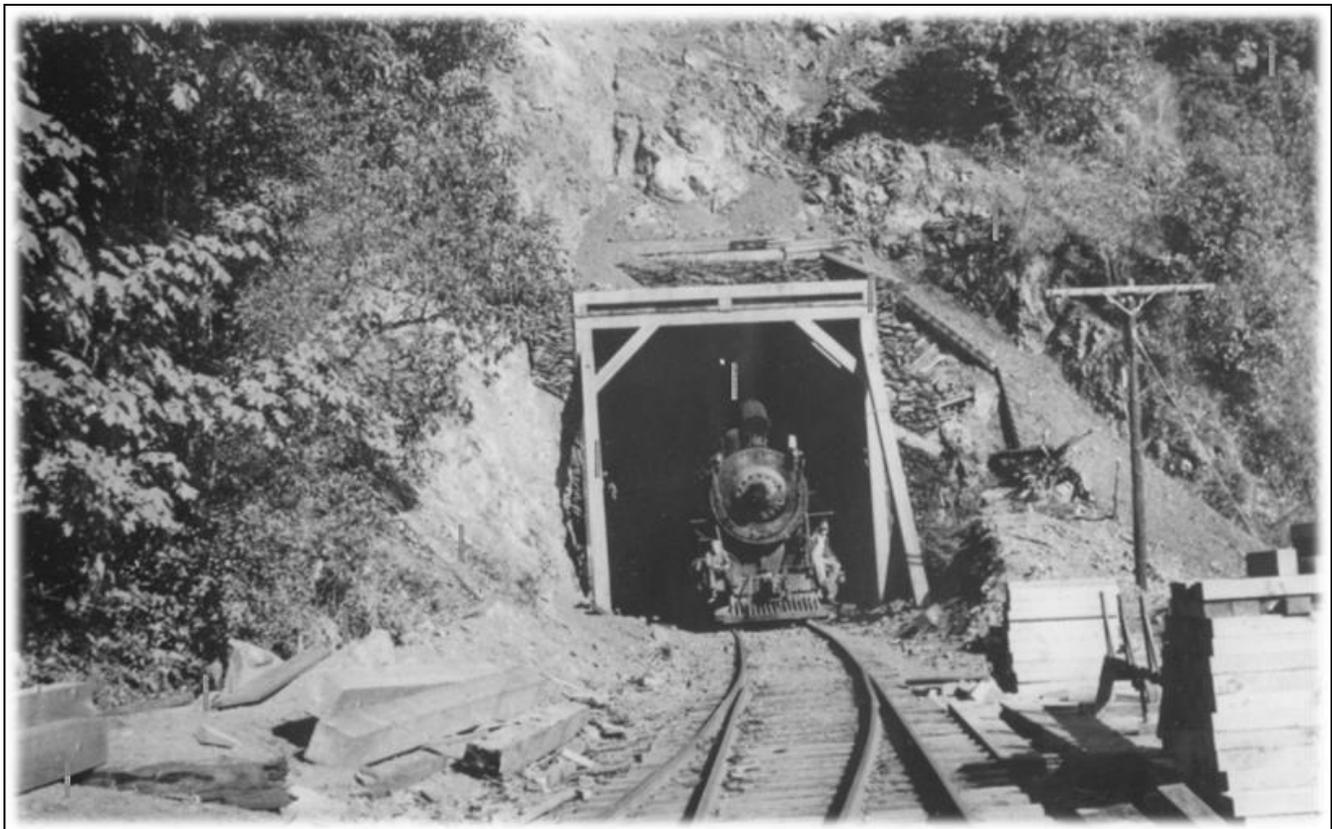




# Spruce Railroad Trail

## Environmental Assessment (SRRT EA)

May 2012



*The National Park Service (NPS) proposes to 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.*

Cover photo courtesy of Dan Peacock.

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# Spruce Railroad Trail Environmental Assessment

## Executive Summary

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### **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. 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 Trail as identified above. 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. 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 Spruce Railroad Trail within Olympic National Park, as a non-motorized, multiple purpose trail as identified in the GMP and LCMP. 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.

## **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 structures 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.

## 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/olymp>. 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.

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.

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.

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 five 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.

**Alternative 1: No Action – Continue Current Management, Routine Maintenance Only (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.

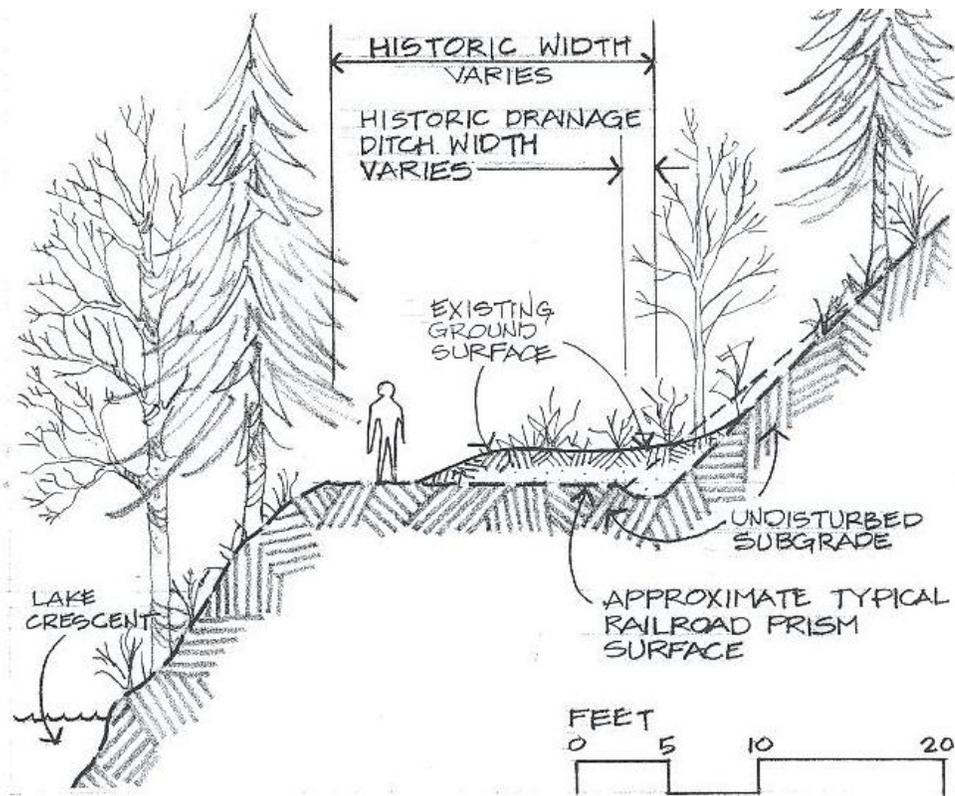


Figure 1. Trail profile (historic railroad sections) existing conditions

## **Activities Common to All Action Alternatives**

The following activities are included in all action alternatives (Alternatives 2, 3, 4, 5). The two historic railroad tunnels on the Spruce Railroad Trail (SRRT) would be opened for trail use.

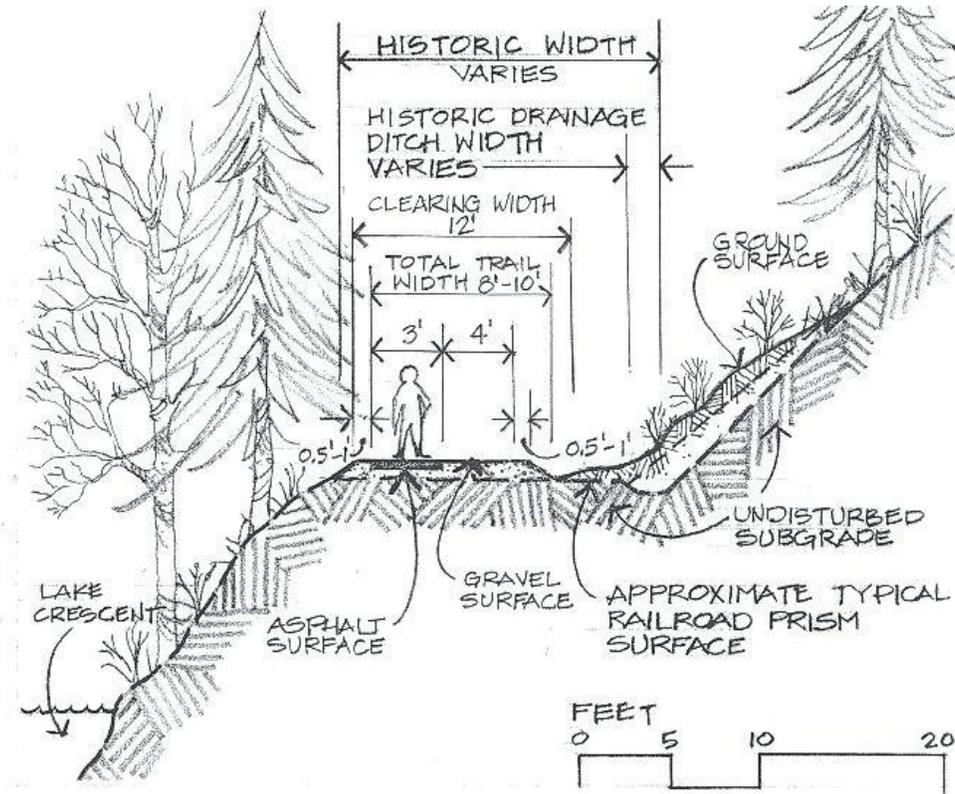
Two accessible parking spaces would be developed on Camp David Junior Road (CDJR) adjacent to the existing North Shore Picnic Area parking lot. A universally accessible trail from the new parking spaces to the ODT Phase 1 would be constructed. The existing SRRT parking lot near the Lyre River would be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

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.

The conceptual design for trailhead improvements and trail rehabilitation and development presented in this document may be modified during final construction design to best accommodate site-specific conditions and to avoid or minimize resource impacts.

Construction, maintenance, and use of the trail would be managed under all alternatives to comply with laws and policies related to safety and risk management for the visiting public and to provide a safe and healthful workplace for NPS employees, volunteers, and partners.

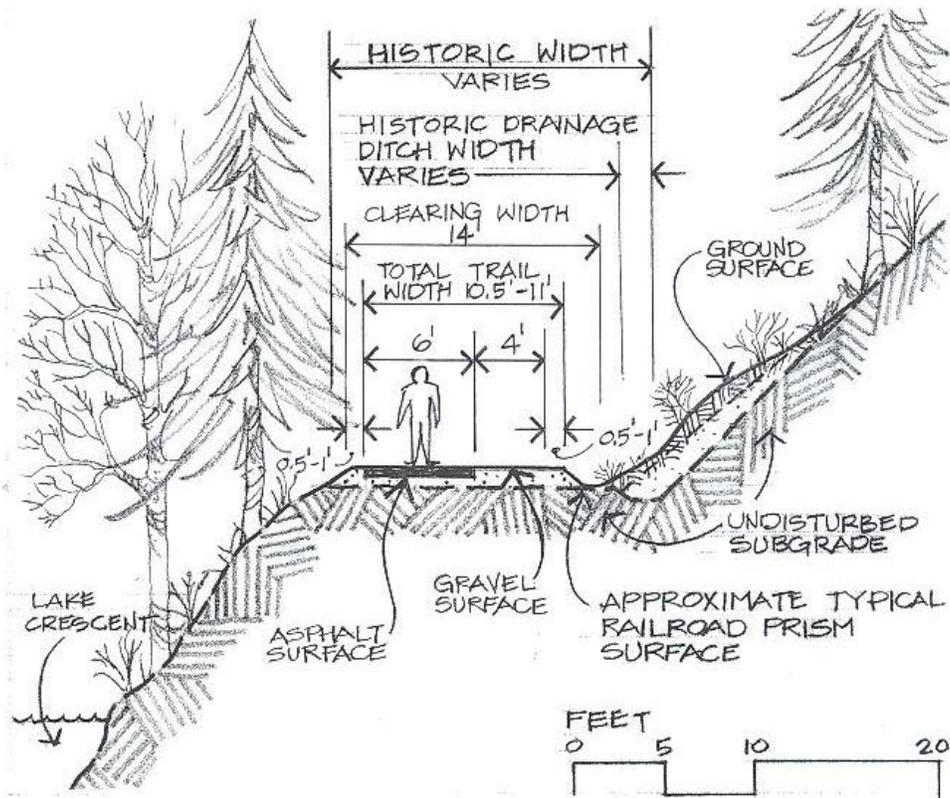
**Alternative 2: Recreation Trail Emphasis – Accessible, 3 ft. asphalt with 4 ft. unpaved shoulder**



**Figure 2. Trail profile for Alternative 2**

Under Alternative 2 the existing SRRT would be widened and paved between Phase 1 of the Olympic Discovery Trail (ODT Phase 1), constructed above CDJR in 2009, and the Lyre River Trailhead. 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 trail would be designed to meet the outdoor accessibility guidelines described in Chapter 2 of the SRRT EA. The existing railroad bypass trails that go around the two historic railroad tunnels would not be improved, but would be signed and managed for pedestrian use only.

**Alternative 3: Accessible from Camp David Jr. Road to beginning of Segment D (not accessible from Lyre River), 6 ft. asphalt and 4 ft. gravel**



**Figure 3. Trail profile for Alternative 3**

Under Alternative 3, the NPS would make improvements to the Spruce Railroad Trail (SRRT) near Lake Crescent as described in the 2011 SRRT EA. The trail alignment would remain in its current location with minor lateral adjustments, up to three feet from the current trail alignment on the railroad grade, to better accommodate site conditions. Both railroad tunnels would be reopened to allow the existing trail to be widened and developed to meet accessibility standards along the general route of the historic Spruce Railroad grade. Implementation of the proposed trail improvements would occur over time, in phases.

**Segments A, B and C:** The existing Spruce Railroad Trail would be developed and maintained in accordance with the new ONP trail standard as described in the table below. This would amend the range of existing park trail standards to provide an accessible trail with six feet of asphalt paved surface and an adjacent 4 feet of gravel surface for equestrian 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.

**Alternative 4: Accessible, 10.5 ft. non-asphalt, firm and stable surface (NPS Preferred)**

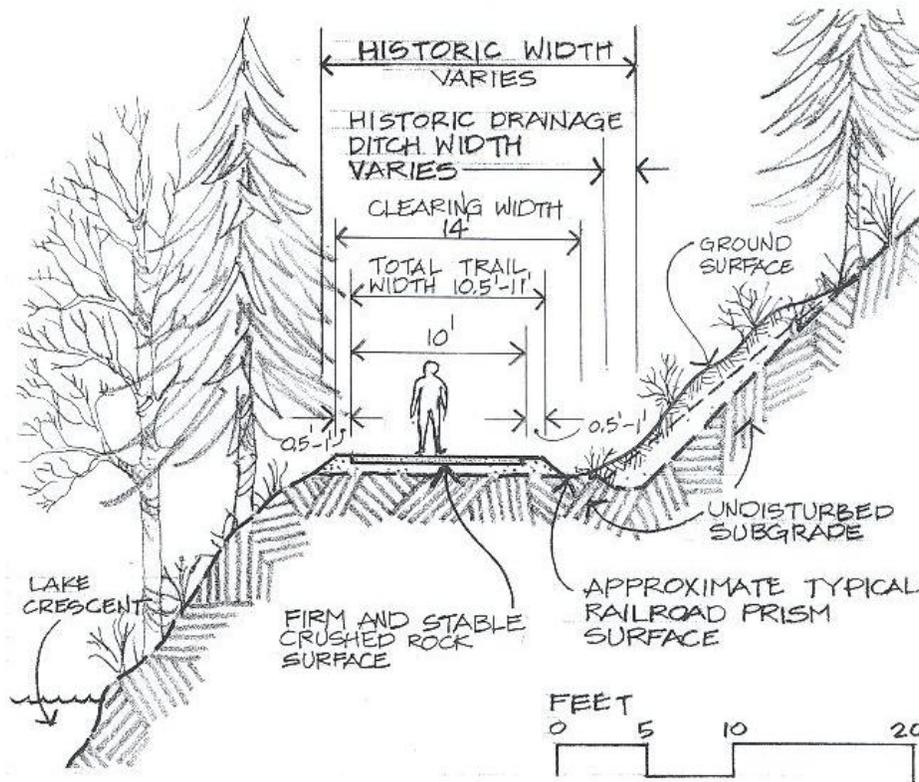


Figure 4. Trail profile for Alternative 4

Under Alternative 4, the NPS would make improvements to the Spruce Railroad Trail (SRRT) to meet and exceed the guidelines for providing an accessible trail as described in the Draft Final Accessibility Guidelines for Outdoor Developed Areas published on October 19, 2009 (Access Board, 2009) described in Chapter 2. These guidelines are proposed by the Architectural and Transportation Barriers Compliance Board (Access Board) pursuant to the Architectural Barriers Act (ABA) for camping facilities, picnic facilities, viewing areas, outdoor recreation access routes, trails, and beach access routes that are constructed or altered by or on behalf of the

Federal government. This would amend the range of existing park trail standards as described in the 2008 General Management Plan (GMP).

All segments of the SRRT would be accessible. This would require that a new alignment be developed in Segment D as described in Alternative 2 to address the steep grades between the historic railroad grade near Lake Crescent and the current SRRT parking lot near the Lyre River. The trail would be constructed to provide a 10.5 foot wide, firm and stable, non-asphalt surface. The trail would be shared by pedestrians, equestrians, bicyclists, and people traveling in wheelchairs. The existing railroad bypass trails that go around the two historic railroad tunnels would not be improved, other than to repair or replace the bridge at the Devil's punchbowl. The bypass trails would be signed and managed for pedestrian and equestrian use only.

**Alternative 5: Accessible, 8 ft. asphalt with 3 ft. unpaved shoulder**

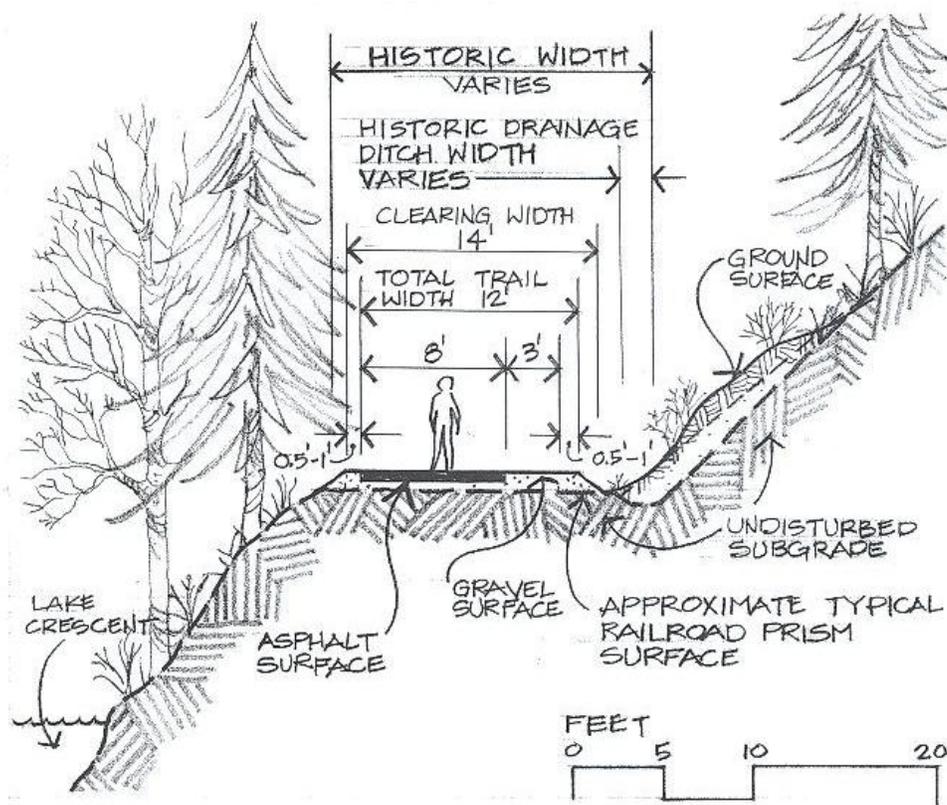


Figure 5. Alternative 5 Trail Profile

Under Alternative 5, the NPS would make improvements to the Spruce Railroad Trail (SRRT) to meet and exceed the guidelines for providing an accessible trail as described in the Draft Final Accessibility Guidelines for Outdoor Developed Areas published on October 19, 2009 (Access

Board, 2009). These guidelines are proposed by the Architectural and Transportation Barriers Compliance Board (Access Board) pursuant to the Architectural Barriers Act (ABA) for camping facilities, picnic facilities, viewing areas, outdoor recreation access routes, trails, and beach access routes that are constructed or altered by or on behalf of the Federal government. These guidelines are described in Alternative 2. This would amend the range of existing park trail standards as described in the 2008 General Management Plan (GMP).

All segments of the SRRT would be accessible. This would require that a new alignment be developed in Segment D to address the steep grades between the historic railroad grade near Lake Crescent and the current SRRT parking lot near the Lyre River. The trail would be paved with asphalt to a width of eight feet. A three foot wide, unpaved shoulder would be developed immediately adjacent to the accessible trail surface to accommodate equestrians and other trail users who prefer to travel on an unpaved surface.

### **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 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 area currently provides 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, 4, or 5 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 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 C.

## **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 mid- 2012. If approved, construction would occur as funding becomes available. This would likely occur in phases over multiple years.