Spruce Railroad grade. This new trail would be constructed in accordance with AASHTO guidelines for bicycle facilities. The trail would be 8 feet wide paved asphalt with a 4 foot wide gravel shoulder on the railroad grade and on a short spur trail that would connect to new trail planned on U.S. Forest Service lands adjacent to the park. The trail would be open to hikers, bicyclists, and equestrians. Access would be provided via the spur trail connecting to the USFS trail outside of the park.

Segments A, B, and C of the existing SRRT would be widened and paved in accordance with the AASHTO guidelines for bicycle facilities. The paved trail would be 8 feet wide with gravel shoulders and an upslope ditch to accommodate equestrian use. The two historic railroad tunnels would be opened for trail use. A new trail alignment would be constructed along Segment D-ADA to provide an accessible grade. This would require construction on lands with Olympic National Park and on a section of private lands. This would require prior approval by the land owner and approval and oversight of the NPS on park lands.

New trail would be constructed upslope of the road between the parking lot and the Lyre River Bridge to the same trail standards described above. The Water Line Road within the park would

be paved to support future trail development. Improved interpretation would be provided to enhance visitor understanding and appreciation of the historic Spruce Railroad.

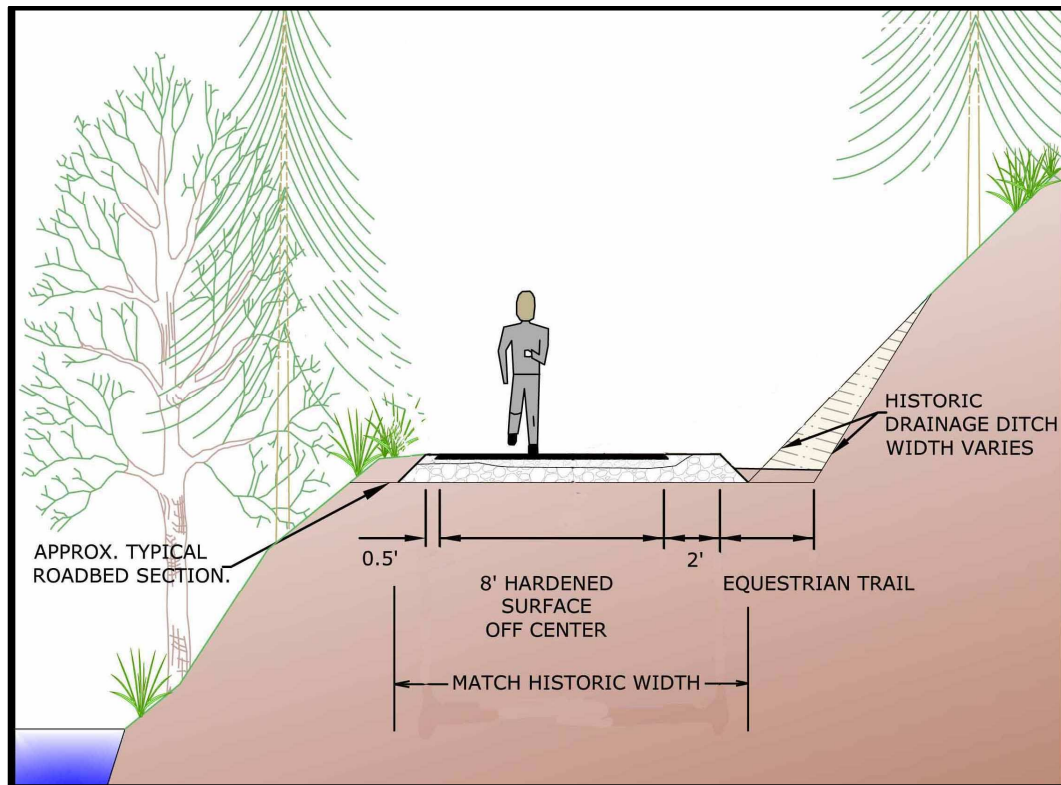


Figure 4. Trail profile (historic railroad sections) for Alternative 4

Affected Environment

The proposed project area includes the north shore of Lake Crescent, including Camp David Junior Road, the North Shore Picnic Area parking lot, Phase 1 of the ODT, the existing Spruce Railroad Trail (SRRT), the existing SRRT parking lot near the Lyre River, and East Beach Road and the Water Line Road within the park. The project area also includes the Sol Duc area located primarily between the Sol Duc Road and Highway 101 to the western boundary.

The project area includes both developed and undeveloped areas either in or adjacent to mature forests. Lake Crescent is also within the project area. This area provides habitat for a wide range of wildlife, fish species, and native vegetation. This includes two species listed under the Endangered Species Act, the marbled murrelet and northern spotted owl. Two endemic fish species are also found within the project area, the Beardslee and Crescenti trout. These fish species evolved in Lake Crescent and are found nowhere else. Water lobelia, a rare and sensitive aquatic plant is also found within shallow waters adjacent to the project area. Best management practices are described in Appendix A of this document that would be implemented to avoid or

minimize the potential adverse effects to park resources during construction and maintenance of the expanded trail system.

The project area also includes the historic Spruce Railroad. This historic property is eligible for the National Register of Historic Places and was determined to be nationally significant due to its association with World War I and the Spruce Division that supplied materials for airplane construction to support the war effort. The project area also includes sites that were used in the past to support Tribal use, early resort development, recreation, and timber harvest.

The Lake Crescent and Sol Duc areas currently provide a wide range of visitor experiences. The existing Spruce Railroad Trail is used by hikers, bicyclists and equestrians. Phase 1 of the ODT provides over six miles of universally accessible trail to the west of the SRRT. The SRRT is also accessed by trails located outside the park via the Water Line Road.

Environmental Consequences

Construction of Alternative 2, 3, or 4 would result in impacts to park resources and values. Implementation of conservation measures would be implemented under all alternatives to avoid or reduce adverse impacts to the greatest extent possible. A summary of these measures is included in Appendix A of this document. A summary of environmental consequences (impacts) is included at the end of Chapter 2.

In addition to evaluating environmental consequences, the National Park Service must also evaluate whether the park's proposal would result in the impairment of park resources or values. Impairment is prohibited by the NPS Organic Act. A written evaluation of the potential for impairment of park resources and values is included for the NPS Preferred Alternative in Appendix C. This analysis was completed in accordance with current NPS guidance regarding impairment determinations. The analysis of park resources and values to determine if impairment would occur may only be completed by the NPS.

In considering the proposed action, the NPS evaluated the potential for cumulative impacts in the context of previous, ongoing, and reasonably foreseeable actions. A summary of cumulative impacts is included in Appendix D.

Consultation and Coordination

In addition to the public scoping described previously, the NPS has developed this environmental assessment in consultation with interested Tribes and other Federal, state, and local agencies. This includes the U.S. Forest Service, U.S. Fish and Wildlife Service, State Historic Preservation Officer, and Clallam County.

Additional input is requested during the formal public review and comment period. A public meeting will be held to answer questions and accept verbal comments. Written comments will also be accepted, including comments posted on the park's Planning, Environment, and Public Comment (PEPC) website at <http://parkplanning.nps.gov/olym>. The NPS will consider public input in making a final decision regarding the proposed expansion and improvement of the Spruce Railroad Trail. The NPS anticipates a final decision will be made in late 2011. If approved, construction would occur as funding becomes available. This would likely occur in phases over multiple years.